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Forward to the Revised Edition

In a feature as extensive as this one it only seems appropriate to say a few words about how it came to be in the form it is today.

If I had known what I was getting myself into when I first started looking for writers interested in creating a history of the real time strategy genre, I probably would have been intimidated and given up right then and there. Great ambitions have a way of disguising the many trials that are inevitably and intimately woven into their nature. The only redeeming value of these ambitions is that they supply the energy to overcome these trials when they finally surface. And so, in retrospect, I am glad that the project began with such a great and unrealistically ambitious vision—because if it had not been initially imagined as such it never would have been realized at all.

In the months before I proposed the idea I had begun to notice that an increasing number of people at GameReplays.org were unfamiliar with the older RTS games. I had grown up playing these games and had simply taken for granted that others knew something about them as well. I looked on other RTS websites and discovered the same trend. I'm not sure when it happened—in all probability it simply happened so slowly that nobody noticed—but somewhere along the way a new generation of RTS fans had quietly slipped in amongst us “old school” players. So, like any old schooler facing a new generation of young punks, I decided that these youngsters had better learn their history.

But I didn't want to write the history myself; that was a Herculean task no sane person would ever attempt. Instead, I took the easy route and searched the Internet for that history. I was not surprised at the quantity of information out there—it was quite adequate—but what did surprise me was the quality, which was very inadequate. It seemed impossible to find any source that explained what any given RTS game was “really about.” Information of every type—reviews, screenshots, unit statistics, and even some videos—was everywhere, but nowhere was it all compiled into a single piece of writing that explained what the game was “really about” and what made it similar to and different from all the other RTS games out there. The one work that actually had attempted to paint a fairly complete picture of the history of the genre was done by GameSpot, but was horribly out of date. So finally, after searching in vain, I decided that what was really needed was a completely new work of RTS synthesis.

It took me several months from the time I had that very simple idea—synthesizing all relevant gameplay information about past RTS games and writing a brief article about each game of significance—and turn it into a plan for actually doing so. The general plan was obvious and simple: to recruit experienced RTS players with decent writing skills and get them to explain the games they were most familiar with. But, as the saying goes, the devil was in the details. I thought I would be working with perhaps ten writers, most of whom would write about multiple games, but I ended up working with over two dozen writers, most of whom only wrote about one game. This simple statistic created the most dangerous problem in the whole project; I suppose it could best be called “Favorite Game Syndrome.”

Favorite Game Syndrome is the tendency to study only the game you enjoy the most and to see all other games of that genre from the perspective of that game. This was the exact opposite of what I needed. I had assumed I would easily find people who could see one RTS game from the perspectives of other games in the RTS genre, and then use those perspectives to compare and analyze their chosen game. The result was that I was continually obligated to remind many writers to approach their game from alternative perspectives. It caused me some frustration at the time, but in retrospect none of the
writers were actually at fault. Until multi-game sites such as GameReplays had emerged, RTS communities were almost invariably closed communities that had little to do with one another. An expert Starcraft player would generally know very little about Total Annihilation, except that the TA players who kept talking about how superior TA was had no idea what they were talking about. The opposite was equally true; no one could see the forest for the trees. Favorite Game Syndrome was epidemic.

Aware of this, I continually edited the early versions of the articles, trying my best to remove any biased remarks and anything that remotely sounded like it might have come from a review. The goal was not to judge the games, but to analyze them. Admittedly, the distinction is subtle, and I did a poor job of communicating it. My hope was that somewhere in the process of analysis, a chain of influence would become evident, stretching from the earliest RTS games to the most recent, and readers would be able to discern how the past RTS games had influenced those of the present and how far the genre had come in such a short time. This was the grand chain of causality I had initially envisioned. The problem was that I kept finding so many broken links.

About a month had passed after I recruited the first writers and it had become very apparent that I needed additional editing help. The scale of the project had already grown larger than I had anticipated and I needed to spend most of my energy looking for new writers to write about some important games that still lacked authors. But finding editors was no easier than finding writers. I was very lucky to find Elegy, known as sigsiggerson at the time, who provided a huge amount of editing assistance and even wrote a small guide to help the writers with their articles. I also had a couple of other staff members help with the editing near the end of the project, allowing me to focus on communication with the writers and last minute recruiting.

During this time, I was continually troubled by the fact that there was nothing tangible for me to offer the enthusiastic volunteers who were spending hours toiling away at their keyboards for no apparent reward. I couldn't offer them money, as I had none. I couldn't offer them promotions, as I wasn't in charge of them (many of the writers were higher in the staff ranks than I, a lowly Discussion Moderator, was—and some were not on staff at all). I couldn't offer them medals, as I wasn't an admin. The best I could do was to try to convince a Global Admin, in this case Darky, that the writers and editors who worked on the project deserved GameReplays Article Medals, which were traditionally reserved for single, stand-alone articles that covered the strategic nuances of a particular game. It wasn't until the 2007 version of the project was completed that I finally got Darky's approval to distribute article medals to the volunteers based on the degree of their contributions. Fortunately, I was a Moderation Admin by that time and could distribute them myself.

It was an enormous relief to finally have the entire project completed. I was amazed that it had ever been completed at all, and many others seemed amazed that GameReplays could actually produce a feature of such length and variety. In the end, over thirty games were featured and commentary on some of the defining periods of the genre was provided, as was a timeline of the genre's major events. Over two dozen writers, none with any formal writing experience (and some who did not even speak English as their first language), had collaborated and authored a history of a genre that had never before been so completely catalogued and analyzed. The entire work was almost a hundred pages long. It could have been a book. And, considering that the many industrious volunteers had collectively been toiling away on it for almost a year, it almost felt like we had written one.

After a few weeks had passed, I had finally rested enough to take a step back and look at the finished result with a critical eye. What I discovered was unsettling. In the rush of recruiting, editing, and
writing articles myself, I had apparently lost sight of the big picture. The finished result was supposed
to be a cohesive whole, a single story that could be read from front to back as though it were a
narrative. Additionally, it was supposed to be a sort of RTS encyclopedia, something that RTS fans
could consult if they wanted a quick crash course in the mechanics and gameplay of a game they
weren't familiar with. Despite all my attempts at inoculating the project against the dangers of Favorite
Game Syndrome, the individual pieces of the puzzle didn't quite fit together to produce the grand,
ambitious picture I had hoped to see at the end. I began looking for opinions about the History of Real
Time Strategy on websites other than GameReplays, hoping to figure out if it was just me who felt this
way. Unfortunately, I wasn't alone. Some, just like most GameReplays members, thoroughly enjoyed
it. Others criticized it as too long, while others said the exact opposite—that it should have covered
individual games in greater depth. Still others remarked that the feature started off well, but lost focus
as it went on and devolved into a series of abnormally analytical game reviews. This last criticism came
nearest to my own concerns. But it was too late to fix it. What was done was done. In the end, I was
externally glad to have completed it and proud of what the feature evolved into, but internally I was
bothered by its imperfections.

Earlier I reflected that great ambitions have a terrible tendency to hide the difficulties these ambitions
must ultimately overcome, and that their only redeeming value is that they provide the energy to
overcome these difficulties when they arise. But this is not the full story; great ambitions have another
terrible side to them, and it is that great ambitions cannot tolerate imperfections. They are demanding
of design and hungry for harmony. They will magnify cracks in the structure and make you view the
beauty of the whole from a thousand miles away. And so I felt about the thing that I and over two
dozen other volunteers had built. As time went on, people began to forget about the History of Real
Time Strategy, and I decided that it would be best to consign the feature to the forgotten corners of
history. By this point I had retired from the GameReplays staff and I decided that he most appropriate
thing to do was to let our history go the way of the GameSpot history. Maybe one day a better hand, or
group of hands, would take up the task where we had left off.

About a year passed from the time that the History of RTS was published until I next received a
message about it. The message came from TDA, a GameReplays Global Admin who I had never really
worked with when I was on the site's staff, which is why I was surprised when the message was titled
“History of RTS.” It seemed that the Globals had decided to transfer the now outdated History of RTS
to the new GameReplays portal system and update it in the process. TDA asked if I would be willing to
help once again. I wrote a lengthy reply, but the gist of it was “No, but good luck with the update.” I
still thought the flaws in the feature could not be fixed. Or, if they could be, they required someone else
besides myself to lead the repair effort.

But TDA was persistent and kept the conversation going. I figured out that he had been leading the
update effort himself and that he wasn't having as much luck as he had hoped. Finding new writers to
write about newer games seemed to be a particularly thorny problem. It became evident that they were
going to update it and re-publish it, with or without my help. And, although I couldn't be completely
sure if TDA was just embellishing his troubles, it began to seem like the updated version might not turn
out too well if they didn't get help from someone. In the end, he convinced me to come back as an
Editor and help with the revised version of the History of Real Time Strategy.

I quickly discovered that a couple of new articles had already been written, and a few of the old ones
had already been updated, or were in the process of being updated, with information on new expansion
packs released since the 2007 version of the project. To my delight, I also discovered that these new
articles required less editing than most in the first version. In the year since the first version,
GameReplays had grown, and the site's multi-game focus had diminished the effect of Favorite Game Syndrome. Despite the first version of the feature's flaws, the new writers were able to understand, without anyone telling them, that these articles should make comparisons and contrasts with other games. The intent of the project had been communicated, even though, in its original form, it did not perfectly exemplify it. I had been wrong all along; it was not the right decision to let this project fall unnoticed into the depths of history.

I went back to the old articles and made minor revisions, trying to eliminate any remaining traces of bias and anything that sounded like it came from a game review, as well as attempting to diminish the focus on the superfluous elements of some games. As we published the revised versions of the old articles and began to publish the updated ones I noticed that people still enjoyed reading them. Maybe they didn't read the entire thing, like I had originally and irrationally hoped, but at least they found a part of it enjoyable. And then TDA showed me how many hits the articles were getting. I didn't think that that many people even visited the GameReplays main portal. It was far more than I had expected. I'm not going to reveal the number, since I think the Globals Admins like to keep that kind of information private, but suffice it to say that, if the numbers are indicative of the entire RTS community, then the number of RTS fans has probably grown significantly since the original version of the History of RTS was published. If that's the case, there are even more RTS youngsters out there who don't know their history. I guess us old school fans still have an obligation to make that information available before it falls into some forgotten corner of the genre's history.

The revised version still has some of the same flaws as the original. To a degree, these flaws have been mitigated by the new round of editing, but they could not be eliminated. In many cases, I would need to consult with the original authors to revise some of the old articles further. Sadly, many of the original writers are no longer active at GameReplays and could not be reached. But that is the way these things work. I have a feeling that this feature will outlast all its authors. As long as people keep asking questions about old RTS games, it provides a useful service. And as long as we have readers who are willing to read these kinds of features, we will no doubt continue writing them. The writers of the 2007 version did not write for the medals they received, they wrote for the simple joy of writing their articles. Each of them no doubt enjoyed the writing in their own unique way, and each of them no doubt faced difficulties equal to those I have described here. I hope that we have collectively been able to convey a better understanding of the history of this excellent genre of games and that, despite the flaws and the great length of this feature, that all who read it are able to extract a level of enjoyment from the words contained inside.

Working on the revised version of the History of Real Time Strategy has refined my understanding of ambition. Yes, it blinds the ambitious to the real difficulties they must overcome. And yes, it magnifies the imperfections of the ambitious work. But it has a fourth quality that is easily missed: not only does it provide the energy to overcome the same difficulties it hides, but it also creates a sense of responsibility for carrying out the vision that drives the ambition, in spite of the inevitable imperfections. I hope that others will share my desire to tell the story of the RTS genre and analyze its constituent games, so that, no matter who takes charge of this feature and its future updates, those readers who are the ultimate reason for this feature's existence will never cease to have a thorough history of the RTS genre at their fingertips.
Introduction

The History of Real Time Strategy was conceived as a project with the goal of narrating the history of the RTS genre and cataloging the major RTS games that have been released over the years. However, since the RTS genre has become so large and diverse, it was impossible for one person to write a full account of the genre's development. Not even those who have been with the genre from the very beginning have enough experience to fully describe it from birth to the present day (although there have been some attempts).

To solve this, various members of GameReplays volunteered their experience and wrote about different games in the history of the RTS genre. As a result, each of the articles in this feature has its own unique style and perspective. However, this does not mean that this project is just a random collection of unrelated articles. It is a collection, yes, so it has an encyclopedic element to it. However, behind the initial layer of information is a largely unknown tale of the evolution of an idea. I hope that as you read and learn about the RTS games of the past, you will see the connections between them and those of the present day.

Additionally, this is an open project. That means that you are free to contribute any of your knowledge and experience to this feature. Think of it as an "RTSipedia," if you will, and feel free to skip around as you desire. Right now we don't have every RTS game covered, and as new games are released they will need to be added as well. Therefore, this is an evolving project and your input, comments, and experiences are welcomed. If you see that we're missing a RTS game and you'd like to write an article about it, feel free to contact me (Phantom) or a Global Admin and volunteer. Currently, we're missing some important RTS games, but in time those will be added as well. Although some of the games covered here are not seen as true RTS games, any game that incorporates a significant amount of RTS elements is subject to inclusion, if only to cast a brighter light on those that are true RTS games.

Although this is a historical project designed to catalogue RTS games, it is also a story. It's a story about a very unique family of games, the people who create them, and the fans who enjoy them. As with any story, it is best to start at the beginning.
Chapter 1: The Past is Prologue

“what's past is prologue; what to come,
In yours and my discharge.”

William Shakespeare, The Tempest Act 2, scene 1

The Beginnings of Real Time Strategy

If you want to trace the RTS genre back to the very beginning, you need to understand the world into which the genre was born. In the mid-1980's Nintendo had just reinvigorated the dying video game industry with the release of the Nintendo Entertainment System. Apple and Microsoft had introduced the notion of a personal computer. The Cold War was thawing out and the wealthier countries of the world were beginning to believe in the possibility of a relaxed and contented lifestyle. Simple games like Tetris and Pac Man entertained the people of this generation. In the world of computers and video games, everything was simple yet exciting.

Slowly but surely, however, things began to get more complicated. In 1992, Wolfenstein 3D introduced the instinctual and reflex-based gameplay of what would eventually become known as the first person shooter. A growing tech-savvy group calling themselves “gamers” marveled at the realistic, complex, and lifelike gameplay of Will Wright's SimCity. With the release of Nintendo's Super NES, the introduction of Sega's Genesis, and the expansion of the computer industry, it became clear to game developers that their industry was growing. They realized that a growing population of gamers would be hungry for new gaming experiences, and they sought to deliver them.

A small portion of these early attempts to create new types of games used warfare as an inspiration. While games such as Wolfenstein 3D had used warfare as a setting, it was always on the level of background and never really affected the player in a direct, meaningful way. Some developers tried porting over older turn-based war games, such as Risk, to computers and consoles. After a few not-so-successful iterations, it became clear that the old mechanics of war games were not well suited to the new paradigm of gaming. What was needed was a completely new type of war game, a totally new take on strategy.

However, this change did not occur overnight. For quite some time there was no revolution in the way war games were designed for video game systems. There were, quite naturally, a few interesting innovations in early strategy games such as Stonkers and Mega-Lo-Mania, but for the most part, new strategy games continued to be merely interesting derivatives of the old ones.

That all changed when Westwood Studios released Dune 2 in 1992. For the first time, the strategy genre had an entirely new type of game. Whereas previous strategy games proceeded in a fairly linear fashion and were mostly about making the most of limited resources, the revolution that Dune 2 brought was all about freedom: freedom from turns, from long waits for your opponent to make his move, from the randomness of dice, freedom from having your armies reduced to mere symbols on a vaguely drawn map, and, most importantly, freedom from having no direct control over your armies.

Of course, not all of these ideas were original. Westwood borrowed, either directly or indirectly, some things from previous strategy games such as Stonkers, Mega-Lo-Mania, and Herzog Zwei. But what
Westwood did was to take the great ideas of these games, overcome their shortcomings, fuse their styles of gameplay together, and add one single new idea: total control. That one concept permeated the entire Dune 2 experience and still permeates every strategy game that has followed in its footsteps. In the pensive game of Risk, you were a general who gave orders and then observed whether or not the results met your expectations. In the arcade-like Stonkers, you were a low-level commander incapable of receiving reinforcements. In the somewhat simulation-like Mega-Lo-Mania, you were more of an overseer with no direct control over your population. In the individualistic Herzog Zwei, you were a single combatant with the ability to exert limited influence over computer-controlled allies. In Dune 2, you were none of these, yet you were all of them. You took care of everything, from the larger, more strategic decisions, all the way down to the smallest tactical details. You were free from dice, from AI behavior, and from the perspective of a single unit. Total control was yours, all yours.

This feeling of control is what ultimately led Dune 2 to become the template from which future computer strategy games would be built. These games were so different that they were even given a new name, a name which reflected the freedom afforded to players by no longer being bound by the old turn-based elements. Since these types of games proceeded in real time, they were simply called "Real Time Strategy" games. They took the strategy of the turn-based strategy games, removed the monotony inherent in them, and fused the result with the action of a first person shooter. The result was a type of game that could satisfy anyone ranging from a trigger happy kid to an economics professor. Because this new type of game appealed to one of our most innate human desires--the desire for control--it was intuitive and familiar, but because it imagined conflict in a way never seen before, it was entirely strange and new.
Stonkers

Developer: Imagine Software  
Publisher: Imagine Software  
Release Date: Sometime in 1983

Stonkers is so old that it was released for a platform that almost no one has ever heard of: the 48K ZX Spectrum. To give you an idea of the kind of technology that the game ran on, the "48K" stands for 48 kilobytes, the amount of memory in that version of the ZX Spectrum. The Spectrum was a small keyboard-like unit that plugged into a TV. It used tapes to play games instead of cartridges, which became the dominant storage medium for games only after the release of the Nintendo Entertainment System.

It incorporated some primitive RTS elements that were very unique at the time. The most important of these was the introduction of a very basic counter system. Simply put, Armor beat Artillery, which beat Infantry, which, in turn, beat Armor. If you replace those three units with the words "Rock," "Paper," and "Scissors," you'll see the simplicity of the combat system. Nevertheless, this was a new concept for a war game. Previous attempts mimicked the systems of various turn-based strategy games, producing combat systems that were either arbitrary or luck-based.

In fact, Stonkers was something of a rebellion against turn-based strategy games. The game did not require the player to preposition his units on the map or to spend the early part of the game purchasing units and other assets. In Stonkers, your units are all set up at the start of the game and random luck is not a deciding factor in the outcome of the game. But, like most turn-based strategy games, there is only one map to play on. This map is not noteworthy aside from mentioning two things. First, each player begins with a Port where supplies are delivered and, second, there is a river, with only one bridge spanning it, that divides the map in two. Controlling this crossing is obviously the focal point of the strategy of Stonkers.

The game also incorporated a unique resource system. At regular intervals a ship will dock at a Port and deposit resources there. Players are given four supply trucks each to transport these supplies to their twelve combat units (four of each type). If combat units do not receive supplies, after a certain time they will die. Properly using these supply trucks is often more important than properly using one's tanks, artillery, and infantry.

The goal of the game is simply to capture the enemy Port and HQ. In theory this is a simple task, but in reality it is made difficult by some of the nuances of the game. For example, whenever your units come within proximity of an enemy unit they automatically engage and the rock-paper-scissors battle system decides the result. You may not want to fight, but you don't have a choice; if you want to retreat, you are just out of luck. Additionally, units travel slower on rougher terrain. This simple feature, which
would become only a minor caveat in RTS games many years later, actually added a significant amount of depth to the game by giving the map a level of interactivity that no turn-based strategy game could ever hope to achieve.

Ultimately, Stonkers was created because strategy fans were tired of the same old mechanics of turn-based strategy games. Stonkers offered something entirely new, something truly novel. In retrospect, it is a highly flawed game and would not entertain many of today's RTS fans, but it nonetheless set the precedent of a strategy game taking place in real time. It wasn't the breakthrough, genre-defining game that was needed to truly establish real time strategy as a unique art form, but it was certainly a big step in the right direction.
Mega-Lo-Mania

Developer: Sensible Software  
Publisher: Virgin Interactive  
Release Date: Sometime in 1991

Mega-Lo-Mania (MLM) was originally released as a "god simulation" (since the term RTS didn't exist at that time), but by today's definitions it's also considered a RTS precursor. MLM has a pretty simple storyline: a new world is formed, and four rival gods fight for power over it. These gods are Scarlet (Red), Oberon (Yellow), Caesar (Green) and Madcap (Blue). They are not different "factions," but share the same technologies (called designs), structures, and units.

One unique feature in MLM is that each map (called islands), is divided into different sectors. An island can have a maximum of sixteen sectors, but most only have a few. On each sector a player can build a castle, which is the main building, similar to the Construction Yard in C&C games. It is necessary to build a castle before you can build anything else or discover designs in that sector. The castle is automatically built by moving units to an empty sector. The time required to build the castle depends on the number of units that are working on it. You can move units between sectors, but you can't micromanage them within a sector. This means that if two enemy armies are in the same sector, they will automatically start fighting.

The MLM world consists of 28 islands, and your goal is to conquer all of them during ten epochs (three islands in each of the nine first epochs, and one in the final epoch.) The epoch determines the starting technology level (tech level) for a castle, and the highest possible tech level. When a castle discovers a certain number of designs it will reach a new tech level. This means that all the buildings in the sector get increased armor, designs get discovered faster and, for certain epochs, more buildings become available. Examples of these buildings are the factory, which is used to build the more complex weapons (everything more complex than longbows), and the laboratory, which is used to discover the most complex designs (everything more complex than catapults)

The game also has a pretty special resource system. The main resource is men. Men have a large number of uses, like building castles, other buildings, and weapons, discovering designs, and mining minerals. The time required to complete one of these tasks depends on the number of men assigned to it. All battles are also fought by men (except in the last epochs were you get nukes), but the men can be equipped with lots of different weapons that you have to design and build first. When you have men inside a castle that aren't assigned to a specific task, they will automatically reproduce. The speed at which they reproduce depends on the number of unassigned men; the more men you have, the faster they reproduce.

The second resource is minerals. Minerals can, individually or combined with other minerals, be used
to discover designs and build weapons. There are a total of twenty different minerals, which have "jokenames" like solarium and planetarium. Every design and weapon requires one specific, or one of a few different mineral combinations. For example, bazookas can be built by 1 aquarium + 2 onions or 1 paladium + 2 onions. Every sector can have a maximum of four different minerals, which means it can only produce a certain number of designs and weapons. This makes expanding very important, as you cannot obtain a balanced army without doing so. The minerals can also be divided into two main groups: the "free" minerals which are automatically harvested and dominate the first three epochs, and the "mined" minerals that are mined by assigned men, and dominate the later epochs.
**Herzog Zwei**

**Developer:** TechnoSoft  
**Publisher:** TechnoSoft  
**Release Date:** January 11, 1990

The thing that really made Herzog Zwei (German, roughly translated: "Duke Two") special and that set it apart from other strategy games of its time, as well as those that came after it, was that the player was personified on the battlefield. In other strategy games, the player was always treated as a distant commander with no direct involvement other than giving orders. But in Herzog Zwei, you actually *are* a unit. Your unit is a robot capable of transforming from a ground-based form into a flying form, and vice versa. The flying form is much more powerful, but also uses much more fuel, and striking a balance between these two forms is a crucial aspect of the game's strategy.

Of course, it would not have been much of a strategy game if there was only one unit to toy around with. Herzog Zwei allowed you to build and loosely control other units via "programs." These programs had to be purchased for a certain amount of money (the amount depended on the program) and each program would make the unit behave in a certain way. There were only six programs, which would give units orders such as "guard this area," "attack enemy main base," and "attack closest enemy base." A considerable amount of depth was added by the fact that your robot, when in its flying form, could drop off your units and save them from having to use their own fuel. For example, you could make a unit fight until it was completely out of fuel, then come in and bring it back to have it resupplied.

The ultimate objective of the game was simply to destroy your opponent's main base. The outposts were just there to provide additional resources. The game was released for the Sega Genesis platform, which meant that everything had to be controlled with the Genesis' simple controller. This meant that Herzog Zwei was a very busy game, with players constantly having to give and update orders. It had an arcade-like feel to it, which proved to be a major benefit, since the learning curve of the game would have been much higher had it not possessed its arcade-like simplicity. And in a time when nobody had even heard of a RTS, most people didn't want to spend a long time learning the rules of a strange new game.

Herzog Zwei has developed a sort of cult status as one of the early RTS games, although it was actually more of an arcade/strategy hybrid. Nonetheless, personifying the player as an actual unit gave players a real feeling of involvement with their troops. This lesson would be completely forgotten until seven years later when Cavedog created Total Annihilation, a game which pulled almost exactly the same trick. Some heralded the Commander of Total Annihilation as a revolutionary concept, but it was actually based on the player's main robot in Herzog Zwei. Eventually, with the release of Warcraft III in 2002, players would be encouraged once again to be emotionally involved with their units (or heroes, in the case of Warcraft III), and Relic's Dawn of War series would intentionally strive to create
the same emotional attachment even later. The concept of a central, all-important unit is one that only a few RTS games have tried, but one that appears to be gaining momentum with the release of numerous modern "hero-centric" RTS games.
Chapter 2: The Glory Years

Defining a Genre

If Stonkers, Mega-Lo-Mania, and Herzog Zwei were fuel for the imaginations of early RTS developers, Dune 2 was the spark that ignited them. By defining the basics of the RTS genre, it offered developers a template to use for their own RTS games. However, early RTS developers were not content to merely produce copies of Dune 2. Instead, they took the Dune 2 formula and greatly expanded it by adding many new ideas to the RTS genre. By the end of the first era of the RTS genre, as the first 3D RTS games were being developed, the influence of Dune 2 had almost been forgotten.

That's not to say that the new RTS games weren't as good as Dune 2. In fact, most were better. The genre underwent a series of rapid innovations and improvements to the original formula that really took the simplistic Dune 2 template and rewrote it to accommodate more advanced and more realistic games. Beginning with Blizzard's Warcraft, the first RTS to emphasize melee combat, it seemed as if there was a RTS being developed for every gamer's fantasy. Command and Conquer treated fans of modern warfare to a style of cinematic and engrossing gameplay that had never been seen before. Age of Empires took players on a journey through time and allowed them to wage war throughout human history. Fast-paced, explosive gameplay was defined and refined by Westwood's Red Alert and Red Alert 2 respectively. And at the end of the first era of the RTS genre, as if to prove that greater things were still to come, Blizzard released their masterpiece, Starcraft, and introduced true competitive gaming to the genre.

Many of these games were, for their time, some of the greatest RTS games ever released. The fact that some of them are still played today, over a decade later, is testament to the brilliance of each of their designs. It was during this time that most RTS fans first became acquainted with the genre. Most were introduced to it by one of Westwood's, Ensemble's, or Blizzard's games, and the rivalries that ensued between fans of each still echo throughout the overall RTS community to this day.
Describing Dune 2 is like describing the basics of the RTS genre itself. Westwood's seminal game essentially defined many of the major elements that now make up the RTS genre. While previous games containing elements of real time strategy tended to be imitative in nature, attempting to mimic certain aspects of real war, Dune 2 was the first truly complete RTS game. The ability to use Frank Herbert's sci-fi universe freed Westwood from the burden of imitating reality, and the developer used every ounce of creative freedom afforded by the Dune universe to create perhaps the most significant RTS of all time.

Dune 2 differed from its predecessor pseudo-RTS games in that it gave you near total control over everything. Herzog Zwei only allowed you to directly control a single unit, Stonkers did not allow you to buy new units, and Mega-Lo-Mania did not allow you to directly control units within map sectors. In perhaps the most important innovation the RTS genre has ever seen, Dune 2 threw the doors wide open and gave you control over everything your forces could do. The units could be sent anywhere on the map, ordered to fire at specific things, and you could build as many as you wanted. You chose when and where each building was constructed and, aside from the fact that players could not build on sand, Dune 2 imposed very few restrictions on the player. Whereas previous pseudo-RTS games had core ideas such as supply chains, manpower, research, and fuel management, Dune 2 was purely about control, and all the core ideas of the previous strategy games were just complementary aspects.

For a game that allowed you unprecedented control of your forces, it was a shame that the interface of Dune 2 was so basic. The game only allowed you to control a single unit at a time (there was no way to select a group). There were no options for waypoints and no ways to give strings of orders. The idea of secondary abilities had also not yet been introduced into the RTS genre, so the units were fairly one dimensional. Nonetheless, Dune 2 succeeded where other games had failed—it created a feeling of being in control of an actual army. You were the commander, not merely a single unit or just one link in the chain of power. Little things such as the ability to select the next territory to attack constantly emphasized this point.
The game also featured unique factions, a first for the genre. Previous games featured the same faction, just with different names. Westwood's decision to make the armies of Dune 2 more than mere copies of each other opened the game up to balance problems, but it created a huge amount of diversity and allowed players to identify with one faction more than others. The units were also more than just generic "tanks" and "infantry". They had names which reflected their purposes. The Atreides had a Sonic Tank, which fired a beam of high-intensity sound waves and would damage any unit in the path of the wave. The Ordos possessed the Saboteur, a unit capable of taking control of any enemy unit or vehicle.

One of the biggest and most important innovations of Dune 2 is one that is truly essential to modern RTS games. Before Dune 2, games did not require you to harvest on-map resources in order to purchase units. Resources were previously acquired through other means, such as being automatically generated at specific points (Herzog Zwei), generated by idle units (Mega-Lo-Mania), or not generated at all (Stonkers). This one innovation initiated the era of map-control based RTS games. The formula was simple and brilliant. The one with a greater number of higher quality units will win. To get a larger number of units or higher quality ones, you needed money. To get money, you needed to harvest the on-map resource—Spice—and return it to your base to be processed and turned into money. This forced players to go out, explore the map, fight over the resources on it, and creatively seek ways to gain an advantage. Without this simple idea, there is essentially no strategy in the real time strategy genre. Without the system of base construction, army building, and map-control based fighting that Dune 2 initiated, RTS games would still be the same sort of simple, tactical games that preceded Westwood's landmark title.

But there was more depth to the game than just its faction design and resource system. Dune 2 greatly expanded the simplified unit classes that strategy games had previously relied upon. Instead of a system like that of Stonkers, where tanks countered artillery, which countered infantry, which finally countered tanks, Dune 2 allowed you to counter tanks by building a bigger tank, or to counter them by using a Deviator Tank to take control of them, or to counter them by using a Rocket Launcher to destroy the factory that produced them. This system was possible due to the introduction of a "Technology Tree." In other words, the more valuable, more expensive units were "higher" in the tree and had greater prerequisites which needed to be met (usually met by building a new structure) before they could be built. The player was always faced with the choice of continuing to build a greater number of less expensive, but less valuable units or "climbing" the Technology Tree and accessing the more valuable but more expensive units at the top. Choosing the right moment to climb the technology tree was always an important decision that needed to be carefully considered. However, this was complicated by the fact that the "shroud" (a dark fog that prevented the player from seeing unexplored areas of the map) prevented you from knowing exactly what your opponent had built. For reasons such as these, the possibilities of each battle and, consequently, the overall depth of the game, was much greater than its predecessors.

In terms of storyline and atmosphere, the game used the Dune universe well. Westwood managed to
use many of the most notable features of Frank Herbert's universe to create unique and interesting gameplay elements in Dune 2. For example, the game's buildings can only be constructed on stone terrain. The sandy terrain is home to the famous and deadly Sandworms, which have a nasty habit of coming out of nowhere and eating your harvesters as they harvest the Spice, which is only found on sandy terrain. Two of the central parties of the books, the House Atreides and House Harkonnen, were represented as controllable factions in the game. A third faction, created specifically for the game, was the House Ordos. While the Harkonnen relied upon brute force to accomplish their objectives (similar to the Soviets and Global Defense Initiative of Westwood's later Command and Conquer series) and the Ordos relied more upon speed and clever tactics (much like the Allies and Brotherhood of Nod in the Command and Conquer series), the Atreides took a more moderate approach and adopted aspects of both the Harkonnen and Ordos military philosophies.

It is impossible to imagine the RTS genre without Dune 2. The game has become a central pillar around which the entire pantheon of RTS games which followed it has been built. It took elements from previous strategy games, melded them with gameplay inspired by the Dune universe, and created many entirely new gameplay mechanics which have forever altered the history of real time strategy. Though by today's standards it is outdated, has poor controls, and possesses obsolete graphics, it nonetheless remains the most influential RTS game of all time, and every RTS that exists today owes a debt of gratitude to the pioneering work that Westwood created.
Command and Conquer

Developer: Westwood Studios  
Publisher: Virgin Interactive  
Release Date (C&C): August 31, 1995  
Release Date (The Covert Operations): April 30, 1996

Anyone who has ever played Command and Conquer (C&C) remembers the first time they loaded the game. As the Electronic Video Agent (EVA) AI, "initialized communications" with the Global Defense Initiative (GDI) network, you realized that you were in for something truly special. From the very beginning of the game's installation, it practically oozed with character and style; it was almost as if you were an actual commander uplinking to central command. And then, just as you thought that the showy, imaginary illusion of actually being a military commander was about to fade, it got better. You were treated with a main menu that screamed of modern warfare. And all of this was before you had even played the game.

Perhaps it's a bit over dramatic to call a game sublime. But if the RTS genre has ever seen one, a good argument can be made that it was the original C&C. Yet it did not possess the amazing graphics, the level of complexity, or the sheer detail and polish that today's RTS games have. What it had was very basic, but it worked, and most importantly, it all worked together. The entire game was built from the ground up in a way that made it seem simple on the surface, when in reality it was very deep, both in terms of atmosphere and gameplay.

The game's premise is remarkably simple, yet deep. A strange meteorite lands near the Tiber River in Italy. Normally this would just be an interesting story for the local news, but this is no ordinary meteor. Somewhere inside it is a mysterious, dangerous, and exceedingly valuable substance which would later be named Tiberium, after the Tiber River. In a few short hours the nearby flora mutates into strange, alien-looking plants. Shortly thereafter, small green crystals begin to emerge from the ground. As investigations into the event take place, officials notice that exposure to Tiberium results in severe illnesses and, in some cases, death. It turns out that the strange crystalline substance possesses two very deadly properties; it emits intense radiation and has the ability to mutate whatever it touches into more Tiberium. But the curse doesn't come without a blessing. Scientists and engineers soon find ways to harness the intense internal energy of Tiberium and turn it into a new source of energy, one more valuable and more efficient than all other energy sources yet discovered. The immense value of Tiberium piques the interest of an ancient, secretive organization known as the Brotherhood of Nod (Nod).

As the United Nations Security Council passes the Global Defense Act and creates the Global Defense Initiative, a new military wing of the U.N. charged with global defense and counter-terrorism operations, the Brotherhood of Nod quietly but rapidly sets its plans in motion. Making massive
investments in Tiberium harvesting technology, the organization quickly amasses a respectable amount of wealth. Concentrating its operations in Third World nations to avoid GDI scrutiny, Nod uses its Tiberium wealth and propaganda techniques to convince a large part of the Third World to join its cause and fight for freedom from the oppression of the world's wealthier nations. The Brotherhood's cause resonates with many distressed, impoverished and desperate people, who quickly fill its ranks. As Nod's military and economic might grow, GDI sees it as an increasingly greater threat and prepares for war. When it becomes obvious to all that Kane, the mysterious and charismatic leader of Nod, has global ambitions, GDI declares him a danger to the free world and the first shots of the First Tiberium War are fired.

In the first GDI mission of C&C, you, the commander of a small force which has just made an amphibious landing on a Nod-controlled beachhead, are charged with firing these first shots. From the beginning of the war to the end, you are in total control. You choose to ally with either the GDI or Nod, you choose which territories to attack, and you decide how the battles are fought. These concepts are all very standard for modern RTS games, but at the time, the feeling of being the commander of an actual army was quite exhilarating. Although you only had a fairly limited selection of units, each was unique and had several uses. Additionally, almost all of the game's units were based on real life counterparts; units such as M1A1 tanks, humvees, APCs, Mobile Rocket Launch Systems, and Apache helicopters populated the battlefield. The fortunate result of this was that the game had a very low learning curve. It was easy for players to understand the purposes of C&C's units, since they mimicked real life weapons and their functions.

In many ways, the gameplay of C&C was quite similar to Westwood's previous genre-defining game, Dune 2. It was so similar, in fact, that fans and critics alike sometimes referred to it as "Dune 3." There can be no doubt that many of the fundamentals of Dune 2 were carried over to C&C. The concept of "shroud" was exactly the same in both games, and early attempts to secure reconnaissance data were very important. Resources on the map were required to be harvested by, you guessed it—harvesters—and returned to base in order to be spent or stored. The concept of a "technology tree" was also expanded upon and the result was further refinement of the idea of a "build order," where the player decides beforehand which buildings and units to build, in which order, in order to maximize unit production or attain higher technology quickly. The two factions were unique and required different styles of play. The idea of a "global map" was also imported from Dune 2, a gameplay mechanic which allowed players to select which territories to attack next. This latter idea would be largely forgotten until 3D RTS games such as Shogun: Total War, when the resurgence of the idea of a global strategic map began to take place.
But the game was more than "Dune 3." It was more than met the eye. It was the first game to offer an accessible and natural system of control. While Dune 2 players had been restricted to selecting and controlling only one unit at a time, C&C allowed players to select huge groups of units and give them orders simultaneously. But it didn't stop there, it allowed players to designate these groups by numbers (numbers one to zero on the keyboard) and instantly select these groups, regardless of their location on the map or on the screen. While ordering thirty infantry units to move across the screen in Dune 2 would have taken sixty clicks of the mouse, doing so in C&C only required one button press and one mouse click.

The game has incredibly simple, yet satisfying relationships between units. Infantry were cheap, and, when compared to armor, were quite weak. In fact, they were so weak that they could be run over (accompanied by a strangely satisfying "squish" sound) by most vehicles. However, infantry were plentiful and were vital to early reconnaissance. In groups, Grenadiers or Rocket Soldiers could even defend themselves against armored units. Tanks were faster than the less mobile infantry units, but needed to run infantry over in order to effectively kill them. There were, of course, exceptions to this rule, such as Nod's Flame Tank, which could incinerate dozens of infantry units before being destroyed, but the game nonetheless forced players to choose between more expensive but tougher units and cheaper but slower units. But infantry and armored units weren't always at odds. One of the most unique and most powerful ways to use them together was to use the slow and weak Engineers (which could instantly capture most enemy buildings) in conjunction with armored APCs (which, by themselves, were rather weak as a combat unit, but were an excellent transport unit).

Fundamentally, Command and Conquer, at its core, is about one simple concept, and that concept permeates the entire experience. The game, and the series that it spawned, is simply about abstract relationships. Relationships between units, between strategies, between factions, between styles of play, and most importantly, between players, dominate the C&C experience. It seems that, in the distracting and hurried world of modern RTS development, many of the simple lessons of Command and Conquer have been forgotten. Accessibility was exchanged for complexity. Gameplay was replaced by graphics. Mere, simple fun has been replaced by plentiful but unrefined content. The memory of Command and Conquer will serve as record that it does not take anything fancy to create a great RTS, but merely an interesting system of unit interaction and some cool toys to play with.
The year was 1995. A new genre was growing and the two companies that pioneered it were Westwood Studios and Blizzard Entertainment. Every other game was better than the previous, not only in terms of graphics and sound, but also in terms of gameplay. C&C had been released and it was time for Blizzard to strike back. And strike they did...

WarCraft II continued the story of the struggle between the Orcs and Humans in the world of Azeroth. The storyline is probably the greatest flaw in WarCraft II as it doesn't have any depth and background and it does not motivate the player (except for the short cinematics). There were special units in the single-player campaign which had personality, but the only memorable one is the paladin Uther the Lightbringer. He reappears in WarCraft III as the old mentor of prince Arthas and is a key character in the single-player campaign. He is killed in WarCraft III and players can visit his tomb in the MMORPG World of WarCraft. There are also items that players can get that are said to have belonged to him.

The other memorable thing about the storyline is the Dark Portal (a portal to the Outlands, where the Orcs came from); the object that the whole struggle is really about. In fact, the story would later be expanded in WarCraft III and World of WarCraft as part of the WarCraft Universe's history, but at the time WarCraft II was released it was not very notable. The single-player missions were not exceptionally notable either. Most were of the generic "destroy the enemy base" template, along with a few escort missions.

The interface was also a bit of disappointment for those who played C&C as it didn't allow saving control groups to numbers and didn't allow the player to use build queues, though you could bind locations on the map to a shortcut key. However, the interface introduced one great innovation that became widely used later on—it made use of the right mouse button to give a default command. For example, right-clicking on a mine with a peon selected would order him to mine gold and right-clicking on an enemy unit would order an attack.

With all these negative aspects, you might wonder if WarCraft II was a failure, but in actuality the game was a great success, largely due to the numerous innovations it introduced. Specifically, its success was greatly aided by three new gameplay innovations that Blizzard introduced. First, WarCraft II was the first RTS to allow the player to freely build away from his base. Second, the game finally allowed RTS fans to battle on naval maps, forcing the use of naval units in a RTS game instead of...
relegating them to secondary gameplay elements. Finally, the game introduced the concept of "fog of war" into the RTS genre. Fog of war differs from what previous RTS games had used—shroud—in that it "regrows," whereas shroud, once uncovered, always remains uncovered. The net result of these two innovations was that players were no longer prevented from expanding all over the map and could finally hide their assets from their opponents. In fact, sometimes players would lose their main base but come back and win using an expansion base!

In addition to these two innovations, WarCraft II also used the concept of the Town Hall, inherited from WarCraft I. The Town Hall could be upgraded two times, which, for the first time, created a clear distinction of tech tree levels known as "tiers." The concept of spell casting units was expanded from WarCraft I, as well as the concept of upgrades and research. The basic gameplay is similar to WarCraft I, where the player gathers gold and chops trees to build buildings and units. A population cap is still present, forcing the player to build farms in order to build more units. However, all units cost 1 population regardless of their strength—something that would be changed in StarCraft.

WarCraft II was also the first game to introduce water units and pure water maps (with no land route). This entirely new concept, which would later be used in Total Annihilation as well, forced the player to use transports, unlike in C&C where the transports are just a faster way to get somewhere. There were different water units: a transport, two kinds of battleships, a submarine, and an oil tanker (used to gather from oil platforms built on oil patches in the sea). The same concept of resource gathering would later be used in Krush, Kill, 'n' Destroy (KKnD) and StarCraft (for gas gathering), as well as many others. Water units (and upgrades to them) were the only things in the game that required oil. The Submarine could be seen only by towers, Zeppelins, and Gnomish Flying Machines. There were two flying units, one used only for scouting purposes, and the powerful but very expensive Dragons/Gryphon Riders. The two races shared the same units (with different graphics) but the spells and some of the upgrades differed. For example, the Elf Ranger got +3 damage while the Troll Berserker got regeneration.

The multiplayer was the part of the game that was really strong. For the first time, players could play in teams or in more than a two player battle. While C&C was released too early in the history of the RTS genre to truly make an impact as a multiplayer RTS game, a community formed around an online service called Kali, used to play WarCraft II and other games online, just as the Internet was just beginning to become popular for games of the time. Ladders were formed and the path was paved for StarCraft to become the first truly competitive RTS. Though it may seem like only a minor difference
in the races, the spells proved to be very important and the Orcs were preferred on land maps mainly because of the Bloodlust ability of the Ogres, which boosted their speed and damage, while the human counterpart—the Paladin—had healing, which was only useful when the battle was over. On the other hand, Humans were the preferred race on water maps, largely due to the Invisibility spell that Human Mages could cast on transport ships, making landings on enemy-held islands practically unstoppable.

These imbalances were countered by the invention of new strategies, such as "walling" (blocking the way to your base with buildings), setting up bottleneck points so only one melee unit could reach your defenses, and the extensive use of spells, the most notable being the Blizzard/Death and Decay which caused lots of damage to all units and buildings in certain area as long as the Mage or Death Knight was there to channel it or until his mana was depleted. Raids on peon lines (mainly using Blizzard/Death and Decay) were introduced, and since then have become an important part of most peon-based RTS games. For the first time, players could interact with the terrain via Goblin Sappers/Dwarven Demolition Squads, which could blow up rocks and make a passage in mountains. Unlike in C&C, maps became a really important part of the game. Offensive towering, catapults shooting over trees into the enemy's base, or Mages casting Blizzard while being protected from the enemy's melee units made an extensive usage of map layout in a way never before seen in a RTS game. Many of these strategies would later return and evolve into new forms in StarCraft.

Another big step forward was the fact that WarCraft II was the first RTS game to come bundled with a map editor which allowed players to create their own maps. The .pud file format for WarCraft II maps was later reverse engineered, leading to the creation of third party map editors (the most notable being War2xEd) much more powerful than the originals. Blizzard even began using War2xEd internally, and as a result it influenced StarCraft's map editor. Maps could also be inhabited by neutral creatures called critters. They were different for every tile set and served no other purpose than to make the map more alive (although Death Knights could actually raise skeletons from their corpses). The expansion, Beyond the Dark Portal, continued the story with Humans making a counter-invasion in the Outlands. It didn't change the gameplay but it did add new campaigns, multiplayer maps, and one new outland tile set. Also, the Orc chieftain, Grom Hellscreem, who would later become one of the most important characters in WarCraft III, made his first appearance in Beyond the Dark Portal. In 1999 Blizzard released a new version of WarCraft II called WarCraft II Battle.net Edition which allowed players to play over Battle.net and had a few interface extensions—saving groups to numbers and an attack move command that ordered units to move somewhere but fight if they meet enemy units. Third party replay saving software was also created.
There is still relatively small community that plays WarCraft II online. Its success in developing multiplayer in a RTS game would largely be forgotten, overshadowed by the immense legacy of Starcraft. However, since it was one of the most innovative games in the history of real time strategy, it solidified the WarCraft franchise, as well as Blizzard's reputation as a top RTS developer, and introduced a number of new concepts and gameplay mechanics into the RTS genre. WarCraft II may not have achieved the fame and praise that later giants such as Starcraft or Total Annihilation did, but without it the face of the RTS genre would likely be quite different than the one we know today.
Command and Conquer: Red Alert

Developer: Westwood Studios
Publisher: Virgin Interactive
Release Date (Red Alert): October 31, 1996
Release Date (Counterstrike): March 31, 1997
Release Date (The Aftermath): September 30, 1997

Red Alert was everything that Command and Conquer was, but more. It is a perfect example of how to take something that is already great and make it even better. And Westwood knew they had to make their Command and Conquer franchise even better, since Blizzard had just released Warcraft and had shown that they could be a serious competitor in the future. The original Command and Conquer was hindered by several issues which, while not great enough to hinder the game's success, nonetheless needed to be fixed in Westwood's next C&C iteration.

Foremost among these issues was the fact that the pace of Command and Conquer could sometimes slow to a crawl. Since harvesters in the first C&C game collected Tiberium fairly slowly, and since units often built and moved even slower, it was not uncommon for C&C fans to find themselves waiting. Waiting for the next load of Tiberium, waiting while units traversed the map, or just waiting for them to be built—there was just too much idle time that separated Command and Conquer's explosive battles. Red Alert fixed this in two ways. First, it introduced a new type of resource: "Gems." Gems were worth twice as much as "Ore," the game's primary resource. However, technically speaking, calling them two separate resources is incorrect, since they were just two different flavors of the same currency. Nonetheless, the introduction of a more valuable resource allowed harvesters to collect money twice as fast, but since Gems were limited and never grew back like Ore did, there were no problems with runaway economies in the late game due to an overabundance of Gems.

The second, and by far the most important, of the changes that resulted in a faster game pace for Red Alert was the increased focus on tank warfare. In fact, Red Alert was the game that popularized the now overused term "tank rush." Instead of one basic tank per faction, as in Command and Conquer, Red Alert gives players two basic tanks per faction. For each faction, one tank is more expensive, more powerful, but slower than the other. Tanks are very powerful and cost effective in Red Alert. Losing just one or two can sometimes mean difference between victory and defeat, and battles are very frantic and explosive. While infantry could be used as support units in certain circumstances, the focus was clearly on armor in C&C's successor. This was in stark contrast to Blizzard's Warcraft,
which set itself apart by focusing on living units and melee combat instead of armor and ranged combat. The fact that Westwood went even further towards the armored, modern combat side of the thematic spectrum was perhaps Westwood's way of drawing a metaphorical line in the sand. As time would pass, the rivalry between these two companies (while always friendly) would grow, as would the rivalries between their fans.

Of course, Red Alert was more than just fast-paced, explosive multiplayer action. It had what was probably the most atmospheric and deep storyline of its time. It also had the craziest storyline of its time. In 1946, in the midst of World War II, Albert Einstein develops a machine called the Chronosphere. It is a machine capable of transporting a single entity through time and space. Einstein chooses to end the horrors of his reality by going back in time and killing Hitler, thus preventing World War II from ever occurring. However, as Einstein soon discovers, time doesn't always submit to the wishes of men. In the altered reality Joseph Stalin lacks any competition to the West and, fueled by a desire to spread Communism across the globe, begins a massive invasion of Europe.

The player can choose to take the side of either the European Allies or the Soviets, and the technology that each side uses reflects their own unique philosophies on warfare. The Soviets rely almost entirely on brute force, while the Allies are heavily dependent on speed and subterfuge. The Soviets possess the largest tanks in the game, which easily outclass those of the Allies, but the Allies have a greater variety of much superior infantry (including the "one woman army" unit Tanya, a commando capable of demolishing a base in seconds), a superior navy, and GAP technology, a means of concealing one's forces from the enemy. While Warcraft used the old idea of mirror factions, as in games like Herzog Zwei and Stonkers, Red Alert continued Westwood's tradition of very unique factions with different styles of play. This uniqueness permeated throughout the entire game, in fact. Red Alert, in a definite step forward from the limits of its ground-based predecessor, Command and Conquer, featured fully developed navies, air forces, and armies, each requiring different styles of play for both the Allies and Soviets.

Red Alert, like Command and Conquer and Warcraft, raised the bar for RTS games in terms of both the multiplayer and singleplayer...
experiences. It solidified the Command and Conquer franchise and raised every RTS fan's expectations for future RTS games. It set in stone the fast-paced, explosive nature of the Command and Conquer series and solidified the franchise's reputation. It is remembered fondly by many RTS fans even today, despite its balance problems. While it did not introduce anything truly innovative, it was a nearly spotless refinement of the excellent gameplay of the original Command and Conquer.
Age of Empires

**Developer:** Ensemble Studios  
**Publisher:** Microsoft Game Studios  
**Release Date:** October 26, 1997

When one thinks of the foundational games of the RTS genre, Age of Empires is almost always near the top of the list. Age of Empires was one of the first Real Time Strategy games to ever hit the shelves. The game was developed by Microsoft and Ensemble Studios, a new RTS developer, and used the 2D Genie engine—the same engine that was later used on Age of Empires 2: The Age of Kings. In the game, users can select from a handful of ancient civilizations and lead their empire through the ages, from the Stone Age to the Iron Age.

Age of Empires was the first game to introduce the idea of "Ages," which are effectively Tiers in a tech tree. In Age of Empires, players must advance in Age to further their military and economy. The game contains four Ages: the Stone Age, in which only villagers and basic infantry are available, the Tool Age, in which units such as Archers and Clubmen are seen, the Bronze Age, in which chariots and basic siege units are found, and the Iron Age, where everything from War Elephants to Juggernaut warships to Phalanxes can be found. Age advancements cost more and more resources to research, but also unlock more and more powerful upgrades and units.

Age of Empires had the most advanced resource gathering system in the real time strategy genre and still is unmatched, except by its sequels, to this day. The basic gatherer unit in Age of Empires is the Villager. The Villager is a unit that can primarily gather resources, but can also build structures. There are four types of resources: food, wood, stone, and gold. Food, gathered by hunting, foraging, farming, or fishing, is the cornerstone of unit production; almost every unit available costs food, and thus it is widely considered the most important resource in the early stages of a game. Wood is collected by tasking villagers to chop down trees in the many forests found across maps. Wood is used to construct buildings, as well as build wood-based units such as Archers, Catapults and various Warships. Stone is gathered by ordering villagers to mine from Stone Mines, which are periodically found around maps. Stone is perhaps the rarest resource, and its main use is constructing defensive structures such as Towers and Walls. Gold, the final resource, is found by tasking Villagers to mine from Gold Mines. Gold is a very important resource in the late game, because it is used to produce advanced infantry and weaponry, as well as advance into the Bronze and Iron Ages. Resources in the game are limited, and when a gold mine or stone quarry runs out, players are often forced to make an offensive push to gain control of a more vulnerable mining area. All in all, Age of Empires had the most
advanced resource system of its time, and laid the foundations for many economic systems in modern RTS games.

Age of Empires has twelve unique civilizations, sorted into four different architectural types. Each civilization has roughly the same units, but each has its own unique bonuses:

<table>
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<tr>
<th>Asian</th>
<th>Middle Eastern</th>
<th>Egyptian</th>
<th>Greek</th>
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<tr>
<td>Choson</td>
<td>Babylonians</td>
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<td>Shang</td>
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<td>Yamato</td>
<td>Persians</td>
<td>Sumerians</td>
<td>Phoenicians</td>
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Land-based units are the most used in gameplay. Infantry units such as clubmen, swordsmen, and hoplites use melee combat to attack. Mounted units include units mounted on chariots, horses, or war elephants. Archers, both on foot and mounted (on a horse, chariot, or elephant), attack at range. Siege units such as the catapult (firing a large volley of stones) and the ballista (shooting a large bolt) are good against both units and buildings. Priests are weak units with no attack ability, although they can heal allied units or "convert" enemy units to join your forces.

Seagoing units play a large role in water-based maps, and can be a handy key to victory on all maps. Fishing boats are a great way to supplement your economy, as they can gather food from fish. Merchant ships trade resources from a player's stockpile in exchange for gold at another player's dock. Transport ships carry land units from one area of land to another, and must be used to transport ships across large expanses of water. As well as attacking enemy ships, warships can be very effective in attacking land-based units close to the shoreline. Warships include both galleys, which fire arrows, and triremes which launch ballistae projectiles or hurl boulders, which are highly effective against buildings near the shoreline.

Age of Empires was one of the first RTS games to use the concept of the Town Center. At the beginning of each game, players start with a handful of villagers and a Town Center, which produces more villagers and researches upgrades in Ages. Age of Empires was also one of the first games to introduce a population cap. The Town Center supports 4 population, and in order to create more units, houses must be constructed by Villagers. Villagers can also construct military buildings, including the Barracks, Archery Range, Stable, and the Siege Workshop. Docks create all naval units. Like Warcraft 2, these buildings could be built anywhere and did not have to be built close to other buildings as in Command and Conquer. Walls and Towers can be constructed to fortify a player's base or create a defensive outpost. Economy buildings, such as farms, are also available to enhance economic production. Certain buildings, such as the Government Center, allow for researching technologies. Almost all buildings have upgrades that effect a player's civilization, ranging from making hunting faster to changing clubmen into swordsmen.
Age of Empires also introduced the concept of Wonders. Wonders are enormous buildings representing the architectural achievements of a civilization. They require huge amounts of resources to build and are constructed very slowly (twenty or more villagers working on one together is not uncommon). Wonders do not produce units or allow research; in scenarios played with standard victory conditions, a player can win by constructing a wonder and keeping it from being destroyed for 2,000 years (fifteen minutes under standard game timing). Building a Wonder also greatly increases a player's score, which is beneficial in "score" games. Other players typically make it their top priority to destroy enemy wonders, especially under standard victory conditions. For this reason, and because a Wonder is relatively easy to destroy, a Wonder must be guarded carefully at all times. Wonders cannot be converted by priests (even by those with the ability to convert normal buildings) and are different for each architecture type, with Asian civilizations constructing a round temple, Greeks constructing a giant bronze statue, Middle Eastern civilizations constructing a Ziggurat, and Egyptians constructing Great Pyramids.

All in all, Age of Empires was without a doubt one of the most influential Real Time Strategy games of all time. After great reviews, its expansion, the Rise of Rome, was released in 1998. Age of Empires was truly a pioneer in unit development, technology, and resource gathering. It brought a new level of complexity to the previously simple and predictable RTS genre. The game is considered one of the founding titles of RTS genre, along with other greats such as Starcraft and Command and Conquer, and with good reason. It simply was, and still is, one of the most complete and expansive RTS games ever created.
Starcraft

Developer: Blizzard Entertainment
Publisher: Blizzard Entertainment
Release Date (Starcraft): April 1, 1998
Release Date (Brood War): November 30, 1998

Blizzard Entertainment's Starcraft is one of the best-selling and most influential real-time strategy games that have ever been developed. Originally launched on April 1, 1998, Starcraft flew off the shelves at an astonishing rate. Later in that year, an expansion pack, Starcraft: Brood War, was released. Since then, fans have been anxiously anticipating Starcraft's sequel, although it has not officially been announced by Blizzard Entertainment.

The story involves three races exploring the distant parts of the universe. They soon encounter one another and things quickly turn hostile. Before long, each race finds itself on a quest for control of the known universe, each knowing there can be only one victor. The Terrans, outcasts from Earth and members of the tyrannical Human Confederacy, find themselves trying to wage war with strange alien species while simultaneously fighting their own civil wars. The Protoss, a very religious and technologically advanced race that relies on cybernetics, are deeply concerned with the spread of the third race, the Zerg. The Zerg are completely reliant upon biological development and roam the universe seeking to assimilate other species.

In the realm of Real Time Strategy, a unique conflict such as this had never been seen. Instead of three generic races with only minor differences, these three races are radically different. Each race has a very unique set of abilities and advantages which it must rely on to rise above the others. The Terrans have the ability to move their buildings in the event of danger and exclusively use ranged weapons; even their most basic combat unit, the Terran Marine, comes armed with a C-14 "Impaler" Gauss rifle, whereas the Protoss and Zerg counterparts to the Marine rely solely on melee attacks. The Protoss have powerful psychic abilities which allow them to create psionic storms, merge units, and even make their enemies hallucinate and perceive more Protoss units than there really are. Though the Zerg do not enjoy the advantages of technology, they nonetheless possess units such as the Ultralisk, a towering monstrosity capable of slicing tanks to shreds with its bone-like scythes.

Generally, the gameplay is centralized around the gathering of two resources, Minerals and Vespene Gas, which usually involves constructing a new base after resources in the immediate area have been depleted. In order to obtain resources and construct buildings, each race has a common construction
unit, commonly called a "peon." The method of obtaining each resource differs slightly. To obtain minerals, all that's needed is to use a peon to mine the mineral out of the rock. However, to obtain Vespene Gas, a special building must first be constructed on a Vespene Geyser, after which it can be gathered by peons.

The single player campaign is widely considered to be one of the best and deepest single player modes in the RTS genre. The sheer depth of the Starcraft universe continues to inspire fans to this day. In order to move on to the next campaign, you must advance through a certain number of missions. Although much of the story unfolds through cutscenes, the mission objectives are integrated rather well and reinforce the story that is told through the cutscenes. Instead of the typical "destroy your enemy in one blow approach," you are given a variety of mission objectives as well as number of constraints which make accomplishing your tasks all the more difficult. For example, during the Terran campaign you must prevent the death of General Duke and the destruction of Norad II, the Confederation flagship, which has been forced to land in Antigau Prime behind a wall of Zerg bases. To do this you must clear a path through the enemy bases so your drop ships can reach Norad II.

Starcraft's multiplayer was, in the least of terms, unmatched during it's time. Starcraft added multiple features fairly new to the gaming community, including allowing players to create maps using a map editor, a competitive ladder system, and multiple game types ranging from Melee to "Use Map Settings." Starcraft put control of the gaming experience into the hands of the player. This, in addition to the game's fantastic storyline and unprecedented balance, allowed Starcraft to become a truly competitive RTS. As the game became more popular, televised tournaments began to be held, mainly in Korea, where professional Starcraft players fought for prizes worth tens, and sometimes hundreds of thousands of dollars. In Korea especially, professional Starcraft players were often regarded as celebrities and were offered sponsorships just like professional athletes. These tournaments are still held today, and Starcraft is even considered a national sport in Korea. For the second game to ever be played professionally (second only to Quake), Starcraft's success as a multiplayer sport is quite remarkable.

Many elements, including Starcraft's story, faction design, and stellar multiplayer, played a vital role in
Starcraft's success and led to its rise as phenomenon in the RTS world. But most importantly, Starcraft has stood the test of time. Nine years after its release, it is still widely played throughout the gaming community and has many loyal and active players. For a game that was originally derided as merely "Warcraft in space," Starcraft has built quite a reputation for its name.
**Command and Conquer: Tiberian Sun**

**Developer:** Westwood Studios  
**Publisher:** Electronic Arts  
**Release date (Tiberian Sun):** August 27, 1999  
**Release date (Firestorm):** March 7, 2000

In many ways, Command and Conquer: Tiberian Sun (TS) is the most unique Command and Conquer game ever released. While the original Command and Conquer (lovingly termed "Tiberian Dawn," or TD, by C&C fans) and its prequel, Red Alert (RA), were both small-scale, fast-paced RTS games true to the spirit of Westwood's Dune 2, TS was something of a gameplay anomaly, at least in comparison to what the Command and Conquer community was expecting. TS wasn't so different as to be considered a deviation from the C&C spirit, but it set out in a bold, new direction that some thoroughly enjoyed and with which others thoroughly disagreed.

If you were to watch someone play several games of TS, you would notice that, on average, it takes longer to complete a single game than it does in any other C&C title. One of the most visible causes of this is the huge maps of TS, most of which are at least twice the size of an average TD or RA map. Since units in TS weren't really any faster than in either of the game's predecessors, attacking forces generally took longer to reach their destination than in TD or RA, where the infamous "tank rushes" reigned supreme. This strategy was less common in TS due to the extra distance tanks needed to travel to reach their targets.

In addition to the increased map scale, most games also saw a larger number of units wielded by both sides. Since Tiberium, the game's main resource, was generally more plentiful than in TD, it was easier to build a larger number of units. This was amplified by the introduction of a new kind of Tiberium: Tiberium Vinifera, or "blue Tiberium," for short. Blue Tiberium was worth twice as much as regular, "green" Tiberium. In addition, blue Tiberium was highly volatile and certain units could destroy entire fields of it (a huge sum of money) with a single well placed shot, something which could not be done to green Tiberium. However, most of these units were late game units such as artillery or bombers, and since blue Tiberium was always harvested first this was not an exceedingly useful tactic for disrupting the opponent's economy.

The extra Tiberium, the larger maps, and other factors (such as the increased importance of air power and the introduction of units which could travel underground) forced many veteran C&C players to reconsider how a C&C game should be played. Their old strategies were largely useless, and many initially wondered what kind of C&C game Westwood had created. The solution to their problem was
to think of the units in TS a little differently. In previous C&C games, almost every unit was capable of both exerting map control over its surroundings and of reaching its destination in a reasonable amount of time. In TS, this is not true. Therefore, it seemed logical to classify TS units into two categories: units which are relatively slow but exert strong map control and units which are poor at exerting map control but can perform quick strikes. Most units in TS fit into one of these categories. Slower units such as tanks and artillery were good at exerting map control, but could not be called upon to assault any given point at a moment's notice. On the other hand, subterranean units and aircraft were excellent at catching one's opponent off guard and quickly capitalizing on any mistakes he might make. For the most part, the map-control exerting units functioned the same or very similar to their corresponding units from previous C&C games. The real uniqueness of Tiberian Sun lies in how it implemented the "quick strike" units.

Due to the larger scale of TS, it was sometimes possible to build a small number of tanks for defense and quickly construct an air force large enough to catch one's opponent off guard. In theory, a powerful air force could entirely or almost entirely destroy an incoming tank force since the air units were quick and flexible. In reality, this strategy was much more viable for the Global Defense Initiative (GDI) due to their overpowered Orca Bombers, two of which could destroy almost any unit and most buildings with their carpet bomb attack. The Brotherhood of Nod (Nod) possessed the entirely useless Harpy attack helicopter, which did the least damage of any aircraft in the game yet had the longest reload time, and the high-tech Banshee, which was fast enough that it could often dodge anti-aircraft missiles (with the help of an engine bug that caused poor missile tracking). The net effect of this new style of gameplay was that a respectable air force, while sometimes difficult to obtain, could completely equal or overcome any traditional ground force, an entirely new concept for a C&C game, as well as for the RTS genre as a whole.

While the new and stronger aircraft of TS tipped the scales to make traditional ground units weaker, the other main type of quick-strike unit, the subterranean unit (available only to Nod), shook things up by making buildings more vulnerable than in other C&C games. There were only two types of subterranean units, the Devil's Tongue Flame Tank (lovingly named the "Flaming Shoebox of Death" by some) and the Subterranean APC, and neither were very useful against armored units. However, they were incredibly deadly to buildings. A small group of Flame Tanks or a single Subterranean APC loaded with a few Engineers (infantry units capable of instantly capturing almost any building) could drill underground, quickly pass under any static defenses, emerge in the heart of the enemy base, and

![A large GDI bomber raid in progress.](image-url)
decimate it in very short order. Although both sides could build pavement on the ground to prevent subterranean units from surfacing there, the sheer amount of ground one needed to cover made this a very implausible solution. The only real defense was the Mobile Sensor Array, a unit which could deploy and detect incoming subterranean units (as well as cloaked units), although it could not actually do anything to stop them. The net result was that, if you were caught with your army away from your base, or even on the wrong side of it, a small force of unseen subterranean units could quickly decimate your base before you could do anything to prevent it.

Much of the unique gameplay of TS is a direct result of the game's storyline. While Red Alert adopted a slightly comical Cold War era theme and Tiberian Dawn employed a modern setting, the world of TS is a serious, futuristic, and post-apocalyptic one. The story, which is told mostly through full-motion video cutscenes, relates that the world of TD has been ravaged by the Tiberium plague. The substance that Scientists praised as a clean, cheap resource for the 21st Century turns out to be a disease which has begun uncontrollably terraforming the Earth itself. The plentiful Tiberium in most TS maps is a reflection of this harsh reality. Also, since Tiberium has polluted most of the world's oceans to the point where sea travel is largely impossible, there are no naval units in TS but many air units.

The storyline itself is a natural continuation of where TD left off. After the GDI victory in TD, Nod is a broken, disorganized, and largely impotent organization whose competing factions are ruled by various leaders. The most cunning of these leaders, Anton Slavik, manages to eliminate the most powerful Nod leader at the time, General Hassan, who is merely a puppet figure secretly installed by GDI to temper Nod's aggression. Just as Slavik is about to publicly execute Hassan, the image of Kane, the original Christ-like leader of Nod, who was thought to be dead, appears on a giant screen behind Slavik and promises a new world order once GDI is defeated. GDI, astonished that the (apparently) resurrected Kane has returned, rushes to forge an alliance with the
Forgotten, a band of rebels suffering from Tiberium-induced mutations so severe that they consider themselves a separate species. In the final battle, GDI's Commander McNeil confronts Kane and kills him, preventing the launch of a massive Tiberium missile that Kane planned to detonate in the upper atmosphere in order to transform Earth into a Tiberium planet.

The expansion, Firestorm, continues this storyline. In the absence of Kane, Slavik controls Nod, but once again must silence dissent from his rival Nod leaders in the traditional Nod style—execution. The GDI, having captured the Tacitus (an invaluable device which Forgotten stories claim can reverse the seemingly unstoppable effects of Tiberium) during the final battle of Tiberian Sun, are just beginning to unlock the secrets of Tiberium when CABAL, the Nod AI superprogram that the GDI captured in order to translate the Tacitus, hijacks the Tacitus and begins a full-scale cyborg-based assault on both GDI and Nod. GDI and Nod form a reluctant but necessary alliance against CABAL and manage to destroy his computer core and defeat him, or so it seems. In the final cutscene of the Nod campaign, amidst rows of dozens of CABAL's clones, a vat containing Kane himself, or a clone of him, is shown, with CABAL's face on a giant screen above. As their two voices mix and overlap, the following is spoken by Kane and CABAL:

"M...m...my vision has permutated. My...your...my plans have followed a path unpredicted by the union of GDI and Nod. My...Your... ........Our directives must be reassessed."

And with that, the true identity of CABAL, and exactly who—or what—Kane is, is left a mystery.

For many, Tiberian Sun is a game that shines because of its intricate and compelling story. For others, it is an extraordinary game because of its unique and captivating gameplay. Some consider the game to be too serious and criticize the game for being so grim that it's not fun to play. Other criticisms against the game argue that Westwood tried too hard to create a somber, believable storyline and, in doing so, sacrificed the successful gameplay of the previous two C&C games. However, fans of Tiberian Sun disregard such criticisms and point out that the game has one of the most immersive storylines, one of the most captivating artistic styles, and some of the most unique gameplay of any RTS game to this day. Indeed, the legacy of Tiberian Sun is that, while creating great, compelling gameplay should be at the forefront of any RTS developer's "to do" list, the power of an immersive story and a believable game universe cannot be neglected.
**Stronghold**

**Developer:** Firefly Studios  
**Publisher:** Take Two Interactive  
**Release Date (Stronghold):** October 21, 2001  
**Release Date (Crusader):** September 25, 2002

In many ways, Stronghold is similar to the popular game Age of Empires 3 (AoE 3), having similar units such as the archer and pikeman. However, unlike AoE 3 and many other RTS games, it does not have a strict, well-defined, "rock, paper, scissors" style counter system. In fact, aside from the thematic similarities it shares with the Age of Empires series, Stronghold does not bear many similarities to "pure" RTS games at all. To further this point, the game's expansion, Crusader, was advertised as a "castle sim." While the game is part simulation, it does have enough elements of real time strategy to merit a place in the history of the genre.

There are now three games in the Stronghold series, with one more in production. They are games about the Medieval Times. The game has a military campaign, but you must nonetheless manage your economy intelligently and keep an eye on it. There is also an economic campaign, although it only has five scenarios. The military campaign has many more missions and focuses on combat, while the economic campaign is mainly focused on economic growth and doesn't see the same amount of military conflict that the military campaign does.

There are no factions, in the traditional sense, as all players have equal access to all units and buildings. Essentially, this means that every game is a "mirror" match, but since there is a relatively large number of units and buildings available there is still room for diversity on the battlefield. Which units and buildings can be built depends on the resources which one possesses. Most buildings cost wood, but some cost stone. All units cost coins and must be equipped with their weapons and armor. The basics of this resource system are rather straightforward, although actually having to separately build weapons and armor for your units and then equip them means that the implementation of it can be rather complicated, compared to most RTS games. The system has certainly not revolutionized the RTS genre, especially considering that Stronghold was never very popular. But it separated players based on their ability to multitask by forcing them to balance their resource collecting efforts, since certain units could not even be built without enough wood or stone, and since a large number of units were no good if you forgot to build weapons for them.
The military campaign had around thirty missions, whilst the economic campaign had five. Because the economic campaign was rather devoid of action, it was more of a construction-based scenario and was useful for exploring the game's economic system. The military campaign starts you out as a Lord (whose name you can choose). You begin with two territories and the rest of the lands are divided between four rival leaders (although a few states are independent). They are the Duc de Puce, Duc Beauregard, the Duc de Truffe, and Duc Volpe. However they are more commonly known by the names "The Rat," "The Snake," "The Pig," and "The Wolf," respectively. At the beginning of the campaign, these four have taken over a lot of your land and with each passing mission you reclaim one territory. The objectives are never the same, but in the military campaign you will always be fighting.

Stronghold: Crusader (Crusader) is a stand-alone expansion for Stronghold, which means that, while it is an "expansion" in terms of gameplay similarities and the addition of new content, it is technically a sequel because it can be played without actually having Stronghold installed. This was an entirely new concept for the RTS genre, as previous expansions always required the base game to be installed. Crusader has all the units and characters that were in Stronghold, but with an entirely new Arabic faction, complete with its own units and buildings. It also has the Crusader Trail mode, which is a mode which simply asks you to complete fifty successive maps. You play each map under different circumstances, but the objective is always to defeat all enemies. It also has four short campaigns.

While Stronghold and Stronghold: Crusader never really caught on in the RTS genre, the few who have played them have built a solid community for them. The Stronghold Series does not have a built-in online gaming area, like some popular games such as Age of Empires 3 and Rise of Legends. However, GameSpy currently hosts both Stronghold games, and many dedicated fans continue to enjoy them online.

Stronghold is a curious mix of complexity and simplicity. The economic system requires more attention than the simplistic resource systems of Command and Conquer games, yet the units of Stronghold are fairly one dimensional, usually only having one distinct purpose. It is a game that does not rely wholly on compelling, dynamic gameplay to entertain fans. It is a game for people who enjoy sieges and castles. It is a game for people that enjoy having their imaginations stirred by the world that it presents the player. It will never be remembered as a popular or hugely successful game, but the dedicated niche community that has sprung up around it is a testament to the potential of a RTS game's ability to appeal to a very specific type of fan.
Command and Conquer: Red Alert 2

Developer: Westwood Studios  
Publisher: Electronic Arts  
Release Date (Red Alert 2): October 21, 2000  
Release Date (Yuri's Revenge): October 10, 2001

Command and Conquer: Red Alert 2 (RA2) is a very fast-paced, somewhat cartoon-like RTS released in the waning years of the 2D RTS era. Although the game incorporated a limited use of 3D elements in the form of voxels (short for "volume pixels"), a graphical technique that used a 2D engine to mimic the effect of a 3D engine, it was nonetheless clear that RA2 would be one of the last 2D RTS games the genre would ever see. That's not to say that the graphics were bad, however. In fact, many gamers appreciated the colorful, lively look of RA2, which complemented the game's cast of colorful and lively characters.

In contrast to the dark and serious premise of Command and Conquer: Tiberian Sun (TS), the storyline of RA2 is rather ridiculous. The humor of the game results from the fact that this "tongue-in-cheek" style of ridiculousness is intentional, as the game's heroes and villains alike are practically ripped out of old comic book characters. There is the Wonder Woman-like Tanya, an Allied commando with an attitude; the power-mongering Premiere Romanov, who seeks world domination for the Soviet Union; his brilliant (or insane) assistant, Yuri, who secretly harbors ambitions of his own and uses mind control technology to achieve his aims; and the outwardly tough, but soft-on-the-inside, General Carville, who leads the Allied forces in the name of freedom. The Soviets naturally seek world domination, and the Allies (mostly composed of the American military) are simply in the way of Premiere Romanov's plans. So the Soviet Union launches a full scale invasion of the US, using exotic technology such as robotic Terror Drones, capable of burrowing inside a tank and destroying it from within, and Giant Squids trained to destroy ships with their massive tentacles. If a story like that can't make you smile, nothing will.

Perhaps one of the greatest ironies of RA2 is that, while it used a modified TS engine, its gameplay was essentially the exact opposite of its predecessor. While TS was a somewhat slower-paced RTS game than what most Command and Conquer games had been, RA2 was blindingly fast. Some units, such as the Soviet Terror Drone, were so fast that many players had trouble even clicking on them as they dodged and darted across the map. In fact, the most powerful unit class in RA2—tanks—were also the fastest unit class, even faster than aircraft! Naturally, this meant that RA2 inherited a gameplay tradition from Red Alert--the so-called "tank rush." But tanks in RA2 were not as simple as those in
Red Alert. They came in a great variety and with different functions, which meant that they formed the core of any ground-based assault. While this disappointed some who had grown accustomed to games which relied more on infantry, it was true to the Command and Conquer spirit, and fans eagerly added the game to their collections.

The Soviet Tanks were especially tough, and easily outclassed their Allied equivalents. Since tanks formed such an important part of the battlefield, this might lead one to assume that the Soviets were clearly a more powerful faction. Although they were the preferred faction by many top players, the Allies had their own counters to the Soviet Tank superiority. First, the Allied tanks, while inferior, were cheaper and could be built in greater numbers. They even had a special tank, the Mirage Tank, which could disguise itself as a tree and ambush enemy tanks and infantry. But the Allies' greatest advantage was their flexibility. While almost all Allied units were less powerful than their Soviet counterparts, they could generally be used for more than one purpose. For example, the Allied basic naval unit, the Destroyer, could bombard nearby land forces and attack naval units, including submarines, while the Soviet Counterpart, the Typhoon Attack Sub, could only attack other naval units. The Allied Mirage Tank was equally good against tanks and infantry, whereas the Soviet Tanks had to run over infantry (accompanied by a satisfying "squish" sound) in order to reliably kill them.

However, the versatility of each of these units paled in comparison with what might have been the most flexible unit ever put into a RTS game—the Allied Infantry Fighting Vehicle (IFV). The IFV, by itself, was a fairly weak and cheap unit, whose missiles were good for destroying small groups of infantry and for providing light air defense. However, the IFV's true strength was that it could change its function simply by placing a single infantry unit within it. If an Allied GI was put inside, the IFV gained a machine gun, which made it even more deadly against infantry. If a Navy Seal was put inside, it gained a rapid-fire machine gun, which allowed it to mow down almost innumerable amounts of infantry. If an Engineer was placed inside, the IFV sprouted a mechanical repair arm and could repair any nearby armored unit. The possibilities were compounded by the fact that the player could place captured enemy units inside as well. Placing the normally slow and vulnerable Yuri mind control units inside turned the IFV into a unit which could quickly approach an enemy unit, take it over, and retreat while the opponent's other units killed their former comrade.

Depending on what infantry unit you placed inside, the IFV could become a frontline attack unit, a hit and run unit, a lone kamikaze unit, or one of many other possibilities. All together, although there were a large number of possibilities, there were only four models for the IFV, since many combinations shared the same model. (1) has the machine gun canopy and (2) has the armored canopy.
there were eighteen possible combinations of the IFV and an infantry unit. The expansion, Yuri's Revenge, increased this number to twenty two.

Due to RA2's "easy to learn, hard to master" nature, along with its colorful and attractive graphics, the game gained a large following and many players went online and competed in a RTS game for the first time. While the true appeal was the thrill of playing a fast-paced, explosive RTS against other people, the game had many accommodating aspects which made the online experience both enjoyable and long-lasting. Perhaps the aspect of the online mode which most greatly enhanced the replay value of RA2 was the concept of "subfactions." The idea was that the two main factions, the Soviets and Allies, were really conglomerations of several smaller, independent nations, and each of these nations brought a specific, unique unit or structure to the table. The French had the Grand Cannon, a massive defensive emplacement capable of hurling powerful shells across the screen. The Iraqis had the Desolator, an infantry unit which emitted radiation so intense that nearby infantry units died in seconds (unless they were other Desolators). The Cubans had Terrorists and Korea enjoyed the benefit of the most powerful planes in the game.

The idea of subfactions was quite popular and would later be adopted (with modifications) in games such as Command and Conquer Generals and Company of Heroes. Although the many subfactions provided plenty of replay value, one of the most memorable and humorous aspects of RA2 multiplayer matches resulted from "taunts" that players could send to one another during online matches. A simple button press would send a message tailored to your specific subfaction. The Americans sent taunts such as General Carville's booming exclamation, "Surrender now and I promise amnesty for you and your men," while the French sent the slightly less intimidating taunt, "Surrender! No, I don't mean I surrender...I mean you surrender," and the down-to-earth, business-like Russians teased their opponents with messages such as "If you surrender now, perhaps...I will kill you quickly!" This allowed players a way to communicate, albeit a limited form of communication, during matches without actually having to type out an entire insult. Entire conversations could be had simply by exchanging various taunts, although the depth of these conversations was questionable.

Command and Conquer: Red Alert 2 will be remembered as one of the last 2D RTS games, but nonetheless an important one in the history of real time strategy. It proved that war games don't always have to be bleak and dreary, showed the potential of fast-paced, explosive gameplay to create a large online community, and set a standard of polish and superior gameplay that many of the 3D RTS games that followed it failed to achieve amidst their efforts to achieve graphical superiority. Although it is was released in 2000, it is still played by a respectable number of people, proving that the humor, excitement, and character of a great game can still entertain many years later.
Chapter 3: Polygons and Pixels

The 3D Revolution

As the glory years of the RTS genre drew to a close, developers needed something to keep RTS fans interested. The man who solved this problem was Chris Taylor, a no-name game designer from British Columbia, Canada. Taylor believed the genre was beginning to become repetitive and that RTS developers were copying the elements of past games and simply adding a gimmick or two to sell their games. His solution, which was a very bold move for a time when PCs had relatively little processing power, was to fully incorporate physics into a RTS game. Believing that the old rock, paper, scissors format needed a serious revamp, he decided that RTS games needed to move beyond the 2D world which had previously constrained them. To that end, he released the first fully 3D, fully simulated, large-scale RTS, calling it (appropriately) Total Annihilation.

Total Annihilation was so radically different that it should have altered the RTS genre in a similar but smaller way than Dune 2 did. However, many of the innovations of Total Annihilation were simply ignored for years to come. Few RTS games to this day imitate its advanced control features or the fully simulated physics system that it pioneered. Perhaps this was because Total Annihilation was so different that merely trying to imitate it would force a developer to abandon their original design. Maybe it was the result of the emergence of powerful RTS franchises and the strong loyalty (and sometimes closed-mindedness) of their fans. Either way, although most of Total Annihilation's unique aspects were not widely imitated, its greatest visual innovation, the use of 3D graphics, would soon set the standard for all RTS games to follow.

Realizing that PCs had the power to run a 3D RTS, developers rapidly jumped on the bandwagon and began earnest development of their own 3D RTS titles. Unfortunately, this resulted in several games that were pretty on the outside, but hollow on the inside. Indeed, while Chris Taylor began the era of the 3D RTS with a bang, it soon became clear that many new 3D RTS games had fundamentally broken gameplay. The best were fun for a while but quickly got old, while others were nothing more than failed experiments. Games like Shogun: Total War, Emperor: Battle for Dune, and Empire Earth were fortunate enough to achieve modest success. It was apparent that most developers simply had no idea what to do with a 3D RTS. The same tricks that worked with 2D RTS games did not apply, and RTS fans had become more demanding after the string of hits in the glory years of the genre. After Total Annihilation, the RTS genre seemed to be slowly sailing through the doldrums without any direction at all.

However, at the end of the era of the first 3D RTS titles, a new developer called Relic created a little game known as Homeworld. The game would call into question several traditionally held beliefs about the RTS genre, such as the ineffectiveness of the genre as a storytelling medium and the difficulty of implementing space combat in a RTS game. It was a welcome breath of fresh air for many RTS fans, proving that the genre still held much promise and that RTS developers still had a few tricks left up their sleeves.
Total Annihilation

Developer: Cavedog Entertainment
Publisher: GT Interactive
Release Date (Total Annihilation): October 25, 1997
Release Date (The Core Contingency): March 20, 1998
Release Date (Battle Tactics): Jun 30, 1998
Release Date (Kingdoms): June 25, 1999

Total Annihilation. The name seems to say it all, doesn't it?

Total Annihilation (TA), which debuted in 1997 under a Chris Taylor led Cavedog Entertainment, was the first RTS game to use both 3D rendering of units and terrain. It paved the way for future RTS games that would similarly use this rendering. Massive battles, huge explosions, and large bases were all commonplace in Total Annihilation. Hundreds of units attacking each other in large scale warfare was now a possibility in the RTS genre. The game itself also featured something else that many RTS games had never even thought of implementing: real world physics. Not every plasma burst that a heavy Goliath Tank fired would hit an enemy unit, especially if it were blocked by something in its way!

This combination of really good graphics (for its time at least), as well as a sense of realism through the use of physics, created one of the best RTS games to date. To this day, people still play TA, not to mention "TA Spring", an independent, open-source project developed solely by loyal TA fans who absolutely loved the game. Very few fan communities have had the passion and loyalty to create an entirely new game based off an old one, and the fact that the TA community did this speaks volumes about their enthusiasm for TA.

TA was also one of the first RTS games to employ infinite resources. RTS games before TA, such as Age of Empires, always had a finite amount of resources. This frustrated some, since base planning and unit building were always limited by the available resources on the map. A player knew that he had to conserve resources and build only what was needed. In TA, energy and metal could constantly be collected with no limit. A player could build anything whenever he wanted; it wasn't a question of if he could build it, it was just a question about how long it would take to build. Also, once units were destroyed (provided their remains weren't nuked, obliterated with a D-Gun, or heavily fired upon), one could reclaim the metal or a portion of the metal required to make the dead unit. TA still has one of the most unique resource systems ever, and many still claim that its system is the best.

Another unique aspect of TA was the employment of long range artillery. In many RTS games, even
modern ones such as Command and Conquer: Generals, units have a relatively short maximum range, usually no more than the width of the screen. In TA, artillery could fire tens of screens, not to mention a nuclear silo's ability to hit anywhere on the map. Who could forget the chills one received when you heard the shrill sound of the Big Bertha firing its huge cannon? BOOM! You desperately hoped it was your ally's, or your base would soon be rained down upon by a long range plasma cannon!

TA was also one of the first games that allowed virtually every single unit to fire while moving. Units would automatically attack each other and even try to maneuver out of enemy fire. Also, units would not fire at enemy units if friendly units were in their way. This feature was also helped by the fact that TA was a RTS game that had land, sea, and air combat. Most other RTS games of the time only had perhaps one or two of these types of combat; but one must understand that the sea aspect was so well-developed that a player could literally play on an all-water map.

TA's counter system was also pretty unique for the time period. Instead of the "rock-paper-scissors" combat system used by many RTS games both old and new, TA's counter system was much more complex. Flak cannons and anti-air missile towers could take down planes efficiently, yes, but anti-air missile towers could also attack ground units, though not as efficiently as say, a plasma battery. In TA virtually every unit could attack every other unit. This doesn't mean that a heavy laser tower would be able to shoot down an aircraft, but based on one's maneuvering of the aircraft, or perhaps sheer luck, it was quite possible. Even artillery batteries could fire at aircraft, but again, that didn't necessarily mean that the aircraft would be destroyed. Lasers would perhaps be more efficient against certain "Kbots" (mech-like machines), and plasma cannons would be more efficient at taking down larger vehicles. The possibilities of warfare were quite endless.

Total Annihilation was truly a RTS game without limits. There were no specific build orders, no absolutely necessary units to always win a game, and no certain buildings required to win a game. Would you tech up early, and try to go for an early fusion reactor to power your Vulcan rapid fire plasma cannon whilst building laser towers to defend your base? Or would you perhaps go for a nuclear silo instead of the Vulcan? Or maybe a more defensive nuclear missile interceptor would fit your style of play? Or would you do none of this at all, and rush with first tier units? The game was YOURS to command as you saw fit.

On top of all this, the game did suffer from certain AI problems (such as the AI that would build units that didn't necessarily counter an enemy unit). TA also suffered from a weak single player campaign; the storyline was mediocre at best, and is nothing compared to more modern RTS games like Warcraft III or Homeworld. TA only featured two sides to play as: the Arm and the Core. The story goes roughly along the lines of this: the Core were a group people who decided to upload human brains into machines, constantly producing the best fighters; while the Arm was a sector of the Core that wanted to keep their human traits, and relied on cloning. When played in game, both the Arm and the Core were
controlled and produced by a "Commander" unit that contained a human, while every other part of the
game was a machine. Chris Taylor didn't truly care about the single player campaign experience
because he knew that people would love TA for its gameplay.

What kept TA alive was its really well-done multiplayer gameplay, which is why people still play TA
online to this day, with some active ladders and clans. But perhaps what really set TA apart from other
RTS games was the massive amount of units available. About 150 different units came with the
original TA, and its two expansions, Core Contingency and Battle Tactics, increased the count to
around 230 units. TA was also one of the only games that allowed players to download new units for
free directly off of Cavedog's website. The game was also easily moddable, which allowed for quite a
large community that created new maps, units, and even some total conversions (like a Star Wars mod).

However, TA's two expansions were also criticized for lacking plot, just like the original TA. Cavedog
later released TA: Kingdoms in 1999. Instead of the sci-fi theme of the original TA, TA: Kingdoms
featured a fantasy setting. In an effort to give fans the plot that TA should have had, Cavedog created a
significantly more developed storyline in TA: Kingdoms. However the game just didn't have the large
scale warfare that TA had, partly due to the fact that it used more complex models. TA: Kingdoms just
didn't quite play like the original TA did.

Total Annihilation was a game that definitely made a large mark in the RTS genre, introducing many
new unique aspects in a RTS game that had never been seen in the RTS genre. Its community is still
fairly large, considering how old the game is, and TA Spring continues to grow as more people
discover it. But the true legacy of TA has been resurrected in a game called Supreme Commander.
That, however, is a topic for another day.
Shogun: Total War

Developer: Creative Assembly
Publisher: Activision
Release Date: August 24, 2001

If you're not old enough to remember the horrific 1981 TV miniseries Shogun, then the title of EA's perfect melding of strategy and tactical combat will have no taint for you, and that's a good thing. It's good because Shogun: Total War has nothing to do with wispy-haired gaijin Richard Chamberlain and everything to do with filmmaker Akira Kurosawa's sweeping cinematic battle scenes, as spooled out in The Seven Samurai, Ran, and other renowned epics.

Set in Japan's tumultuous Sengoku era, Shogun: Total War truly is two games in one. However, you're encouraged to grasp the basics of the real-time combat aspect before venturing into the intricacies of the empire building campaign game, where combat becomes one element in a larger picture of managing resources, building up provinces, and training armies for the inevitable assaults on rival warlords.

On the panoramic 3D battlefield that is its heart, Shogun: Total War looks great and plays even better. Armies can be made up of a variety of unit types, from simple spear-wielding peasants to fearsome no-dachi samurai (highly trained foot soldiers wielding massive two-handed swords) to musketeers, once the round-eyed foreign devils land on your shores and offer you guns for trade. Each unit has its own particular strengths and weaknesses, and guiding your formations into battle so that they most effectively engage the enemy forces makes for some surprisingly deep and realistic tactical game play, especially when unit morale, weather, and terrain are factored in and used to your advantage. And oh, what battles! They are bloody, thundering affairs that can see as many as six or seven thousand individual soldiers on the map at once, charging, clashing and raining hundreds of arrows upon each other. Amazing stuff.

On the strategic side, things take place on a stylized two-dimensional map of Japan, broken up into its various provinces. After choosing one of seven available clans, your goal is to overcome all of your enemies and unite Japan under your benevolent shogun rule, by building up your finances, advancing your technology, and assembling better and more efficient armies through a simplified version of the tech tree used in games like Civilization II.

In addition to dispatching armies across the map to invade enemy domains, you're asked to engage in
forms of subterfuge like checking out opponent unit strengths with emissaries, stirring up unrest in enemy provinces with shinobi spies, and conducting assassination attempts on generals and diplomats using ninjas or the frighteningly efficient geisha. These latter events are played out in short, windowed cut scenes that are both technically dazzling and entertaining. But watch out for your daimyo, the leader of your clan—should he die in battle or be assassinated without leaving a mature heir, it's game over.

The beautiful thing about Shogun: Total War is that it can played as a quick and easy real-time combat title (using either the included scenario editor or by choosing from among a handful of pre-fab historic battles), yet it can also be played as a straightforward, combat-free strategy game, since you're given the option before each battle of either commanding your armies personally or letting the computer sort things out. Once you have a basic grasp of combat tactics, it's reasonably easy to secure an outcome more favorable than what the computer is going to give you, but a campaign game with a lot of fighting could drag on for days if you decided to lead your samurai into battle every time.

Sadly, when playing online against human opponents through Shogun's built-in multiplayer interface, tactical combat scenarios are the only option. It's too bad, because the campaign game is where the true multiplayer fun would lie, especially since the diplomacy aspects of the single-player campaign are weak at best.

Some other hiccups in an otherwise smooth gaming experience include a counter-intuitive resource management interface which requires much clicking around just to find out which province is in the process of building what, and a battlefield camera that tends to hover just a little too far above the action, when what you really want is to see your little samurai sprites running their yari through the little enemy sprites' intestines.

No matter though, because the replay value of Shogun: Total War is immense. Aside from the four difficulty settings, each clan has its own strengths, based on number of starting units, what type of units it makes cheaper/better than the rest of the clans, and even geographic location. Add to that an enemy AI that is a challenge to outwit both on and off the battlefield, and this would be a title to take to a desert island, jail, or any other place where you have lots of free time to delve into its exotic eastern mysteries. The fact that this was the first in the Total War series show's how tremendous the game was at the time, to spawn such epic follow ups as Medieval: Total War and Rome: Total War.
Emperor: Battle for Dune

Developer: Westwood Studios  
Publisher: EA Games  
Release Date: June 12, 2001

Emperor was somewhat of an experiment for Westwood. After Total Annihilation, the RTS genre had begun to evolve into the third dimension. Westwood knew that developing a 3D RTS posed a number of challenges, but they also knew that their 2D/3D hybrid "voxel" (short for "volume pixel") engine would not be able to keep up with the advances in graphics that the RTS genre was seeing. So Westwood, once the leader in innovation for the RTS genre, hopped on the bandwagon and started work on its first 3D RTS.

From the beginning, it was decided that Emperor would not be a revolutionary or groundbreaking RTS. Westwood was playing it safe this time. With all the problems associated with creating the game's 3D engine, Westwood did not have time to redefine the RTS genre. So they stuck to what they knew and trusted, and as a result, Emperor turned out to have a very similar feel to Westwood's other RTS games. The influence of Dune 2 and Command and Conquer: Tiberian Sun were particularly apparent. Westwood's trademark fast-paced, small-scale, and explosive gameplay was present in full force and its effect was made all the more visceral by the added beauty of the new engine.

However, the game was certainly not perfect. It had a few annoying qualities, most of which had nothing to do with the 3D graphics, which functioned quite well (aside from causing longer loading times than expected). One of these annoying qualities was due to the return of the global "metamap" feature from Dune 2. Many of Emperor's missions were introduced with full motion videos (FMVs), which narrated events as they occurred in the storyline. Since the presence of the metamap created a campaign which was open and dynamic, it was impossible to create FMVs for every battle. As a result the number of FMVs dropped off considerably toward the end of the campaign. Since most players naturally expected the drama of the storyline to increase as they progressed, they were quite often disappointed by the near disappearance of the FMVs towards the end of the campaign. However, minor issues such as these discarded, the game's storyline was remarkable for its faithfulness to the Dune universe of Frank Herbert's novels as well as for its engaging and interesting atmosphere.

Although in one respect the game was a remake, Westwood did add a number of new features that greatly enhanced the outdated gameplay of Dune 2. Chief amongst these improvements was the

The graphics of Emperor were a world apart from those of Dune 2.
removal of the need to individually baby-sit each harvester as it went to and fro across the map. Gone were the days when the harvester drivers could not remember where they last collected Spice. Instead, the harvesters in Emperor traveled in style. Each refinery came with a Carryall transport aircraft capable of picking up the harvester and flying it to the Spice and back to the Refinery. This shifted the focus of the game away from petty tasks and busywork and allowed the player to focus on the fast-paced battles of Emperor.

The interface also saw an overhaul. Instead of the old, bulky and inefficient sidebar of Dune 2, the sidebar of Emperor was semi-transparent, allowing a greater view of the battlefield. The archaic state of the Dune 2 interface was well recognized by Westwood, and the player no longer needed to click a move button to actually move their units. This was handled simply by clicking the unit and then clicking the destination, as in all other RTS games since the time of Dune 2.

It is hard to find anything noteworthy or unique about Emperor: Battle for Dune. While it was considered by many to be a great game in the Westwood tradition of RTS games, it also further confirmed that Westwood was no longer the dominant force in the RTS genre that it once was. The problem with Emperor, quite simply, was that it was good, but not great. And in a time when the RTS genre had just produced many great games and great developers, it just wasn't good enough to just be good. The fate of Emperor ironically seems to mirror the fate of Westwood Studios, which was closed a year and a half after Emperor's release. While the game was good, and although it was fun, it failed to stand out among the crowd. Sadly, as many developers came to realize this in the years after Emperor's release, many games after Emperor sacrificed sound gameplay, introduced gimmicks, and became niche in an attempt to attract attention.
Medieval: Total War

Developer: Creative Assembly
Publisher: Activision
Release Date: August 19, 2002

The second installment of the Total War Series was no doubt one of the best medieval games of its time. Offering players the opportunity to build a dynastic empire from Medieval Europe all the way to the corners of the Earth, it gave players a genuine feeling of being a global force. Allowing players to siege mighty fortresses through four hundred years of brutal medieval warfare, while meeting heroes such as Richard the Lionheart and William Wallace on the battlefield, Medieval gave you a feeling of command and importance.

Many hardcore Total War fans have called this the best game of the series because of its depth of strategy; even with an army of two hundred you could beat an army of four hundred by using your army correctly. Swift ambushes, for example, with Heavy cavalry charging into the enemy's infantry, could destroy forces much more numerous than your own. The gameplay was both tactical and strategic, which was the main reason behind Medieval's popularity. The turn-based game style, which dealt with the conquest of towns and capitals, was only one side of the coin. Once you made your large-scale strategic decisions in the turn-based mode, your forces would fight the enemy on a tactical map in real time.

The storyline seemed basic to most, and was largely dominated by a simple "just conquer the world" attitude. Your aim was to conquer the earth, and the strategic depth of the game was incredible, just like the Age of Empires series. Shifting plagues from the ocean would threaten to kill off civilians in your provinces. Crusades would be ordered by the Pope and the mixture of units that you would find yourself fighting against brought a unique form of strategy to the game, requiring you to weigh the advantages and disadvantages of any action without always knowing what would happen next. Your ruler's death could cause shockwaves throughout your kingdom.

Assassins attempted to kill you and sudden ambushes could occur at any time, so defense was also an important part of the game.

Compared to Shogun, it was a great improvement, but many do not consider it to be as great as Rome: Total War. Compared to Rome, Medieval had an inferior weather system, less troops on the battlefield, and did not use terrain features to create strategic variety. For example, in Rome: Total War, the Romans could be easily destroyed in Egypt because Romans were not accustomed to the extreme heat
and the sand.

Each of the game's many factions represented one of the three main religious movements of the time: Orthodox Christianity, Catholicism, and Islam. Each religious denomination had its own unique buildings; Christian factions built churches, while Muslim factions built mosques. Certain factions also had their own specialist units such as the Mamluk Handgunners of the Egyptian faction. The Christians and Catholics could order a Crusade, which enabled them to gather an army composed of soldiers from every province under its control and march towards a territory to claim it. Muslims could wage a Jihad to gather an army and take back any territory which an enemy had claimed.

Whereas in Shogun the territories were the different provinces in Japan, whose size limited the amount of buildings you could build in each, the territories in Medieval were entire countries, each of which could contain all the buildings in the game. The game also employed an interesting system of vices and virtues which would affect morale positively or negatively, depending on a number of factors. For example, if a general or unit leader was seen as courageous, it would give a boost to that army or unit. If he was seen as a coward, however, the opposite would happen. The resource system was much more exacting and laborious than Shogun, as you had to build your settlement's population up to advance your farming. One feature, imported from Shogun, was that improved roads would lead to increased trade with allied nations, which would boost your income.

Invasion, or the conquering of new lands, was where the fun really started and what set the Total War series apart from the rest. A battle was a real time affair, allowing you to take complete control of your armies. The army of each territory consisted of the units you had garrisoned in it. Units came in the form of squads and numbered anything from eight to a hundred men, depending on their type. The stronger, more valuable units came in small squads, while the smaller, more common units were often composed of large squads.

The battles were played out across realistically detailed maps; Scotland had mountains, Wales had lush green valleys, and much of Northern Africa was represented by flat sandy terrain. For hurried players, there was the option to let the computer decide the result of the battle, but fighting it out yourself was the preferred method for most players. Every battle had nuances and details which, if ignored, could easily decide the outcome. Weather affected the speed of horses, for example, and required the player to pay careful attention to his units.

However, online play was nothing like the singleplayer mode. There was no settlement building or global strategy; it was just about the battles. Dozens of units—loosely grouped into light cavalry, heavy cavalry, cavalry archers, heavy infantry, medium infantry, spearman, archers and crossbows, skirmishers, siege equipment, and gunpowder units—allowed tactical variety. Details such as morale, fatigue, ammo, formations, terrain, weather, and positioning made
the battles incredibly realistic. It was common to pick an army that was naturally suited to the terrain in order to give oneself an advantage.

However, the realism of the game was of secondary importance in multiplayer, in order to prevent balance problems. A group of sixty longbow men could shoot five volleys at forty knights and only kill twelve, leaving the rest to cut them too pieces. Some fans complained that the whole point of real longbowmen was that they weren't fair to the opponent. Medieval French commanders had to find ingenious ways of defeating them, such as allowing them to run out of ammo or laying an ambush, but this was not necessary in Medieval. The game's reinforcement system was also frustrating. Having more than sixteen units in an army and waiting for the surplus to be destroyed before being able to bring the rest into play was not an aspect of the game that all fans enjoyed. Additionally, it was possible to wipe out an entire army, leaving only its general, and, due to his extreme power, be forced to watch him cheerfully hack his way through several infantry units. He would practically ignore the hundreds of arrows shot at him before finally being killed by a lucky rock from a catapult that happened to land on him.

Medieval: Total War is remembered for the realistic and thorough detail that permeated every aspect of it. Creative Assembly provided what many fans of both real time and turn-based strategy had waited for: an in-depth, empire-building, dynasty-destroying game. It provided players with the opportunity to casually play through the detailed, engrossing campaign or to enjoy the real time aspect of the game online against other players. It brought new fans into the Total War franchise and created a template that future turn-based/real time strategy hybrids would follow for years.
Homeworld

Developer: Relic Entertainment
Publisher: Sierra Entertainment
Release Date: November 15, 1999

In 1997, Relic Entertainment was founded in Vancouver, British Columbia. Two years later, they left their mark on the RTS genre by releasing their revolutionary first title: Homeworld. Homeworld was the first fully three-dimensional RTS game to be released. While there may be a debate over which RTS game first introduced 3D elements, none offered the full 3D movement and environment that are found in Homeworld.

Homeworld became well known for its storytelling. Through the use of a unique "hand drawn" movie style, in-game cut scenes, and mood setting music, the player is drawn into the epic storyline. The story in Homeworld starts off by describing the known history of the Kushan race. The Kushan live on a planet named Kharak and are divided into numerous clans across the planet. But when an ancient artifact is found buried in the desert, the tribes unite to build a mothership to find their true home. After sixty years, the enormous ship is completed and the player gains control of the ship as it leaves the shipyard. After a test run, you return to Kharak, only to find that it has been destroyed by the Taiidan Empire. You are now all that remains of the Kushan race and your journey to find Hiigara ("Home") has only begun.

While Total Annihilation made use of true 3D elevation in a RTS game first, the battlefield of Homeworld was light years ahead of its time because every battle took place in space. In fact, the only limitation placed on a player's movement is an invisible boundary sphere surrounding the map. Players control a camera that can be moved in all directions, zoomed in and out, and focused on an individual ship or a group of ships. Ships can also be moved in all directions. Movement is implemented by pressing the movement key (M), which brings up a large disk in the x-y plane. Moving the mouse and clicking a location sets the
lateral destination, while holding the shift key and dragging the mouse up or down sets the vertical direction.

These movement characteristics allow for strategic ship formations that can be incorporated in various scenarios. For example, a squadron of strike craft can form a "claw" formation, and can pounce on a single target causing heavy damage. You can even form your own custom formations as well.

The single player campaign in Homeworld introduces another unique concept to the RTS genre: persistence. In other words, the ships and resources you have carry on to the next mission. This can be good or it can be bad, depending on the situation. For example, a player may build a fleet of assault frigates for their current mission and carry them into the next. However, the next mission may require ion cannon frigates. This can force the player to replay through the prior mission in order to properly prepare for the next. On the positive side, if you can capture enemy ships with salvage corvettes, those ships can stay with you through the campaign, thus making subsequent missions easier. Salvaging enemy units is particularly attractive as it allows you to control more ships than the default unit cap. The idea of persistence piqued the interests of other RTS developers and soon found its way into other, more traditional RTS games, such as the Battle for Middle Earth 2, Rise of Legends, and Empire at War.

Homeworld features many common elements of RTS games. Just as in any other RTS, players must harvest resources in order to build ships. Typically, the resources are in the form of asteroids, but may also be found as gas clouds. Resource collectors must be built, and it is usually in the player's best interest to also build mobile refineries to speed up the collection process. Because of the tactical nature of the battles, control groups play an important role in Homeworld. For every ship, there is an effective counter. A balanced fleet will consist of various control groups, with each group consisting of different ships with a different formation and tactical assignments (evasive, neutral, or aggressive). For example, a group of frigates are susceptible to bombers, so it is important for the frigates to be escorted with a squad of interceptors or corvettes. In order to get more advanced ships, the player usually must research new technologies. For example, players must research the capital ship chassis and various weapons before getting access to larger capital class ships. The same idea applies to strike craft, frigates, and non-combat class ships.

For the most part, Homeworld has a rock-paper-scissors setup, meaning most units of the Kushan fleet have an effective counter in the Taiidan fleet, and vice versa. However, to maintain uniqueness among races (besides the obvious differences in ship style), each possesses a couple of unique units and abilities. For example, the Kushan have cloaking fighters and drone frigates, which release a sphere of armed drones. The Taiidan have defense fighters and defense field frigates, which are capable of absorbing incoming enemy fire.

There are several different classes of ships in Homeworld and each class serves a different purpose.
Strike craft such as scouts, interceptors, and bombers are the most nimble, yet most fragile of all combat class ships. Interceptors serve as anti-strike craft ships. Bombers are useful against frigates and, to a lesser extent, against capital ships. Because of their small size, strike craft are required to refuel on a regular basis. Corvettes are larger and have stronger armor than strike craft. There are several types of corvettes, such as the salvage corvette, repair corvette and minelayer corvette. Frigates, such as assault frigates and ion cannon frigates, are much larger and more heavily armored than strike craft, but are much slower as a consequence. Destroyers, the second largest class of ships, are effective against frigates and can be used against super capital ships if needed. The super capital ships, the carrier and the heavy cruiser, are the largest class of ships and can potentially be game-ending weapons, although they are major investments. The Mothership and carriers are capable of producing ships, though the largest ships a carrier can produce are frigate class ships.

Homeworld was truly a revolutionary RTS and still holds a place among the most visionary RTS titles. It introduced an increasingly repetitive RTS genre with both new ideas and heavily modified old ones, including unit persistence, a fully 3D environment, fuel management, and epic, atmospheric storytelling. Homeworld was successful enough to spawn several popular modifications and the expansion pack Homeworld: Cataclysm. With the effective use of cinematic storytelling and creative gameplay, Homeworld is the game that put Relic Entertainment on the map and set the stage for the company's future success with Homeworld 2, Dawn of War, and Company of Heroes.
Conquest: Frontier Wars

**Developer:** Fever Pitch  
**Publisher:** Ubisoft  
**Released:** August 14, 2001

The best RTS that nobody played?

Conquest: Frontier Wars (Conquest) was released late in the Summer of 2001 with little fanfare. It didn't stray too far from the StarCraft model: three unique factions, higher level units require higher level structures, higher level structures are dependent on lower level structures, weapons and armor can be generically upgraded, fog of war is present, and special abilities must be researched and deployed manually. However, what it lacked in originality it made up for in execution, epic scope, and a few new features that added a lot of strategic depth and controllability.

Four years in the making, Conquest had a storied pedigree. Developer Fever Pitch was made of former Digital Anvil (of Starlancer and Freelancer fame) developers and was initially designed and produced by Wing Commander creators Chris and Erin Roberts. It was released to good reviews and little competition. Gamespot rated it 8.2 out of 10, while IGN rated it 8.8 out of 10, and Computer Gaming World rated it 4 out of 5. And in a year dominated by turn based strategy games (Civilization III, Europa Universalis II) a good RTS was hard to come by. However, the game never took off.

Like StarCraft, the game features three completely different playable races with completely different sets of units: the Celareon, elite alien energy beings who produce only capital ships (think Protoss), the Mantis, the insectoid race whose ships are mostly carriers with swarms of fighters (think Zerg), and the Terrans, humans who field a mix of capital ships and carriers (think, um, Terran). Although there is only a singleplayer campaign for the Terrans, the other races can be played in skirmish and multiplayer modes. The story is a good one, though, with rendered cut scenes and in-game video transmissions that move it along.

The game has three resource types: crew, ore, and gas. Ore and gas can both be mined from nebulae and asteroid fields as well as extracted from planets. Crew is obtained only from planets, but it replenishes. Each of the three factions is slightly more dependent on one of the three resources than the others, but they all need to collect all three resources to function. Resources are finite, so the player is forced to expand beyond the home system, meaning that "turtling" is a less viable strategy. Structures can only be placed around planets, and slots fill up quickly. This also forces players to expand in order
to find enough real estate to create all the necessary structures that will produce a good economy and war machine.

The AI is predictable, though solid. It expands ruthlessly, mines continuously, sets up defenses, and uses all weapons at its disposal, including the destructive special weapons. It also has an uncanny knack for assaulting you with a new fleet just as you're about to launch an assault on it, delaying your plans.

The game engine rendered units and planets in 3D, although the playing field and spacial "terrain" were 2D. This simplification might have sacrificed a small amount of authenticity, but it more than made up for it by making unit control much easier. In fact, the exact same approach would be used by Petroglyph five years later in Star Wars: Empire at War for the very same reasons. The 2D playing field was especially necessary in Conquest because keeping track of multiple solar systems at once was critical. Each solar system was a map in its own right, with unique type and placement of planets, asteroid fields, and nebulae. The graphics of Conquest were good for their time, if a bit understated. The engine had the ability to display dozens of 3D capital ships and scores of fighters, missiles, and lasers on screen while keeping the frame rate up on machines of the time. Travel between systems was accomplished via wormholes, which provided natural choke points. However, most systems contained three to five wormholes, so it was impossible to blockade them all.

Gameplay is standard RTS fare: build a base, gather resources, build and group units, and attack and destroy the enemy base while protecting your own. But there are a couple of new features that added freshness and depth to the genre: fleets and supply.

Fleets

Fleets are created when you "research" any of six admirals and group the admiral with a set of ships. Each admiral adds bonuses to all ships in his fleet. Different admirals give different bonuses: some are good against specific races while others give superb bonuses to certain classes of ships, like battleships or carriers. Having an admiral control a fleet also grants access to the admiral control screen,
which lets the player give one-click orders to the fleet, like "resupply" or "use special attack X" which otherwise would require multiple clicks to accomplish. Due to their controllability, fleets make it easy to manage multiple battles in multiple systems at the same time. Admirals are expensive to build, so you'll want to choose the one that offers the best bonuses, considering which opponent you're facing and which ships you have already built the most of. Also, Admirals are unique and if you let one die, he is gone forever, so they must be protected.

Supply
Each ship in Conquest has limited ammunition, and some ships run out quite quickly. Ships must be replenished at either stationary supply depots or by supply ships, who themselves must resupply at supply depots. Orbital stations in other solar systems must also be kept "in supply" or they won't function. This can be accomplished either by building a hideously expensive HQ in each system, or by connecting the system to a system with an HQ via a cheap jumpgate on the wormhole. Jumpgates have the added advantage of only allowing the builder's ships through the wormhole.

Supply adds both tactical and strategic depth to the game. A common tactic when encountering an enemy fleet is to attack the supply ships first, since some ships will run out of ammo before the battle is complete. It's also a good strategy to attack HQs and jumpgates when first jumping into a system, cutting off supplies and starving the enemy economy without having to take the time to destroy every building in the system. This also allows you to deploy troopships and capture the now dormant enemy structures.

It's surprising that Conquest: Frontier Wars was not more popular, and it seems as if there were hundreds of thousands of unsold copies. Original boxes can be easily found in bargain bins all over the place for anywhere from two to ten dollars (US) per copy. With its epic scope and new features, it took RTS gaming in a new direction, adding some interesting new features and depth to the traditional
WarCraft/C&C mold while retaining the essence of classic RTS gameplay. There is a sequel in the works and this game still has an active fan base, going on six years now. Perhaps the game's obscurity is a result of it being overshadowed by Homeworld. Perhaps it was simply too different to appeal to most RTS gamers. Most likely though, its obscurity is an indicator that modern RTS games, without a big name or a big budget, simply can't compete as well as they could in the early days of the RTS genre.

The green circle shows the range of the supply ship escorting this fleet. As long as the ships remain within range, they'll continue to replenish their ammunition until the supply ship runs out.
Empire Earth

Developer: Stainless Steel Studios  
Publisher: Sierra Studios  
Release Date: November 13, 2001

Introduction

The Empire Earth series has been at the forefront of the RTS gaming world since the first installment was released in 2001. Providing Gamers with a variety of races to choose from and the ability to progress through many ages allowed the RTS gamer to experience many varieties of play, and all in one game!

Our tale begins in 2001 when Sierra decided to announce a game which had been under development for a considerable amount of time. The series was to be called Empire Earth and gamers would be granted the opportunity to build up a civilization from the dawn of humanity into the far future, or play out an entire game within a particular historical period. As the majority of RTS games available at this time focused on one particular era in history, the general atmosphere surrounding this announcement was one of excitement. Offering an intuitive interface, the game attracted audiences from all regions within the RTS community, some attracted by the variety of units and civilizations available, others by the innovative campaign system the game offered.

Campaign Modes (Single Player)

The campaign mode is comprised of three different storylines, all requiring a different approach to both the enemy and surroundings. The first campaign throws the gamer into a graphical world evolving around the Ancient Greeks and ends with the fall of Alexander the Great against the overwhelming Persian forces. In this campaign the challenge is to create an empire using the limited resources available in the time period, a requirement which is more demanding than it may first appear. Through a series of missions the story unfolds and new technologies become available, increasing the number of technicalities in the game. Players will find the scenarios to become more challenging as they progress through the storyline.

The second campaign offered focuses on the English Civilization and their efforts to establish a global Empire. Particular attention is paid to the Duke of Wellington's exploits against the growing forces of Napoleon. We see similar situations arise as in the first campaign however; due to technological advancements (which occurred naturally throughout history) the player must adapt a different
approach. This campaign displays the game's variety both in factions and weaponry. In particular, battleships are introduced, meaning the gamer has another aspect of the game to handle—the control of the oceans.

The third campaign, and perhaps the most interesting available, occurs at the beginning of World War I and finishes during the Second World War after Hitler's defeat. This campaign, similar to the other two, offers players the opportunity to witness another form of gameplay as artillery units have a larger influence on the outcome. Players are also presented with the prospect of Blitzkrieg, since the introduction of air units introduces yet another "field" for the player to conquer. Only a combination of land, sea and air units will result in the domination of the map.

Finally we are given the opportunity to explore the futuristic era which outlines a rebellion within Russia; the era is rife with super weapons and new combat robots. By this campaign players should be well accustomed to the mechanics of Empire Earth and so this should not prove too challenging, provided you're capable of adapting your strategy. All the campaigns offer unique styles; however, despite the diversity of factions and weapons available it is rather easy to employ similar tactics in each campaign.

Skirmish (Single & Multi-Player)

With all the campaign modes on offer some would be quite satisfied, but Sierra did not disappoint those who wish to "cut to the chase" and begin battling straight away. Empire Earth enables RTS gamers to simply setup their own game with numerous civilizations available; one must first specify which eras the battles are to commence in and then pick their preferred faction. Offering maps with up to eight other factions, be it allies or opposition, games may last anywhere between ten minutes and several hours.

Shroud and fog of war have become key aspects in the RTS genre and many gamers, be it professional (in the real sense of the word) or new, have become devoted to these features. Empire Earth employs both aspects, rendering camping strategies pointless. The shroud, while the landscape may remain visible, conceals enemy movements which contribute to a fundamental aspect of RTS gaming: surprise. Fog of war on the other hand will prevent one exploration of the map from uncovering the whole terrain for the duration of the game, meaning a successful player must continuously scout the map for enemy presence and new resources, both of which combine to make a successful civilization. To be successful, expansion is vital. The maps offered in Empire Earth are so diverse and large that an opponent can attack from far too many fronts for you to defend adequately. This forms a core of the Empire Earth gameplay and is commendable. A player must think logically to highlight the weaknesses in his defenses, and since the maps are large using the terrain to form a section of defense is advantageous. With the constant fear of attack from many directions, a player must be cautious yet ambitious in all movements. Despite these features, Sierra enabled gamers to select the status of shroud and fog of war rendering these two attributes of the game useless should the player select either option.

The final mode Empire Earth offers, which could be considered vital to RTS success is multiplayer
mode. This allows the gamer to face other human players online should the AI prove too easy (a characteristic of the RTS genre perhaps?). Multiplayer mode offers the same features one can find in Skirmish, yet enables one to interact with other Empire Earth players, which in most instances proves to be more challenging.

**Conclusion & Analysis**

Despite the diversity offered within the game, Empire Earth remains somewhat simple. Many factions behave in the same manner, so one only has to master a particular aspect of play before branching out into other factions with relative ease. This is perhaps a highlight of the game, yet one could argue that the amount of factions dilutes the unit and faction uniqueness. Despite the features Empire Earth offers, the game remains unsuccessful compared with the likes of Command and Conquer and WarCraft. Perhaps one could argue that the already established communities of RTS games led to the "flop" of Empire Earth and its online community. Nonetheless when it was first released it offered a number of new features which had remained untested in the RTS world.
**WarCraft III: Reign of Chaos**

**Developer:** Blizzard  
**Publishers:** Blizzard (US), Sierra Entertainment (EU), Capcom (Japan)  
**Release date (Reign of Chaos):** July 3, 2002  
**Release date (The Frozen Throne):** July 1, 2003

The original concept behind WarCraft III was to have a new revolutionary kind of RTS. Blizzard called this new kind of RTS an RPS (role playing strategy). The units in WarCraft III were supposed to be commanded by a special unit—the hero. The units were not supposed to be able to move around without the hero (much like real time Heroes of Might and Magic). Buildings wouldn't be built by the player, instead they would already be on the map and the player could purchase units from them. Resources would be different for different races; for example, the Undead would use corpses as a resource. The expected number of races was six.

However Blizzard are not known to be the most innovative company. They've always taken the best from a genre and created the most polished game in that genre, but never risked innovating on a grand scale. So they just moved to the more traditional type of RTS. The number of races was reduced to four—Humans, Orcs, Night Elves, and Undead. They were quite different from each other, though not as different as in StarCraft. For example, every race had three clear tiers in its tech tree which could be reached after upgrading the town hall. The player can build buildings, train units, gather gold, and harvest lumber in the traditional way. The units could move and fight on their own, but the heroes were still there.

And this is where WarCraft III gets different. It is the first major RTS title to introduce hero-based gameplay later used in Age of Mythology, the Battle for Middle Earth games, and others. While prior RTS games had used the concept of hero units, WarCraft III was the first game actually built around them. Heroes in WarCraft III are different from regular units because they can gain experience and carry items. Usually the heroes (a player can have up to 3) are more powerful than the rest of the player's army. A dead hero could be resurrected at a special building called the Altar. In order to get experience and items, the player could kill creatures, called creeps, scattered around the map. The actual process of killing these creeps was not-so-surprisingly known as "creeping." The creeps often guard some key location such as a shop for items or a fountain of health. The player also receives gold from killing them.
Aside from heroes and creeping, WarCraft III is essentially a traditional StarCraft-like RTS. The main difference is the upkeep system, which reduces the gold income as the population reaches some level. For example, if the population is above 50, for every 10 pieces of gold taken out of a mine the player will receive only 7. That is why aggressive expansion is not a popular strategy in WarCraft III. In fact, it is incredibly rare to see a player with more than three working expansions (most commonly two or even one) because the population taken up by the workers will increase the upkeep, meaning that there will be no additional income.

Like StarCraft, WarCraft III implements a soft counter system loosely based on a "rock, paper, scissors" style system of weapons and armor, but, while StarCraft only has three types of weapons and three types of armor, WarCraft III has six types of armor and six types of weapons. To make things even more interesting, every unit has a special ability (sometimes a passive one), which means that low tier units usually do not become useless when a player techs up to a more powerful unit.

Because of the number of special skills, the heroes, and the game's relatively small number of units, the game requires heavy micromanagement. However, WarCraft III's interface is well-designed and more than sufficient to meet the game's micromanagement demands. The interface was the first to allow players to use "subgroups" within groups of units. For example, a subgroup composed of a single type of unit could be ordered to cast a specific spell without having to create an entirely new group for just that unit type and without having to remove that unit type from the main group! WarCraft III, taking a page out of Total Annihilation's book, incorporated a limited degree of automation. Whereas Total Annihilation automated unit production, WarCraft III was the first to automate unit functions by allowing certain spells to be set to an autocast mode, preventing the player from having to manually order a unit to cast every single spell. Using this feature, a player could automatically debuff enemy units on sight or buff friendly units as soon as they engaged in battle.

The game's single player campaigns are good for learning as they introduce the units really well, but what is really notable about WarCraft III is the storyline, which is as good or better than what you can read in most fantasy bestsellers. The Orc leader Thrall attempts to bring peace to his people, but this proves difficult as they have been a war-driven community for generations and are not easy to re-educate. Arthas, the prince of the humans, is so eager to fight the evil which plagues his father's land that he will eventually become part of the very evil he fights against and lead the Undead campaign. In the Night Elf campaign you'll encounter a love triangle that has lasted for thousands of years. WarCraft III is the first game (except for the canceled WarCraft Adventures) in the WarCraft universe to expand and deepen the traditionally simple storyline, which in previous WarCraft titles was basically explained as "the evil Orcs decided to fight the good humans." Additionally the game's storyline is deep and extensive enough that it provides a base for World of WarCraft's storyline and a few books in the
The game formed a competitive community faster than any other RTS game because many of StarCraft's high level players moved to WarCraft III. At first, multiplayer games were a far cry from the classic aggressive StarCraft gameplay because players would tend to avoid each other while creeping and teching up. The focus of the game soon became building strategies for more effective creeping. However, Blizzard was aware of this problem and the expansion, The Frozen Throne, remedied this issue. The amount of experience and gold gained from creeps were reduced and the items they dropped were changed to less powerful ones, encouraging players to fight. Today WarCraft III is the most played competitive RTS worldwide (excluding Korea, which alone would turn the tide in favor of StarCraft) and is included in most major tournaments like the World Cyber Games and the Electronic Sports World Cup. The game's success as a multiplayer sport has been made possible largely because of the new ladder system Blizzard implemented for the game. Instead of sticking with the old peer to peer connection model, the new system used a client/server model for ranked games, eliminating most lag. The ladder system is also one of the first to consistently match players of equal skill and to have arranged team matches, both of which are at the top of any competitive RTS player's wish list. The game's longevity has been greatly aided by the powerful map editor included with the game. The most notable custom map is Defense of the Ancients (DotA) which has an immense popularity and is one of the most popular custom maps in any RTS game.

WarCraft III has left an unforgettable mark on the RTS genre. The game, along with Total Annihilation, revived the old idea of a player having a presence on the battlefield by making players identify with their heroes in a way that had not been done since Herzog Zwei. It has proved that RTS games can succeed as a competitive worldwide sport and has set a new standard for competitive RTS gaming. It, like StarCraft, proved that a RTS game can have both great singleplayer and multiplayer experiences. Without WarCraft III it is likely that the real time strategy genre would not still be taken seriously as a competitive medium and that StarCraft's success as a competitive RTS would have been discounted as a fluke.
**Homeworld 2**

**Developer:** Relic Entertainment  
**Publisher:** Sierra Entertainment  
**Release Date:** September 16, 2003

When Relic announced Homeworld 2, many fans wondered how the new developer could possibly top the success of its first game. However, Relic did not attempt to fix what wasn't broken. Instead, the company focused on evolving the successful formula of Homeworld while improving in two important areas: graphics and control.

In the first Homeworld, you led what was left of the Kushan race back to their true home and defeated the Taiidan. It made for a memorable and immersive story, but the sequel needed a tale which could match the greatness of the original. So, in Homeworld 2, one hundred years have passed and the Kushan (who are now called the Hiigarans) have recovered from their oppression. However, a new threat has emerged. A renegade clan known as the Vaygr have begun an onslaught against the Hiigaran empire. Karan S’jet returns as the leader of the Mothership in a journey to eliminate the new threat. This sequel uses the same formula of movies, in-game cut scenes, unique art, and music to set the mood of the game and to tell the story. However, this time around, the graphics have been significantly beefed up and the level of detail is noticeably higher than in Relic's first RTS, which made for an even more engrossing experience, visually speaking.

Aside from the new story, Homeworld 2 built upon the original with new ships, new features, and a polished user interface. Movement was handled just as in Homeworld, although camera movement was improved and was more convenient than before, permitting players even more control. The new user interface allowed players to quickly build, research, launch ships, and more. One of the most significant control improvements came about as a result of building small ships in squads. The first Homeworld game often made it rather difficult to locate and control a single fighter in the vastness of space. Relic's decision to add squads into Homeworld 2, a move which would be repeated in their future RTS titles, made this less of a nuisance. Homeworld 2 went a step further by adopting aspects of other modern (for the time) interfaces, such as that of Emperor: Battle for Dune. The game allowed you to easily display different types of information without losing sight of your fleet, or to minimize the entire interface if you wanted a better view of the battlefield. This was a huge improvement over the interface in Homeworld, where ordering research or new units forced the player to temporarily leave battles unattended.
The Hiigarans and the new Vaygr are significantly different when compared to the two races found in the original Homeworld. Each race has something to perform each rudimentary function, but they usually differ in their execution. For example, the Vaygr battle cruiser has a stronger weapon than the Hiigaran. However, it can only fire its main weapon in the direction it's pointing. The Hiigaran battle cruiser has less firepower, but has moving turrets that make it more flexible. Lance fighters are unique to the Vaygr, and ion cannon frigates are unique to the Hiigarans.

Homeworld 2 introduces the idea of modules and sub-systems. Sub-systems include engines on frigates and capital ships, fighter production facilities, corvette production facilities, frigate production facilities, and capital class ship production facilities. Modules serve as additions to a ship. For example, if a hyperspace module were built on a carrier, the carrier would then be able to move itself and ships in a close proximity via hyperspace. Other modules include an advanced research module, a hyperspace inhibitor module, and the advanced sensors array module. Modules and sub-systems can be placed in various configurations on the Mothership, carriers, the ship yard, and even the battle cruiser. Modules and sub-systems can be targeted to weaken the enemy. For example, destroying the engines on a capital class ship severely hinders its movement, leaving it susceptible to attack. Destroying the frigate production facility on a carrier would prevent the carrier from producing those ships until a new facility was built. Therefore, many players will first focus on specific sub-systems before attempting to completely destroy a large ship. The idea of subsystems and modules suited the nature of space combat quite well, and a similar system would later be incorporated in Star Wars: Empire at War.

Relic made many small changes to the original Homeworld formula that added depth to Homeworld 2 and shook things up. For example, in Homeworld 2, the resource collectors are more versatile than before and can be used to heal ships. Resources were made more available because they could be harvested from asteroids and debris from destroyed capital ships. Additionally, when a player finished a mission he didn't have to worry about all the uncollected resources he left. To save time, all resources remaining in a map are automatically collected at the end of a mission. This eliminated the need to stall the end of a mission just
to finish collecting resources, far from the most exciting task in the game.

Relic also tweaked the combat system in Homeworld 2. Since salvage corvettes were absent from the game, capturing enemy ships was done via marine frigates. These frigates would latch themselves onto enemy craft and a new progress bar would appear, representing the status of the takeover. If the marine frigate survived long enough, the enemy ship would be captured. Also, strike craft in Homeworld 2 no longer needed to stop and refuel as they did in the original game. This eliminated an unnecessary burden on the player and prevented trivial logistical concerns from distracting the player from the action.

Homeworld 2 combined the successful components of the first game as well as lessons learned to create a worthy sequel to the revolutionary game. While the chances of another sequel may be slim, there have been rumors that Relic has reacquired the rights to the game after having disputes with Vivendi. Regardless, the Homeworld series has left its mark on the genre and will go down in gaming history as a milestone to remember. Indeed, by the time Homeworld 2 had been released, the age of the fully 3D RTS had been transformed from a dream into a reality. For the first time, developers were able to create games that convincingly imitated reality and engaged the player in a way never before possible. However, the greatest tragedy of the era of the first 3D RTS games was that so many games failed to use this new opportunity as the Homeworld series did and, as a result, many games ended up pretty on the outside, but hollow on the inside.
Chapter 4: The New Wave

A Genre Comes of Age

After the uneventful period following *Total Annihilation*, the RTS genre had become very well defined. There were few major innovations and most RTS fans dedicated enough to continue playing RTS games already had a clear idea of what they wanted. Ironically, this turned out to be a blessing for the genre. It allowed developers to focus all their efforts on creating a specific type of RTS game, whereas they would previously have had to create a game designed to satisfy a very broad range of tastes. This led to the rise of the Real Time Tactics (RTT) genre, a derivative of the RTS genre. The RTT genre featured no economic aspect and instead focused on the small-scale tactics of individual battles. While the RTT genre remains somewhat niche and true RTT games are rare, many modern RTS games began to emphasize small-scale tactics over large-scale strategy, which was completely contrary to the revolution Chris Taylor hoped to bring to the RTS genre with *Total Annihilation*.

Nonetheless, this new focus on tactical, action-packed gameplay had one major benefit: sales. Sales of RTS games jumped noticeably with the release of games such as *Rome: Total War*, *Age of Empires III*, *Command and Conquer: Generals*, and *The Lord of the Rings: Battle for Middle Earth*. This was largely due to advertising reasons. When a developer showed a trailer of a battle from *Rome: Total War*, the player saw huge battles unfolding on a vast scale. When a player saw a carpet bomber destroying a terrorist base in *Command and Conquer: Generals*, it had a certain appeal (especially in an age of terrorism). When Electronic Arts offered Tolkien fans the chance to live out their war fantasies in *Battle for Middle Earth*, an entirely new audience was introduced to the world of real time strategy games. The era of the modern RTS saw the full realization of the power of licenses. Although few major, genre-changing innovations occurred, it was a time when the RTS genre diversified itself to please a wide variety of fans with widely different games.

The graphical beauty of games also increased to near-photorealism. Games like *Age of Empires III* pushed the limits of technology to create some of the most visually stunning graphics in the RTS genre. And as any major corporation knows, beauty sells. These sales catapulted some of the smaller RTS developers into stardom, with vast fan bases. For example, *Warcraft III* earned Blizzard an entire legion of fans and is still a source of revenue for the company today. By this time, it had become appallingly obvious that the days when a small developer could publish their own game were gone. Publishers wrestled control from the developers and increasingly began to dictate the design of RTS games. While this led to the creation of many mediocre games, just as in the years right after *Total Annihilation*, the big budgets that these publishers brought with them also allowed the creation of RTS games that only a huge amount money and the best talent could create.
**Rise of Nations**

**Developer:** Big Huge Games  
**Publisher:** Microsoft Game Studios  
**Release Date (Rise of Nations):** May 20, 2003  
**Release Date (Thrones and Patriots):** April 27, 2004

When C&C: Generals was released in early 2003, everyone thought the 2D RTS era had come to an end. Rise of Nations, however, proved otherwise. Made by the new developer Big Huge Games, many describe Rise of Nations as a combination of Civilization III and the Age of Empires series.

Rise of Nations featured a somewhat strange 2D/3D hybrid engine, somewhat similar to, although considerably more powerful than, the voxel-based engines of Tiberian Sun and Red Alert 2. All units were rendered in 3D, while certain elements such as buildings were strictly 2D, meaning that certain features of full 3D engines such as camera rotation were not possible. However, the hybrid engine did allow Big Huge Games to put more detail into the units and buildings, and thus to many the graphics were much better than Generals, released only a month before.

The game features 18 nations, far more than most other RTS titles. Just as in the Age of Empires series, they each shared the same tech-tree and basic units, but each nation possessed a unique set of special units and special "powers" such as the Egyptians' ability to build seven farms per city instead of five, or the Russians' ability to cause additional damage to unsupported enemies moving through their territory.

The gameplay was similar to the Age of Empires games, yet different. Rise of Nations featured a variety of new gameplay elements, most notably national borders and an extensive research system, based on, but modified from the Age of Empires research system. Just as in Age of Empires, you would use the research system to bring your country forward through time by gathering resources and building villages. Each of the many "ages" would unlock new tech trees, units, and other abilities. However, unlike the Age of Empires series, ages in Rise of Nations would sometimes give the player access to new resources. So, while you began with only Wood and Food in the first age, you could have access to a wide variety of resources in the last age, such as Timber, Food, Wealth (money), Metal, and Oil. Maps in Rise of Nations also feature numerous "rare resources" scattered about the map. Sending a merchant to capture one of these resources would give your nation unique bonuses such as discounts on research or specific units.

The developers also implemented several ways to counter unit and building "spamming," especially in
the later ages. This was mainly done because in the latter ages players would have access to technologies and territory that would give the player huge amounts of resources. Thus, buildings, units, and research would get more expensive with every age. However, the anti-spam measures didn't stop there. "Ramping costs" were a critical element of gameplay, meaning that the cost of your units would increase for every unit you bought. To many this seemed strange and unfair, but in the end it made the game very balanced. Quite frequently, players would not even notice the increased cost, as the amount of resources they had would also grow larger.

Another concept pioneered in Rise of Nations was that of player territory. The territory was basically a national border of sorts. Players could only build in their own territory. Some buildings could only be built near cities and some gained bonuses when built next to your city. A city was essentially a hub building where villagers were built and from which you expanded your country. The concept was similar to the Town Center of the Age of Empires series, but much evolved to include the concept of a city's influence on the surrounding territory. The amount of cities was limited for each age. When a city accumulated enough buildings in its territory it would increase in "size," which would increase the size of its national borders. National borders could also be increased by constructing defensive buildings such as forts and by researching technologies at the temple and library. In multiplayer games you would often see a row of cities with fortresses and other defenses, trying to push back the enemies borders. In the later ages this strategy would quickly become useless as bombers, nuclear weapons, tanks, and other heavy machinery would rapidly overrun these defenses.

To many, the rather extensive set of features in Rise of Nations was confusing and overly complicated. Others considered the rich amount of units for each age, the many research options, and extensive resource system as perfect ingredients for a RTS game.

Border cities were often recognizable by their larger than normal military presence. Anti-air turrets, watchtowers, and redoubts defend the city in this picture.

The sheer amount of multiplayer options ensured there was a game setup for everyone.
Many fans felt it was simply "cool" to see their nation progress through the ages. Whereas ten minutes ago one might only have had men with bows and swords, the proper research could have now yielded a full Napoleonic army complete with generals, spies, and cannons. The progression through the ages was the most critical element in the gameplay of Rise of Nations, as your enemy would have a huge advantage over you if he was even a single age ahead.

Aside from the "bare bones" essentials of any RTS, the game contained a number of bonuses for players looking for a little extra. Rise of Nations featured a rather intelligent AI, at least as RTS games go, with which you could "communicate" by means of audio taunts or diplomacy game options. The AI was, for example, smart enough not to trust you when you break alliances throughout the game. In a homage to the RTS genre's turn-based predecessors, Rise of Nations featured a special offline mode called "Conquer the World" that offered players the opportunity to fight on a risk-style meta map and conquer the world territory-by-territory. This campaign was turn-based, and had some classic elements such as bonus cards (which for example, would give you more units to start with in a battle). This campaign however, did not contain a story, like many other RTS titles.

Thrones and Patriots, released in May 2004, was the first and only expansion for Rise of Nations. It introduced 6 new nations: the Dutch, Persians, Indians, Iroquois, the Lakota, and the Americans. These nations were very unique compared to the nations in the original Rise of Nations. The Americans could finish their first wonder instantly, the Dutch had armed caravans and merchants, the Persians had two capitals, Iroquois military units were invisible in their own territory, and the Lakota could even build outside of their own territory. This, of course, opened an entirely new can of worms and created some very interesting strategies.

Also introduced in Thrones and Patriots were governments. Starting in the second age, one could build a government building (capital) next to a city. Whichever city the capital building was located in would become the capital city. In the classical age, gunpowder age, and industrial age one of two governments could be selected, and each of these would give different bonuses and discounts. When government research was finished, the player would also get a free "Patriot" who was basically a general with a set of extra powers.

The expansion added a great deal of content in the form of many more singleplayer campaigns. These were all based on the same engine as the old Conquer the World game type, but featured more of a storyline, while not becoming linear. The players could now replay classical campaigns like the colonization of the Americas, Alexanders' conquest, and a Napoleonic campaign. These campaigns also had special units that were unique to that one campaign and could not be accessed in offline or online skirmish games. A campaign that is especially worth mentioning is the rich Cold War campaign. Like
the other campaigns it had many unique scenarios, meaning that each battle was different. But it also allowed the player to build nuclear missiles on the campaign map, and ultimately launch them to trigger a wave of destruction.

All in all, Rise of Nations had to be "your thing." Its fans will tell you that there has never been a RTS game as detailed as Rise of Nations, be it before or after its launch. While games such as Generals concentrated on perfecting a relatively small amount of content, Rise of Nations continued the trend set by the Age of Empires series by offering players an incredible amount of content to explore. The game was huge and critically acclaimed for its massive amount of content and features. It was one of the few games that approached the scale of Total Annihilation, but one that was fundamentally different from Chris Taylor's masterpiece because it offered players a level of complexity that they had rarely, if ever, seen before.
The Total War series is known for its epic battles, comprehensive strategic gameplay, and turn-based campaign. The first two games in the series, Shogun: Total War and Medieval: Total War brought all this to the strategy scene, and set the bar for strategic gameplay. With Creative Assembly's release of Rome: Total War (RTW), the bar was significantly raised due to its numerous gameplay improvements, along with its impressive graphics engine. Rome: Total War takes place in the time when Rome rose to power. In the campaign mode, you play as one of three Roman Houses; The House of Julii, The House of Scipii, or The House of Brutii. Your main goal is to conquer as much land as possible, through diplomacy or brute force. As you progress further in the campaign, you can unlock more factions to play in the campaign mode. The campaign map is very accurate to its time period, showing all of the cities and landmarks that existed at the time. History buffs can truly enjoy the game.

Graphics Engine

The graphics engine of Rome: Total War is amazing. Up to 10,000 soldiers can trek the game's vast battlefields, and each one of them is rendered adequately. The textures are impressive, and the sheer scale is enormous. A zoom feature is included, so one can zoom and view the bloody carnage in all of its impressive glory. During its time, RTW's graphics engine was widely considered to be the best in the RTS genre. However, this brought about problems, as lag and slowdowns are very common amongst all RTW players. An insanely powerful computer is needed to handle the graphical beauty.

Gameplay

In terms of gameplay, Rome: Total War plays similarly to its predecessors. The single player mode is played on a detailed campaign map, similar to the Civilization series. You have direct control over every city in your empire, so you can choose what you want to build in it, what troops you want to train, how much do you want to tax, and so on. You can garrison every one of your cities with troops, and then you can march them around the map. The interface is fairly standard, showing the amount of
denarii (money) you have, construction events, etc. Gameplay is turn based in this part, so you make decisions at your own pace, and then end your turn and sit back and observe what the other empires do, until it is your turn again. Rome: Total War also has an excellent diplomacy system. Rather than just offering peace, or declaring war, or something simple, you can select from a multitude of offers and demands. For example, you can offer 100 denarii in exchange for trade rights, or you can demand 1000 denarii in exchange for attacking that faction's current enemy, or you can offer 3000 denarii in exchange for one of their cities. Its depth is enormous. There are a wealth of options and lots of things to do in the campaign mode. Some of it may be a little too confusing for the casual RTS gamer. However, management can get a little tedious. Once your troops engage enemy troops, a battle will begin. This is where the excitement and action picks up. You will have full command of your troops. Before each battle, you can set up the formation of your troops, and when you're ready, you can begin. Battles have strategic depth in them as you can perform various maneuvers such as flanking, ambushing, phalanxes, stealth, cavalry charging, etc. In the single player campaign, battles are fairly easy as the computer isn't very intelligent. But online you will have to utilize RTW's strategic components to its fullest to defeat your opponents.

RTW also comes packaged with various historical battles for you to play, from the Siege of Sparta to the Battle of Carrhae. Each battle comes with a little introduction in the form of an in-game cinematic, with a narrator telling the backstory behind the battle. These battles are fun to play, as you are recreating actual history, or actually changing it.

**Multiplayer**

RTW's multiplayer focuses on the battle portion of the game. You can select any of the game's factions. Each faction has a diverse selection of troops. There are five types of factions—the Romans, Greeks, Barbarians, Eastern, and Africans—each offering its own unique play style and art design. For example, the Greeks focus on phalanx warfare (long spears), while the Eastern factions focus on heavily armored cavalry and elephants. Each faction type has various sub factions with many differences, similar
to the way Zero Hour implemented its sub-factions, altogether having 19 factions in all. Once you select your faction, you select your units. Each unit costs money, and before the match each player is given a certain amount of money (the amount is decided by the host). The standard monetary amount amongst high level players is 10,000. You select and purchase as many units as you can within the monetary limit, but you can also buy upgrades for units. The counter system in Rome: Total War is soft, since with skilled tactical micromanagement you can overcome counters. For example, spearmen are the counters to cavalry, but their spears are only pointed in one direction. If you can flank the spearmen (attacking their weak points, aka. their side or back) by distracting the spearmen with your infantry and then charge your cavalry at their back or side, then they will rout instantly. Due to this, RTW's online gameplay relies heavily on tactical decisions and micromanagement, rather than unit selection (although unit selection is important).

For online play, RTW uses Gamespy, which is widely criticized for having various connection issues. Nor surprisingly there are plenty of such issues in RTW. Lag is very frequent, due to the sheer size of battles. Desynchronization errors and connection failure errors are also quite common. But, nevertheless, the game has a very active and dedicated community. Games are quite easy to find, and there are always plenty of people in the lobby. There are no official ladders, but there are many private ladders offering the opportunity for competition.
**Act of War**

**Developer:** Eugen Systems  
**Publisher:** Atari  
**Release Date (Direct Action):** March 15, 2005  
**Release Date (High Treason):** May 31, 2006

**Introduction**

The Act of War: Direct Action universe takes form from the stories and futuristic concepts revealed by story writer and author Dale Brown. The Act of War story starts off in the near future where the economy is in shambles, and gas prices are steadily rising to absurd heights. This fuels the fight for money as the antagonist side, Consortium, launches an attack on U.S. soil via ships with vehicle filled crates. Because of the threat to the world's energy systems, one of the game's three sides, Task for Talon, is called upon to help clean up the situation. During the campaign you follow Major Jason Richter as he attempts to stop the Consortium forces with the help of the final Act of War faction: the U.S. Army. The compelling story of Act of War takes players from the Golden Gate Bridge in San Francisco all the way to Pennsylvania Avenue and the White House in D.C.

The gameplay mechanics behind Act of War: Direct Action are quite simple. It follows the traditional control scheme of many previous RTS games, and inherits pieces of game elements from all of the greats. The game features the fast paced action of Total Annihilation. It embraces the evolving base building and upgrade structure of Starcraft. It even contains many of the ground battle war elements found in the Command and Conquer series. These gameplay features help Act of War create an environment that looks new, but enhances itself with gameplay mechanics of the past.

Where Act of War: Direct Action left off in the story, Act of War: High Treason picked up the slack. The story in Act of War: High Treason launches players into a devastating plot of terror as both presidential candidates are attacked, and the current president is killed. Amidst the confusion, Major Jason Richter and his unit, Task Force Talon, are called upon to clean things up from the high skyline of New York to the jungle regions of Central America.

One of the key differences between Act of War: Direct Action and Act of War: High Treason is the method used to tell the story. In Direct Action, players were treated to live action cutscenes before and after each mission, which gave the game a movie-like feel with its captivating story line and its fluctuating momentum. This idea took a nose dive in High Treason as the live action movies weren't done for the expansion, but impressive in-game cinemas still got the job done and in good fashion.
High Treason also addressed many of the community issues to give the game more variety by including many new units, such as the mercenaries and even a navy for each of the game's three factions.

**Economics**

Act of War featured a twist on the economy models of real time strategy games. In the past, most RTS games followed the mold of the grandfather strategy title, Warcraft. This entailed two resources that the player had to effectively manage to build a proper base and execute efficient attacks. Act of War changed things with the addition of the prisoner of war reward system. At the root, Act of War's primary resource is money, and the main method by which money is acquired is through refining oil. With the inclusion of prisoners of war, players must effectively weigh the risks of sending in infantry to effectively defeat soft targets, or not withdrawing vehicles to prevent the pilots from being thrown out of destroyed vehicles. There are two ways for prisoners of wars to be generated. The first method involves allowing a vehicle to be destroyed, which causes its pilot to be ejected from the vehicle upon destruction. The next method takes advantage of mortally wounded soldiers, which contain a small amount of health before they eventually die. During these two periods, healthy vehicle pilots can be returned to base if there aren't any nearby enemy units, while injured soldiers have the chance to be healed by a rescue chopper. If no attempts are made to save the soldiers, they can be captured by the rival faction and stored in a hospital to use for a special spy capability or provide the player with extra income by trickling in additional money for each prisoner of war captured. Prisoners of war aren't the only means of income; on certain maps there are banks that can be captured as well.

**Game Types**

Act of War: Direct Action features the traditional gameplay modes - deathmatch, team deathmatch, and free for all. The most commonly played matches are the 1v1 war room ladder ranked matches that pit players against each other based on skill. While this method works, it doesn't do enough to impress fans of the Battle.net system. Flaws in the Act of War war room ladder system can be found, but the biggest flaw in Direct Action was not being able to select one's own teammates in 2v2 war room ladder games. Act of War: High Treason attempted to correct this by streamlining the multiplayer interface and allowing players to choose teammates in 2v2 war room battles. However, compared with the ingenuity and flow of the Battle.net ladder system, High Treason's system leaves much to be desired.

Despite the average game modes presented in Direct Action, Eugen Systems included a navy for each of the three factions and evolved game play by adding mercenaries as well. These touches helped bring a little bit of a Total Annihilation-like flavor into the Act of War world. Besides Total Annihilation and Age of Empires, Act of War is one of the few recent titles to effectively create a navy in a strategy game. While the naval mode is nice, it is overshadowed by a feeling of clunkiness and poor implementation in regards to the game play. Had the naval mode been properly implemented, it could have made a great addition to ground warfare, as in Age of Empires and Total Annihilation.

**Community**

Being a member of the Act of War community has its own unique advantages and disadvantages. Gamers that appreciate and enjoy the Act of War universe keep the game alive despite its small numbers online. Though the numbers online may not be as numerous as other titles, a large percentage of players are very good. This creates a great competitive environment for online play where you can always find a skilled player to battle against. The mod community of Act of War is a bright spot in Act of War's future. With the release of High Treason, the developers released a Source Development Kit
to change game features and a map editor to allow players to fully customize the game. Modification greats in the community such as Henry666, Salfisi, and BuckyBoy show the great extent that members of the community are willing to push the game to. This same scheme is what helped Total Annihilation last as long as it did, with an effective community changing and pushing the game to limits beyond what developers intended.

Conclusion

Overall, the Act of War universe has had its time in the sunlight and will most likely slowly diminish in popularity as time goes on. With key elements from many older real time strategy titles, and a faster-than-normal gameplay speed, Act of War is a special title for real time strategy fans. If older games have certain elements that bring back fond memories, it won't be hard to find those elements in Act of War, as it takes a piece of each, brightens it some, and polishes it off for a great presentation.
Age of Empires III

Developer: Ensemble Studios
Publisher: Microsoft
Release Date (Age of Empires): October 18, 2005
Release Date (The War Chiefs): October 17, 2006

Introduction

Age of Empires III, better known as AoE3, was the fourth game of the "Age" series made by Ensemble studios and published by Microsoft, after Age of Empires I, Age of Empires II, and Age of Mythology. It was mostly set in the New World—America—from approximately 1500 until 1850 AD and was the sequel of AoE2, which was set in Medieval Times. Eight European civilizations (France, Britain, Germany, Dutch, Spain, Portugal, Ottoman and Russia) were featured in the game and vied for control of the New World. They were all pretty similar, some more than others, but all also had unique units, advantages and disadvantages.

Gameplay

The game, much more than most other RTS games, has a strong economic element to it. The game's economic system utilizes four distinct resources: Food, Wood, Coin and Experience. Food, Wood and Coin can be collected by the worker units, but experience can only be gained by your actions. Experience is quite different and is a sort of "pseudo-resource" because it cannot be gathered by workers. You obtain Experience points, for example, by making units or buildings and by killing enemy units or buildings. It is a similar system to that employed by Command and Conquer: Generals, although Experience is more of a required resource in AoE3 than it was in Generals, where it was just a system of rewards. The traditional three resources in AoE3 are collected by Settlers, but France employs the more effective Coureur des Bois. Food and Coin can also be collected by fishing ships on water maps. Resources are important for the entire length of the game and it is quite common to still be making new workers in the late game.

The game invented the idea of a "Home City," a system where each civilization has a Home City from which they can send shipments. The selling point of the Home City was that it is persistent across each game. Experience is needed to level up your Home City and each Home City begins at level 1. Additionally, you can unlock a card at each level so you can make more and better decks when you have enough Experience. Only the basic cards are available at level 1 but you can get more advanced...
cards once you reach level 10, and the most advanced cards are available in level 25. The maximum Home City level is 131.

As previously mentioned, the game incorporated a unique card system which was intimately related to the player's home city. Each player could have a deck of at most twenty cards, which could each be used to request a shipment from the home city. Shipments contained a variety of useful assets. Many options were available, such as military or economy upgrade cards for a long term advantage, or units and resources for a short term advantage. Experience points were needed to be able to send a card, meaning that the three truly unique features of AoE3’s gameplay—Experience, the Home City, and card decks—were all intertwined.

**The Battles**

An Age of Empires game just would not be true to the original if it did not include the concept of Ages, and AoE3 is no different. The battles are set in five different ages: the Discovery, Colonial, Fortress, Industrial and Imperial age. The game normally starts in the Discovery age, and you can go to the next age by researching it in your Town Center. You can send new cards in the first four ages; however, most cards can be sent again once you reach the Imperial age. In addition, new units, buildings, and upgrades are unlocked upon reaching a new age.

The game basically has three types of units: Infantry, Cavalry and Artillery. Infantry can be subdivided into light and heavy Infantry and Cavalry into melee and ranged Cavalry. It is a typical rock, paper and scissors style game; Artillery kills Infantry, Infantry kills Cavalry and Cavalry kills Artillery. But for the sake of variety, some maps also have natives on them. There are twelve different native tribes, and you can have a maximum of two native tribes on a map. You can hire natives if you build a trading post in a native camp, which causes unique upgrades to become available.

Three game types are available:
Supremacy, Deathmatch and the Campaign, and the former two can be played online. In a Supremacy game you start with very few resources, whereas you begin with a lot resources in Deathmatch, making it a bit faster paced. Both game modes are playable in 1v1, 2v2, 3v3, 4v4 and Free for All matches. The campaign is only playable offline and is composed of three acts: Blood, Ice, and Steel. You follow the Black family in their fight against the Circle of Ossus, a secret European society which seeks a means for eternal life in the New World. You start on Malta where you have to defend against the Ottomans. After having defended Malta, the Black family goes to the New World to prevent the Circle of Ossus from finding the Fountain of Youth and, in the last act, the Black family eventually destroys the Circle of Ossus.

Age of Empires incorporated a physics system made possible by the Havok physics engine. However, instead of using physics as a way to create unique, emergent gameplay in the style of Half Life 2, AoE3 used it to enhance the realism of the game. When a cannonball blew through a house the house would not just collapse in a pre-scripted, pre-animated way. Instead, the destruction of the house was calculated by the physics engine and would collapse realistically. Since the Age of Empires series has always been one to stress realism more than other RTS franchises, such as the Command and Conquer and WarCraft series, the addition of physics to AoE3, in combination with the game's amazing graphics, was a welcome addition that satisfied many RTS fans looking for a more realistic and historically accurate RTS.

Age of Empires III: the War Chiefs, or TWC, was the first expansion set to AoE3. It built upon the already feature-filled AoE3 by adding three new Native American civilizations: the Iroquois, Sioux and Aztec nations. It was set in the same time frame as the original game, from 1500 to 1850 AD. In the expansion, the natives are not like their European counterparts; each tribe has entirely new and unique units available only to them. Instead of starting out with an explorer, like the European civilizations, the natives start out with a War Chief. Each War Chief is a more powerful version of the European explorer, and each War Chief has a bonus aura. The Iroquois have a hit point bonus and the Sioux have a speed bonus. The Iroquois are the most like the Europeans; they too have mainline infantry and cavalry units and are the only native civilization to be able to use artillery in combat. The Sioux field no less than five types of cavalry; however, they do not have any artillery of any kind. Ensemble chose to make the Aztec realistic. The Aztecs have neither cavalry nor artillery, just foot units which pack a huge punch in battle. On top of the three new civilizations, the European civilizations received new mercenaries, buildings and units, such as the Spy, a unit which excels at killing Explorers, War Chiefs, and mercenaries. They also received the new Saloon building, where you can hire outlaws and mercenaries to work for your side.

The second expansion, called The Asian Dynasties, or TAD for short, did not greatly deviate from the basic formula set out in AoE3. It did what most typical expansions do, which is add new content. The expansion added three new major civilizations--India, China, and Japan--and six new minor civilizations--the Sufis, the Shaolin, the Zen, the Udasi, the Bakti, and the Jesuits--which were the equivalents of the Native American minor civilizations in the previous two games. The three new major civilizations, unlike the civilizations introduced in previous games, do not advance through ages via the Town Center, but instead must build Wonders to advance through the ages. These Wonders, in contrast to previous AoE games, do not lead to victory. This system of advancement was a first for the Age of Empires series, as Wonders were traditionally an alternate way to achieve victory.

Ensemble Studios entered into a unique partnership to develop The Asian Dynasties, teaming up with fellow RTS developer Big Huge Games to design the game. Brian Reynolds, leader of Big Huge Games, informed Ensemble that he was a fan of the series and that Big Huge Games had development
time available. This deal worked well for Ensemble, which was busy with Halo Wars, as it allowed the company to have the final say over the content of the game while allowing a like-minded developer to do much of the actual development. The game was published once again by Microsoft, which meant that there was a loose three-tiered development structure during TAD’s development, in contrast to the usual developer-publisher structure. One can only wonder what other development experiments will be attempted in the future by other developers.
Command and Conquer: Generals

Developer: EA Los Angeles
Publisher: EA Games
Release Date (Generals): February 10, 2003
Release Date (Zero Hour): September 22, 2003

Command and Conquer: Generals is a very controversial Command and Conquer game. It was very different from its C&C predecessors and dramatically altered the focus of the C&C series. Normally, a major franchise like Command and Conquer is treated like a pillar of the RTS genre and each new iteration in the franchise can be expected to bring forth important innovations which later RTS games will imitate. The development of Generals apparently did not follow this pattern, since the game borrowed elements from most popular RTS games and fused them with Command and Conquer elements. Although the game did demonstrate some new ideas, such as the concept of "generals abilities," Generals was a game that mostly focused on pure and simple gameplay.

The game makes a number of noticeable deviations from C&C gameplay traditions. It seems that the wild success of peon-driven games such as Starcraft and Age of Empires influenced EA to reconsider the static building system of previous C&C games. The result was a game that no longer used the traditional Mobile Construction Vehicle (the central building which constructed all other buildings), but rather Construction Dozers (for China and USA) and human Workers (for the Global Liberation Army) to construct buildings. The traditional C&C sidebar was relocated to the bottom of the screen, as in Warcraft III, and the production of units and buildings was decentralized. What this meant was that units and buildings were no longer built just from the user interface, but rather the player first needed to click on an available dozer, worker, or building to build something. At first this might seem like too much work, but, in reality, once players became familiar with the game's hotkeys it actually proved to be a faster and more flexible building system. The new system succeeded in eliminating the restrictions of previous C&C games governing the number of units that could be built simultaneously, as well as the locations at which they could be built. In true C&C fashion, the game gave players more freedom, though at the cost of tradition.

The storyline of Generals is very meager and bears no connection to either the Tiberium or Red Alert universes of previous C&C games. It focuses on the near future, where the two major superpowers of the time, the U.S. and China, and a global terrorist organization known as the Global Liberation Army are at war. The influences of Operation: Enduring Freedom and The War on Terrorism are quite obvious. Given that these conflicts were recent events at the time of Generals’ development, many
criticized the game's storyline for being unoriginal and exploitative. Some even went as far as to call the game's storyline inappropriate and offensive. The game was placed on the restricted list in Germany, which meant that it could not be advertised or displayed on store shelves and could only be sold to adults. It was banned in China, even though the Chinese are largely portrayed in a positive, though somewhat aggressive, light.

Although the game's three factions have little character and are uninteresting in terms of their originality, they are fascinating examples of three fundamental ways to play any RTS game. Each successive C&C game contained factions with more and more unique styles of play, and Generals took this to the next level, perhaps with some of the most unique factions outside of Starcraft or Rise of Legends. The USA is a technological powerhouse which is vulnerable during the early game but which can be very powerful in the late game once it has brought its advanced technologies to bear. USA players rely on impeccable micromanagement skills, largely out of necessity, since American units are generally more expensive than those of China or GLA, and hence must be preserved more carefully. China players rely more on a combination of brute force and macromanagement ability. China can set up its economy more cheaply and more efficiently than either of the other two sides, which gives it the ability to quickly begin pumping out larger numbers of straightforward, but powerful units. The GLA are something of a gameplay anomaly. They require both micromanagement and macromanagement skills, and must win by using their greater flexibility to obtain an advantage in map control. They can build tunnels which can instantly transport up to ten units to any other tunnel. Best of all, the tunnels come with the added benefit of fully healing the units they transport before depositing them elsewhere. This allows the GLA to greatly exploit Generals' greatest gameplay addition to the C&C series—the decentralization of bases and armies—much more than either the USA or China.

The game also brought upgrades to a new level. In the development of most RTS games, a typical problem is that it is difficult to create a large number of upgrades without causing them to become redundant. Often, upgrades only add successively greater armor bonuses or firepower bonuses without really changing anything. Generals solved this in two ways. One involved the complete overhaul of the way upgrades were handled in previous C&C games. Previously, C&C players were forced to "deploy" units to access their secondary functions. This essentially served as a replacement for upgrades and prevented a unique secondary ability from being added to every unit. In Generals, most upgrades must be purchased, as in other RTS games. But instead of having tiers of essentially the same upgrade (such as the "+1 armor," "+2 armor," "+3 armor" system of Starcraft and the Age of Empires games), upgrades in Generals usually change the function of the units they are applied to, sometimes in dramatic ways. For example, the TOW Missile upgrade for the USA Humvee changes that unit from a light anti-infantry vehicle into both a light anti-infantry vehicle and an anti-air unit. The Toxin Shells upgrade for the GLA allowed that faction's tanks to not only destroy other armored units, but also to counter infantry as well. Thus, the factions might appear dim and dull on the surface, but in reality they
are surprisingly deep at the core.

The second major improvement to upgrades in Generals was a rather unique innovation. Every faction had unique "Generals Abilities" which could be unlocked by accumulating a certain amount of "experience." Experience could only be gained by destroying enemy units and structures, and once enough had been collected, the player was "promoted" to the next level, which offered more powerful Generals Abilities than were previously available. Although players could choose any ability they wanted, only a limited amount of experience could be acquired. This meant that players needed to decide which abilities they wanted, as there was never enough experience to unlock them all. Some Generals Abilities unlocked special units, others unlocked special attacks such as A10 Warthog bombing raids, while others unlocked passive abilities such as the GLA's "Cash Bounty" ability, which awards the GLA player a fraction of the cost of every unit or building he destroys.

When it was announced that EA was going to make an expansion to the controversial but successful Generals, many fans expected the company to just add a few new units and maps and call it a day. But EA surprised everyone and delivered an expansion with so much new content that could have been advertised as a separate game. It was called Zero Hour, and it essentially took every idea introduced in Generals to the extreme.

Generals was a game that, despite the diversity of its factions and the lethality of its units, could be balanced. Zero Hour, on the other hand, never had the slightest hope of being balanced. In Zero Hour, EA took the three factions of Generals and split each of them into four subfactions. One subfaction for each major faction was deemed "vanilla" because it received the least amount of changes from its parent and was designed to be a balanced, no frills faction. The other nine subfactions varied wildly with regards to their specialties. Each subfaction was led by a General which personified the subfaction's beliefs and military philosophy. They were all given names that reflected the cultures of their countries, but quite frankly nobody remembers those names. Instead, they are remembered for their attitudes and the ways they believed in fighting battles.

Despite technically being "subfactions," these new armies were, in fact, entirely new. They were so varied and so extreme that you had to learn them from the ground up, regardless of your level of experience in Generals. China had the "Tank general," the "Infantry general," and the "Nuke general." The USA had the "Air Force general," the "Laser general," and the "Superweapon general." The GLA had the "Stealth general," the "Toxin general," and the "Demolitions general." The names pretty much say it all. Each faction had an entire armada of weapons designed and customized for a particular form of warfare.

The specialization of each faction in a particular form of warfare had unfortunate consequences, however. Because each subfaction did not have access to all the basic units of the "vanilla" faction, it needed more powerful weapons to compensate for the lack of versatility. Many of these weapons were quite extreme and caused major balance problems. By simply building a Strategy Center (a very important structure for researching technology) the Air Force General gained a free carpet bomb attack that recharged every couple of minutes and which could decimate an incoming army or a cluster of buildings. It was so fast that it was also nearly impossible to stop. You either dodged it or whatever was under it was destroyed nearly instantly. Each faction had its own units which dominated the battlefield, and the more balanced strategy of Generals was replaced by the need to fight fire with fire, as each side pitted its own overpowered units against the other side in the attempt to abuse their natural abilities to the maximum. The result of this was that many units and strategies commonly seen in Generals became entirely obsolete.
Then again, some say change is good. If you really want to find a comparison for Zero Hour, the best example might not be a RTS at all. The game is similar to Nintendo's Super Smash Brothers: Melee, even though it is not a RTS. Just as Super Smash Brothers deviates from traditional fighting games in that it is not about balance, symmetry, or order, so too does Zero Hour differ from the traditional RTS mechanics. It's a chaotic game where the best strategy is to create enough disruption so that you can bring your most overpowered and uncounterable units into play and smash your opponent in an instant. Games are often hectic and the battles often take place simultaneously at various parts of the map. Bases are often decentralized and exist in parts on various places of the map. If Generals resembled the graceful sport of fencing, Zero Hour was like two guys hitting each other with giant clubs.

Both Command and Conquer: Generals and its expansion were radical departures from the traditional mechanics of a Command and Conquer game. Many fans were upset about the change, but many adapted and came to love the new feel of the C&C series. Unlike many RTS games that strive to tell epic stories or create compelling atmospheres, the soul of Generals and Zero Hour did not reside in the story or the art style. It was a very "pure" RTS, one which was easy to learn, hard to master, simple, yet deep.
The Lord of the Rings: The Battle for Middle Earth

**Developer:** EA Los Angeles  
**Publisher:** EA Games  
**Release Date:** December 6, 2004

When EA announced they were making a Lord of the Rings RTS, people were caught off guard. On one hand, it was expected. EA has been a major force in the games industry for quite a while and a LotR RTS game was inevitable. However, in another sense, it was a surprise. The company had just finished releasing Command and Conquer: Generals and its expansion, Zero Hour, both of which targeted the most dedicated and hardcore kind of RTS fan. So, when the company revealed that their next RTS title would not feature tanks, helicopters, or scud missiles, but instead horses, wizards, and orcs, some fans (especially long time C&C fans) of EA's previous two titles were quite disappointed.

However, the gaming monolith knew what they were doing. Their strategy was to branch out and expand their hold on the RTS market. This time the company would be developing an entirely different kind of RTS. When The Lord of the Rings: The Battle for Middle Earth (BFME) was released, players realized there were many aspects of the game that made it somewhat un-RTS-like, but this was mainly because many RTS fans still had not become accustomed to these kinds of elements and had already made up their minds about what a proper RTS should be.

The game had a very unique feel, which resulted from the large number of deviations it made from RTS convention. While many long-time RTS fans enjoyed the game, the special flavor of BFME's gameplay meant that it wasn't for everybody, but that it held a special appeal for many casual players and for Lord of the Rings fans new to the RTS genre. Its uniqueness and simple enjoyability were the result of several elements, most notably a fixed number of "build plots," a fairly unique resource system, and power point "trees."

For a hardcore RTS player, the build plots were the most challenging feature to accept. In almost all other RTS games you were given the freedom to build whatever you wanted wherever you liked, but BFME took away that freedom and forced players to build in a new way. The game did not feature peons, as in Blizzard games, or Mobile Construction Yards, as in Westwood games. Rather, BFME gave you a certain amount of build plots and you were forced to build your structures on those plots. Everything, from resource structures to unit production structures, had to be erected on one of these special sites. The idea behind the system was that it was essentially a "population cap" for buildings. Many
past RTS games had featured population caps for units, but the build system in BFME went a step further by forcing you to build all your structures in a certain area. Because all four armies had their own structures and number of build plots (some had more than others), a certain amount of skill was required when building one's base. Build too many farms and you'll have plenty of money, but no room left to build unit production or research buildings. Build too many barracks and you'll be able to raise an army fairly quickly, but you won't have any money to afford one. It was an entirely new system that meant that the earliest decisions you made concerning your base layout would have effects that would ripple all the way into the late game.

The resource system in BFME was also somewhat different. However in reality, its uniqueness directly resulted from the new build system. Whereas most RTS games feature resources scattered about the map which the player needs to collect, all of the income in BFME is generated "in house." In other words, you simply build a structure and you get money from it over time. Furthermore, the two Forces of Light factions (Rohan and Gondor) start the game with walls that surround all their build plots. For these two factions, this means that their economy is well-protected from the very beginning of the game!

The four factions were very different from each other. For example, Gondor was the most defensive faction and could survive a whole game by only defending. The faction design was different from most real time strategy games since Dune 2, mainly because of map control. Two factions, Rohan and Gondor, had pre-built walls, while the other two, Mordor and Isengard (collectively known as the Forces of Darkness) did not have any, which meant that map control was a more important aspect of the game for Mordor and Isengard. The factions with walls were safe from immediate attacks, but they still needed to get map control in order to win. This was because maps featured alternative assets, such as settlements (resource plots) and "creeps" (neutral creatures that could be killed for experience) scattered around the map. Securing these resources was very crucial in the game, especially creeps. However, they were all the more important because of a little concept inherited from EA's previous RTS game, Generals.

Command and Conquer: Generals featured a system of "generals powers" that granted the player special abilities at no monetary cost. To earn these abilities, you simply needed to kill a certain amount of enemy units. The system had no particular structure, except that the more valuable points could not be unlocked until the late game. BFME applied a concept as old as the RTS genre itself to this system—it made a "tree" out of the system. Just as buildings could be organized into a "tech tree," so also could special powers be organized into a "power point tree." Effectively, certain powers required other powers to be unlocked first, even if you didn't want to use the lesser power. It seems that, no matter what form it takes, the concept of a structured "tree" is fundamental to the RTS genre.
Power points were crucial because they offered special abilities to the player, which varied for each army. Some power points, for example, could summon more units to the field and aid in battles, while others were magic-based and could reveal an area of the map, while still others could heal your units. Since power points were acquired by killing enemy units and structures, you needed to be careful what you bought, which, in turn, meant that you needed to be careful what you built. But, due to the limited number of build plots, this was easier said than done and it forced the player to sometimes make difficult decisions. And the heart of strategy comes from knowing how to make difficult decisions, so while many initially feared that BFME would be a shallow and dull game, its special features created a unique form of gameplay that had a different kind of depth than most other RTS games.

But not everything about the game was unique. The game's hero system was inspired by WarCraft III. Like in WarCraft III, units could "level up" by killing enemy units and creeps. Leveling up granted the hero access to increasingly powerful abilities, just as killing more enemies granted the player access to increasingly powerful special abilities. Heroes were common and hugely crucial in the game. Some were very powerful heroes, while others were less useful, but they all had very different abilities, such as leadership for nearby units, anti-hero abilities, and, of course, anti-unit abilities. The hero system gave the game far more depth than it would have had without it. Every time a hero achieved a higher level, it would get an increase in HP, damage dealt, and armor, which was a decisive factor in the end game.

BFME also borrowed the trampling feature of the Total War series, where cavalry could charge at the enemy troops and run them over, which would either kill them or wound them. The game applied the concept of battle formations as well, which had been used in a myriad of other RTS games. Simply put, each unit could either be in formation or out of formation. Different formations would give different bonuses, such as the extra armor that pikemen would receive in defensive formation. However, this did come at a price, which, in the case of pikemen in defensive formation, was a reduction in speed.
The Lord of the Rings: The Battle for Middle Earth will be remembered as one of the most unique modern RTS games because of its many nuances and peculiarities. It added some new ideas to the RTS genre and modified some old ones. It might not be the best RTS game for competition, but it has more than earned its place in the history of real time strategy because it introduced an entirely new demographic to RTS games and featured a remarkably simple formula that challenged the traditions of the genre.
To investigate, and to take apart Warhammer 40,000: Dawn of War (DOW), is to be introduced to a game that is the culmination of many different ideas. When Dawn of War was released, it was highlighted as a fresh and innovative step forward for the RTS genre. Among its merits, Dawn Of War was noted for an attempt at combining a streamlined system of squads against squad combat with a system of morale that was clearly superior to the few other systems of morale implemented in other RTS games. This concerted evolution of mechanics was set against arguably one of the most developed science fiction tabletop gaming universes in history, that of Games Workshop's Warhammer 40,000 Universe.

In this universe, there is a remarkable variety of content for a RTS game, allowing Dawn of War to draw from a background where the muscular Orks, wielding the equivalent of a meat clever as a hand-to-hand weapon, can clash with the most heavily armed, exceptionally trained superhuman Space Marines. It is a world where a myriad of fantasy concepts are fused with science fiction, where "psykers" and "magic" are intertwined with heavily Gothic and dystopian imagery, Mankind's existence dependant on the fortunes of a monolithic Empire in which a single human life matters nought. The unexpected duality of close combat and ranged combat, as well as the concept of morale, are two primary features in Dawn of War that are transcribed from the tabletop background. Since its release into the gaming community, the developer, Relic Entertainment, has supplemented the original Dawn of War with three distinct expansion packs, each releasing both new single player and multiplayer content. Among this new content was a steady increase in the number of available teams for play. Dawn of War launched the franchise with four: the Space Marines, the Forces of Chaos, the Orks and the Eldar. The expansions added another five races; the Imperial Guard made their debut in Winter Assault, while the Necrons and Tau were introduced in Dark Crusade. With the addition of the Sisters of Battle and Dark Eldar in Soulstorm, the number of playable races in Dawn of War Soulstorm was lifted to nine.
Innovations

Dawn of War introduced a number of concepts that, while not strictly new, were notable in their implementation. The first of these was a map-control based economic system that exhorted the average player to aggressively seize control of the map. Dawn of War splits its economic system into two resources, called Requisition and Power. Power is derived from production buildings that can be constructed, whereas Requisition is somewhat different because it is dependent upon the control of important points on the map. These points, referred to as "Strategic Points," "Relics," and "Critical Points," all offer distinct advantages and disadvantages and are all crucial to maintain a steady supply of Requisition. In addition, to these means of obtaining resources, the Expansions Dark Crusade and Soulstorm introduced alternative resource systems. The Necrons in Dark Crusade used only power as a consumable resource, increasing population cap and unit construction time by controlling territory. In Soulstorm, the Dark Eldar gained souls as a resource for specialised abilities when harvested from corpses, while the Sisters of Battle gained 'faith' abilities, generated by specific units. Upgrades to maximize the efficiency of both resources can be purchased, usually at the sacrifice of the other resource.

In particular, this adds a considerable amount of depth and variety to the strategies which define each of the different races in Dawn of War. For example, the Eldar ability "Fleet of Foot" gives the Eldar units tremendous speed and rewards highly aggressive players who use that speed to gain an economic advantage. Orks, on the other hand, due to their tier 1 defensive abilities and lack of speed, make the best use of the strategic point system through fortification of their tier 1 points in close proximity to their base and rely on harassing the enemy's strategic points by using their early units to apply enough pressure on the enemy to gain an economic advantage. Strategic points are the basic points on which commanders can construct "listening posts" (basically stationary defenses/outposts) to secure more requisition and prevent the points from being captured. Relics give certain armies access to their most powerful and unique units. They also act as a strategic point in resources, but take a great amount of time to secure. Critical Points give the player the ability to see into his opponent's base and discover what they are planning. This is particularly valuable, as information is the key in Dawn of War, with the maps often promoting "all or nothing" build orders and stratagems. However, Critical Points cannot be upgraded with a listening post and therefore produce the least amount of requisition. Hence, while these can provide game-changing intelligence onto an opponent's build order or unit composition, taking them must be considered in lieu of more profitable acquisitions.

Dawn of War also achieved its goal of evolving the oversimplified morale systems and squad-based combat of other RTS games. When giving commands, squads in Dawn of War function as a single unit, but in some cases, each member of the squad is also treated a separate entity. Each squad has its own
specific upgrades and each squad type has a set accuracy when firing on the move and when standing still. But, in addition to this, individual weapon upgrades can be bought for a squad, causing one of the members of the squad to gain the upgrade. If the upgraded member dies, the player needs to replace both the soldier and the weapon. As a result, Dawn of War's squad system retained the benefits of squad combat, while introducing the concept of individuality within the squad. Furthermore, Dawn of War's squad system allowed the game to feature a hard counter system (the "rock, paper, scissors" mechanic), while enabling units to adapt on the fly via squad upgrades. The Space Marine Tactical squad is a sterling example of this, being able to upgrade with any weapon to effectively counter any unit in any army. While units that can counter everything are few and far between, most units have more than one use.

The unique implementation of squad combat meant that micromanagement was very important in Dawn of War. Because a squad was only dead when its entire cadre of soldiers was annihilated, it was incredibly important in many games to protect the last member of a squad and ensure that it did not have to be rebuilt from scratch. Since any squad could be tied up so quickly in melee combat; positioning was of increased importance, in particular when playing with Space Marines and Chaos Space Marines. If just one of your squads died, it would give your opponent a significant advantage because they could reinforce faster. A good example is tier 1 tactical squad battles, in which three squads of Space Marines would often face off against two larger squads of enemy Tactical Marines. Since the two larger squads were already reinforced to their maximum size, through deft micro the other player would often out reinforce the two squads and gain a victory. This was crucial to success in Dawn of War, particularly because of its melee system (one large squad could tie up multiple smaller squads in some situations, but would usually only be able to tie up one), and even more so against dominating tactics that killed squads quickly, such as the Eldar Guardian Rush. As other strategies became more popular in the expansions (such as the mass scout tactics that hallmarked Space Marine Mirrors in Dark Crusade), this concept became more developed.

Morale is the final element that Dawn of War featured in an evolved form. Its implementation played to the idea of squads and their individual accuracy ratings in combat. If a squad suffered sufficient casualties or was hit with a particularly morale draining weapon (such as a flamethrower), their morale meter reached 0 and they would "break." Essentially, this made them move with increased speed and fire very inaccurately. When a squad was broken it became useless to the battle and could be retreated. The use of morale breaking weapons was particularly important in later tiers, with some very powerful anti-morale abilities available. However, morale weapons were not the "be all and end all" of any army, since a broken squad could escape with far greater speed and, especially in mirror matches, breaking an enemy could give them the speed they needed to escape and regroup. Furthermore, some races dealt with morale and the loss of it better than others, meaning that strategies based on morale were not effective against each and every single race in the same situation. For example, the Orks could avoid morale damage by massing in extremely large concentrations, benefitting from increased striking...
power and speed on top of morale resistance.

The expansion packs Winter Assault and Dark Crusade, along with SoulStorm introduced a number of units that were invincible (or effectively invincible) to morale damage. Some felt this decreased the importance of morale, whereas others applauded Relic for expanding the morale system to include units that do not break. These units would in theory provide a direct counter to morale damaging options and thus, expand the number of options available versus an anti-morale aligned army. Dawn of War Soulstorm also added a new addition to the game in the form of air units, allowing aspects of terrain to be ignored by these significantly more mobile designs. Each race was given just one of these new units, with each one fulfilling a different role in each army - from the upgradeable Space Marine Land Speeder Tempest (above), to the Imperial Guard Marauder bomber, which relied on different types of bombs to confront varying targets. This has resulted in a number of new balancing concerns however, since air units have mobility the original maps were not designed to be balanced around, as well as the fact that Air units essentially function as ground units with increased mobility. On top of this, Air units have suffered from a number of pathing and firing bugs which have plagued Dawn of War since it's original production with greater severity than ground units.

Expansions and Controversy

Dawn Of War has been enhanced with added content in the form of three expansion packs by Relic Entertainment: Winter Assault, Dark Crusade and finally, SoulStorm. In addition to adding the new races and campaigns, these expansions also made significant changes to the core gameplay of Dawn of War, which ended in some controversy from vocal members of the community. Winter Assault set out to "speed up teching," and make tier 1, which in Relic's eyes was too dominant, a less significant phase of the game. Therefore, a large series of changes was wrought on Dawn of War, including streamlining upgrades, increase the power of certain units, and generally making tiers 2, 3 and 4 much more achievable in the competitive 1v1 gaming community.

The end result had both supporters and detractors, but the generally universal opinion of the Dawn Of War community was that Relic had achieved their aim, perhaps even overshot it. Tier 1 became effectively useless in some matches, as many sought higher tier units and their impressive power over the lower tiers. In team games many of the tier 3 and the new tier 4 units were dominant, utterly destroying the lower tiers and making team games a "teching-heavy" experience, in which players were forced to acquire these units as fast as possible over any other strategic choice. In the 1v1 gaming scene, almost all combat took place in tier 2, with little occurring before or after it unless extremely specialized build orders were used. Simply put, if the original Dawn of War was a restrained, clever duel between professionals, then Winter Assault was the cold war embodied. Players were obliged to
simply ignore the other player and build as many higher tier units before their opponent could do the same, anticipating that these would be used in a single, decisive battle. Overall, community opinion was mixed, some supporting the fact that with rushes and aggressive build orders, tier 1 combat lived, but at the same time the majority of games could now reach a later tier. Eventually, a patch reintroduced the importance of tier 1 in games of Winter Assault, to much general applause.

Dark Crusade, however, took a more measured approach to finding a balance between tiers in the game. It relied on extensive use of capped unit production, changes to unit design and effectiveness, and the introduction of new teams to regulate the higher tier units. This ultimately led to a reduction in the number of fast-teching strategies, but did not address all concerns. In terms of balance and particularly with specific races – many players felt that as with the Imperial Guard in Winter Assault Patches past, there was a heavy-handed approaching to balancing which resulted in many matchups still being a contest of tech speed (a concern which particularly applied to the Chaos race). The final expansion for Dawn of War, Soulstorm worked further on these concerns, despite introducing balancing difficulties with the presence of two new races and aerial units. The end result is a widespread recognition that at least in 1v1 competitive matches, the balance in Dawn of War Soulstorm has markedly improved. However, due to a number of bug issues (several of which could completely 'break' a game open), many have still criticised Relic and the producer of Soulstorm, the now Defunct Iron Lore Entertainment. These critics feel not only was Soulstorm's changes too late to provide much more than a shot of adrenalin to the heart of the community, but they also feel the long wait for the proposed bug-fixes patch has undone much of the progress Soulstorm has made.

**Community**

From the rich background of the Warhammer 40,000 universe a fittingly diverse and passionate community has built up around Dawn of War. The Dawn of War community features an incredibly diverse modification community, many seeking to expand Relic's portrayal of the Dawn of War universe by adding on extra units, altering the game to make it adhere to the tabletop, or adding extra content. Relic has also released mod tools for the game, but despite significant community pressure and a thriving community, has still not released a Software Development Kit (SDK). Recently, to address concerns raised by the community, Relic has taken several steps to better involve them in the progress of the game. This involved the introduction of a permanent Community Manager, Allie "Buggo" Henze, who thus far acted as a Liaison between the community and Relic until she left Relic, in 2008. On top of this, Relic has run a number of closed community betas for several patches in both the Dark Crusade and Soulstorm expansions. The last beta, credited with the majority of balance success brought on with the Soulstorm expansion was run by Iron Lore Entertainment as opposed to Relic, involving ILE members with the community as well as Relic members. These have been credited with many of the balance improvements provided by patching to both games, although they themselves have not proven immune to criticism, particularly of the lack of transparency for the selection for participants in the process itself (almost all of which were higher tier competitive players).

**Conclusion**

Dawn of War is a game that has aged well, but is finally starting to near the end of it's time with DoW2 on the horizon and the community stagnating. It may not have brought a true revolution to the RTS genre, but what is truly notable about Dawn of War is it's success in taking three very specific, and normally unconnected concepts in the RTS genre (morale, squad based combat, and resources linked directly to map control) and fusing these into a cohesive, fluid, and successful game. The formula set forth in Dawn of War would be used, albeit in a modified form, in the near future when Relic released
their next RTS, Company of Heroes.

While the oncoming Dawn of War 2 seems to seek to depart from this formula, it would be folly to underestimate the significance of Dawn of War. It defined a new series for Relic and influenced both it's sequel and Company of Heroes, both of which we see as their own enterprises today.
The Lord of the Rings: The Battle for Middle Earth 2

Developer: EA LA
Publisher: EA Games
Release Date (BfME2): March 2, 2006
Release Date (RotWK): November 30, 2006

Battle for Middle-Earth 2, (BFME 2) is a real time strategy game based on the books of J.R.R. Tolkien and the Lord of The Rings movies by Peter Jackson. The game was published in 2006 as the second part of the Battle for Middle-Earth series. The game has two editions, the so-called Collector's Edition and the regular edition. The Collector's Edition does not differ much from the regular edition; in addition to the actual game it has different models, textures and a bonus DVD. The Collector's Edition is only available in DVD format, while the regular edition has CD and DVD formats; hence the more expensive price of the Collector's Edition.

Battle for Middle-Earth 2 is based on the characters from the movies and the books; the era in which this fantasy is set is very similar to the Medieval times of the real world. Weapons such as crossbows, swords and trebuchets are characteristic war instruments of the Medieval Ages and play an important role in BFME 2. The economy in the game is based on structures such as Farms, Inns, Lumberjacks and Mines, which differ depending on the faction you are playing.

The game has six factions to choose from, a somewhat large number compared to most RTS games, which are the Men of The West (MotW), the Dwarves, the Elves, the Goblins, Mordor and Isengard. Each faction specializes in a particular criterion of war; for example the Dwarves possess strong infantry units which have the ability to decimate opposing infantry if used correctly and the Goblins rely on large numbers of cheap infantry units to overwhelm enemies.

The Economic System

In BFME 2, the fairly simple economic system has one class of resource: resource. Resources can be gathered in many ways, the most common of which is the basic economy building which every faction has. Men have Farms, Elves have Mallorn Trees, Dwarves have Mines, and so on. These buildings both gather resources and provide command points which are necessary to construct more units. The Dwarven and Goblin resource structures even have the ability to transport units. These buildings have a radius which they collect resources from; if this radius is cut by an object, the income rate drops. For example, rivers can cut this border and make the resource

The circles and green numbers over the Mallorn Trees indicate efficiency of each tree.
In addition to these resource structures, there are outpost buildings on some maps, although they tend to be more numerous on large maps. There are three types of neutral structures: Inns, Outposts, and Signal fires. Inns provide you with the ability to recruit unique units, which vary depending on the faction. For example, MotW can recruit Dunedain Rangers, powerful long range archer units with the ability to camouflage themselves, while Mordor can recruit Corsairs of Umbar, unique melee units capable of scaling walls. The units you can recruit from inns are relatively inexpensive compared to their alternatives. The same kind of system was actually seen in Rise of Nations: Rise of Legends, in which units could also be recruited from neutral buildings. Outposts generate 60 resources in frequent intervals, which can boost your income rate considerably, so they are very valuable to all factions. Signal fires recharge your power point powers faster; the more signal fires you possess the faster your purchased powers will recharge after being used. Power points are gained by fighting in combat; once a power point is used it needs to recharge before it is used again, however, by acquiring signal fires this recharge time is reduced. This power point system is similar to the system seen in Command and Conquer: Generals, in which killing enemy units and buildings was rewarded with powers which could hurt enemy troops, easily affect large areas, kill large armies, or boost your economy. BFME 2 greatly expanded on this system both by increasing the number of powers available and by creating new types of powers, such as the ability to take control of neutral beasts on the map.

Game types

There are several game types in BFME 2 to choose from. There is a single player mode with skirmish and campaign, and each are different and offer a different style of gameplay. There is also a multiplayer mode with several options to choose from. For example, there is Tournament, where your opponent is randomly picked in 1v1 or in 2v2 mode and an Open Play mode where you can choose your opponent, battle up to eight player battles with your own custom created heroes and recruit "ring heroes" such as Sauron, the Dark Lord, and Galadriel, the Elf queen, to fight for you. These ring heroes are extremely powerful and can be recruited by collecting the One Ring from Gollum, who roams the map, and by ordering your units to take the One Ring back to your fortress. Even after that, a large number of resources are required to recruit a ring hero to fight for you since they alone cost as much as entire bases or armies.

There is also turn-based/real time strategy hybrid mode called War of The Ring mode where you can battle on a large strategic map and command the huge armies of Middle-Earth. Rise of Legends and Rome: Total War have the same kind of huge maps which are based on large, strategic-scale war. In this mode, armies are moved around on a map as they are on a tabletop board game such as Risk or Axis and Allies. However, the actual battles are fought and decided in real time mode, although an "auto resolve" feature is available to save time.
Battle system

BFME 2 focuses heavily on micromanagement, allowing a player to control the stances of his units and order them into formations. Macromanagement plays a less decisive role, although both still have a large impact on the outcome of the game. The game has a "rock, paper, scissors" style counter system, although it is not a pure "rock, paper, scissors" system since units can kill more than one type of unit, although they are generally designed to counter one type specifically. Units are classed as swordsmen, archers, cavalry, heroes, pikes, and aerial. Generally, swordsmen counter pikes, which counter cavalry, which counters archers, and archers counter swordsmen.

Heroes also make a return from BFME and have multiple uses, depending on their classes; some can be used to decimate armies and some can be used to support armies. Due to their versatility, heroes play a very important role and should be used at every possible opportunity since they can quickly change the outcome of the game. The diverse world of the Lord of the Rings allowed for a diverse fan base, one composed of both RTS fans and Tolkien aficionados. Indeed, BFME 2's fan base is a perfect example of the power of a large license such as Lord of the Rings to bring in fans from both the world of Tolkien's books and from the overall RTS community.

The Rise of the Witch King

Even before Battle for Middle Earth 2's patch 1.06, created by MaDDoX, a global administrator of Gamerplays, was released, an expansion pack for the game had been announced, The Rise of the Witch-King. Its full name is the longest product name ever, being: The Lord of the Rings, The Battle for Middle-Earth 2, The Rise of the Witch-King Expansion Pack. Electronic Arts, seeing more potential in their license of the Lord of the Rings books acquired for the production of the Battle for Middle-Earth 2, decided to develop an expansion pack for the popular sequel of the successful Battle for Middle-Earth game.

The story behind this game shifted from the end of the Third Age to the time of the forgotten realm of Arnor and the wicked and infamous threat of Angmar, ruled by none other than the almighty captain of Mordor in later times, the Witch-King. The campaign revolving around this story is played from Angmar's perspective and the conquest of Arnor. In contrary to the usual Battle for Middle-Earth campaigns, the fact that evil is victorious here actually does confirm to the tale set out by Tolkien. Arnor, the enemy in this campaign, is not an available faction, to the disappointment of some, but according to others because it, as Gondor's sister realm, would be too much like the already existing Men of the West faction. In short, a duplicate. In eight epic battles, starting in the wastelands of Angmar around the year 1300 of the Third Age, to 1409 and the destruction of Fornost, you conquer the North of Middle-Earth and the region of Eriador becomes a wasteland. By completing this campaign, you unlock an epilogue in which you get to play the forces of good, destroying Angmar and chasing the Witch-King into exile. Although an alternative storyline, often from an evil perspective, never stopped EA, they did not create one for this expansion pack.

The Rise of the Witch-King adds another faction to the Battle for Middle Earth 2's six, namely
Angmar, giving the game a total of three good factions, also known as the Forces of Light, and four evil factions, the Forces of Darkness. Even though most factions are of similar gameplay, having a swordsmen unit, a pike unit, a cavalry unit, an archer unit, a siege unit, a few heroes and upgrades for example, Angmar does not follow this pattern. A unique unit named the Thrall Master gives access to all four basic units, swordsmen, pikemen, archers and cavalry, by allowing the player to summon them directly on the battlefield instead of the usual recruitment from a production building.

But Angmar offers more innovation, such as the Sorcerers, a unit with magical abilities, given by the power of the Palantir of the North as shown in the campaign of this expansion pack, like the Well of Souls power, a spell that drains enemy units of their health and gives it to your own, healing them. It also poisons them and upon death, they turn into Wights for a limited amount of time, usually causing a cascade of spawning Wights, thus destroying the targeted units within moments. Their mighty Soul Freeze can even put the Balrog of Moria into the fridge.

Besides the new faction Angmar, the existing factions have been given new units as well as a whole new unit class, namely the mini-hero horde. The new units are just an expansion on what the factions already had, such as a new pike unit or a new hero. However, the new unit class is something worth discussing. The Battle for Middle-Earth series focuses a lot on its heroes as does the Lord of the Rings tale and heroes have always been singular units with extraordinary high statistics and powerful spells, usually a good number of them as well, whereas normal units were found in battalions, with relatively weak statistics when compared to heroes individually, but powerful as a horde. They also had a few abilities, mostly formations in the first game, the Battle for Middle-Earth, or an ability like Charge, found in the sequel. The mini-hero hordes however are a mix of both, having an above average amount of spells and powerful ones too, unusually high statistics for a mere unit, but below that of a hero and they are not singular, but also come in battalions, although in fewer numbers than a regular unit. These mini-hero hordes involve the very fast Knights of Dol Amroth with their powerful Lancers to the slower, but frighteningly strong Deathbringers, who answer only to Saruman and Isengard. Due to their high cost, they only occur in middle to long games as they can't be afforded early on.

That was not all the expansion offers, EA also improved the Create-a-Hero system and the War of the Ring mode. There are new Troll Classes for the Create-a-Hero and instead of a standardized cost, each hero had a base cost, which would be higher with each new power you chose, also depending on the kind of power you picked. This allows for a more balanced system, although most disagree with EA's statements regarding the balance of the new Create-a-Hero.

The War of the Ring mode had been given new maps, mostly around the region of Angmar and units bought on the map would cost you resources, created by the typical resource buildings for each faction such as a Dwarven Mine or an Isengard Furnace. Also, one of the most welcomed changes for the War of the Ring mode was that units trained in real-time battles on the various maps would still be present when the battle on that particular map was over, instead of simply vanishing. This makes each battle count more towards victory or defeat instead of just a lost territory.

Although this all does seem very appealing, many contest that when they tried the game's new features. According to many, the expansion pack is rather meager, just a "product to increase Christmas sales" as the game was released a month prior to the Christmas holidays. Its balance has been called horrible as well as its support, nevertheless, the game still has a dedicated fanbase these days, having stuck to the game after 1.5 years.

The current official version of the game, 2.01, still holds many imbalances and bugs according to many
of the current players and former ones, which has lead to the production of several, largely applauded, unofficial mods, trying to correct the game's errors and perfecting it.

Even though there have been many rumours of even a Battle for Middle-Earth 3, most likely originated from the enthusiasm of the community, this has never been confirmed by EA itself and to this day it is still a mystery whether or not there will be another one in this successful series of real-time strategy games.
Company of Heroes

Developer: Relic Entertainment
Publisher: THQ
Release Date: September 12, 2006
Release Date (Opposing Fronts): September 24, 2007

I remember the first reactions to Company of Heroes (CoH). Comments like "this is the best RTS ever" and "omfg this game is going to own every other game" were normal and, to some extent, still are. In many ways, the game was a breath of fresh air to the RTS genre. The launch timing was perfect, and greatly helped CoH become the success that it is. CoH filled the vacant period of time between the Battle for Middle Earth 2 (BFME 2) and Rise of Legends (both of which were beginning to lose their "fresh" feeling) and the huge 2007 releases of Command and Conquer 3 and Supreme Commander. Partly for this reason, and partly because the game is simply so polished, the attention the game received was truly phenomenal. Pro players from all over the planet, from games as different as Starcraft, Warcraft 3, Call of Duty, Battlefield 2, Command and Conquer Generals: Zero Hour, Dawn of War, and BFME 2, joined CoH. Many stayed, but others eventually left for reasons that will be explained later.

CoH is a special game in the history of real time strategy. It was definitely a great step forward in terms of graphics quality and gameplay. But it was also the first time that first person shooter elements were fused with RTS elements. People who had only played FPS games, joined CoH because they felt it was a special game which assimilated RTS elements with a FPS style in a truly unique way. When combined with the "Saving Private Ryan" movie-like feeling of the game, this made CoH a truly unique and outstanding game.

What makes CoH so different?

CoH not only combines cutting-edge graphics and detailed animations with an improved physics system, but also unites them in such a way that you can simply blow up everything on the battlefield with an amazing amount of realism. Relic and THQ call this "environmental strategy." There's the feeling that everything is touchable, usable, and destroyable. This creates dynamic experiences within morphing scenarios, which is probably the most revolutionary aspect of the game. Dynamic battlefields, environmental strategy, and great battles are what CoH is all about. Players must be able to adapt to the environment and use it to their advantage. Failing to do so often means that you will not succeed. Units move through the map and constantly adapt to the terrain (including houses, walls, terrain advantages, bushes, and enemy confrontations) by taking cover. Units show "real" intelligence based on what is happening, which adds even more to the impressive sense of realism of the game.
At the end of each battle, the map is completely different. Wreckage, blood, artillery holes, houses in pieces and pieces of houses will be scattered around the map by the end of the game. Structures have plenty of destruction states, which means that you probably won't see the same animated destruction twice. If you are patient enough, you can zoom in and see units changing or recharging weapons, possibly even noticing pieces of a corpse laying on the ground. Gravity, physics, and realism, it's all there, setting a new standard for realism in RTS games. While Age of Empires III created a realistic experience with its photorealistic graphics and physics engine, CoH took realism in RTS games to a new level by bringing the intensity of World War II to a graphically and physically realistic RTS, something that had never been done before in the genre.

Counter system

CoH doesn't include a rock-paper-scissors counter system. A rifle shooting a tank 100 times won't do anything, but when armor piercing rounds are used in a machine gun, an armored car can be destroyed in seconds. Additionally, a tank won't kill infantry easily without infantry support, machine gun support, or an upgrade. Hitting a tank in the rear with a bazooka isn't the same as hitting the front or sides. The rear section has much less armor and is much more vulnerable to anti-armor weapons fire. Sometimes tanks miss because they are on bumpy terrain. Like Dawn of War, every unit can counter any another unit relatively effectively, with a few exceptions of course, such as those mentioned above. In general, players have plenty of options to deal with any particular situation, which is a massive improvement over the more linear RTS games, which only offers the player one or two options to counter many units and strategies.

Economy and Map Control

The success or failure of one's economy is deeply associated with map control. Every map is divided into sections. Each section has a flag which you must claim in order to start collecting the resources of that particular section. Each flag gives you resources, so the early game is really a rush to establish solid map control. This happens fast and the more sections you have the better your economy will be. But you need to maintain good map control by using tactical tricks, such as cutting off your opponent's supply line. This can be done by taking an enemy's flag, which isolates some of his other flags from his
headquarters. If you can cut him off from these flags, he won't receive any resources from them.

If you watch the mini-map during an actual game, the constant dance of grabbing and cutting off resources looks like a puzzle game. There are three types of resources (some more rare than the others) and each flag provides only one type of resource: manpower, munitions or fuel (the rarest and most important resource). Manpower is the main resource (analogous to food in games like AoE3) and it is used to buy units as well as research upgrades. Munitions and fuel are the secondary resources. Munitions is used for employing special weaponry ranging from grenades to panzerschrecks to artillery, while fuel is for upgrades, teching and vehicles.

What this means for the game is that you always have to be aware of how you use your resources. You have limited ammo so you have to choose to invest in weaponry to counter infantry, or weaponry to counter tanks, or to throw a V1 on your opponents army. On the other hand, if you have a problem with tanks, you can also choose to build your own tanks with the fuel you've gathered during a game and use your ammunition against infantry, for example.

Therefore, a strong economy is deeply associated with how you macro or gain map control and how you execute all the strategic moves to maintain your supremacy over the map. The game also requires you to exercise good, and sometimes intense, micromanagement. The advanced AI helps your units to take cover and attack, but what really tests your micromanagement abilities are things like the numerous special abilities, power points, flank movements, repairing, driving, positioning, artillery, and machine gun placement.

**Doctrines and Companies**

One thing that is being seen more and more in RTS games, since Command and Conquer Generals, is that by killing enemy units, you get experience and that experience can be used to unlock special abilities and units. In Company of Heroes, this system also exists, in the form of Companies for the Allied armies and Doctrines for the Axis armies. Although they differ in name, their functions are the same.

During the game, you have the option of choosing a Company for each army. The choice can be made between 3 different Companies, each having its own strengths and weaknesses and each unlocking different strategies. Each company has a total of 6 abilities that you can unlock, with the bigger abilities requiring lesser abilities to be unlocked first. The Companies themselves are also customizable, as all of them having a left side you can go down and a right side, and when you have enough experience, you can actually complete both sides:

What this means is that while there were only 2 armies in
Company of Heroes, there was still a lot of diversity between them and with Opposing Fronts, the game has only become more diverse.

**Analogies**

As far as the nature of map control goes, the game's economy system is definitely comparable to Relic's previous RTS, Dawn of War. But in terms of the nature of its three resources, it is more comparable to Age of Empires. While the battles of the game and intensive micromanagement requirements are similar to Zero Hour, the intuitive nature of the game and level of accessibility bring The Battle for Middle Earth 1 and 2 to memory. The flag-based nature of map control might also remind one of the Battlefield FPS series. And, of course, all the drama of the World War II setting has hints of "Saving Private Ryan" and the Call of Duty series. Compared to Rise of Legends or The Battle for Middle Earth, the speed of the game is reasonably fast, but when compared to Zero Hour, Battle for Middle Earth 2, or Red Alert 2, it seems slow, but from the start of the game and on, you're out in the field fighting with everything you have to try and gain an edge over your opponent, capture his territory and make casualties while making little losses, eliminating the part of buildings, a base, and an economy, which is an integral part of many other RTS games out there.

Some say that Company of Heroes becomes repetitive after playing several games, mostly because it only offers one possible match-up: Axis versus Allies. It's definitely a flaw of the game, one which made some of the best RTS players leave soon after the end of the beta of the game. Nonetheless, the very high entertainment factor and the in-depth strategy involved with the three different companies of each faction compensate for this, making Company of Heroes both an intriguing RTS and a game for everyone who likes a World War 2 setting.

**Company of Heroes: Opposing Fronts**

When the original Company of Heroes was released, one of the strikes against it was the fact that there were only two factions, the Allies and the Axis. Combined with the fact that there were no mirror matches, a lot of people who didn't play the game felt it must be repetitive. Although those who did play Company of Heroes didn't typically feel this way, it was a great moment when Opposing Fronts was finally released, introducing two new factions, the British and the Panzer Elite.

The original factions, were renamed from Allies to the Americans and from Axis to the Wehrmacht. The Americans and the Wehrmacht had always been similar factions, with the Americans being a bit more offensive and mobile than the Wehrmacht, with the Wehrmacht being better at keeping someone out of their territory. The new British and the Panzer Elite were both made to fit in at the outer sides of the spectrum of offense and defense.
The British

The British suffered movement penalties when they were not in their own territory and had a big variety of emplacements they could build, making them exceptional at holding a small piece of the map. Now, as with all RTS games, you need more resources than your opponent to stand a chance at winning the game, so the British had one more core gameplay alteration, the fact that they could move their Headquarters onto a piece of territory, making it possible to make units right there on the battlefield, as well as making the territory it was occupying increase production with over 50%. This resource bonus could also be upgraded, making the territory occupied produce over 100% extra resources. And then you could also choose a doctrine, which would make you produce even more. By now, you're probably starting to think that the British are a very campy, turtling faction, but there's more. Apart from the Headquarters being able to boost your resources far beyond normal, there are also two other Command Trucks (the British tech by calling in additional trucks) which do the same as the Headquarters.

It's not surprising that the British weren't received well, being called a faction designed purely for the part of the community that likes Sim City, but as the game got explored more, it seemed that this was far from the truth. By using your units smartly, you could still move around the map with alarming speed, as well as employ your units quicker in the field because your Headquarters were right in the middle of it. In 1v1, the Brits were no campy faction at all, just a faction with a twist that left your Headquarters vulnerable for added benefit. However, it is still possible to go for an emplacement-based
strategy in 1v1 if you want. Unfortunately, in 2v2, it's a whole different ballgame, where the extra resources from the Command Trucks also increase the income of your teammate, which results in a massive resource advantage for the Allied team.

The Panzer Elite

Where the British suffered a lack of mobility, the Panzer Elite went off the charts and became the most mobile and offensive faction in the game. The Panzer Elite only have one single basic infantry unit, after that, they only have light vehicles and tanks, going from a small bike without any firing power that can capture territory to Anti Tank guns with engines.

Apart from the fact that the Panzer Elite has a large diversity of vehicles, the main thing that defines the Panzer Elite is its versatility. It has a tech tree which is different from Tier 1 -> Tier 2 -> Tier 3 -> Tier 4. From the start, you can choose between two different buildings (building both isn't advised as buildings aren't cheap) and once you have chosen one of those, you have unlocked the other two buildings. Once you have built one of those, you can also choose to upgrade one of your buildings (three out of the four buildings have the ability to be upgraded for a stronger unit). You can also choose to construct another building to get more diversity in units. But in constructing only two buildings, you already have four different possibilities, making the PE a faction that can be played with a variety of strategies.

Apart from their diversity in teching, their teching also comes at a fairly cheap price, allowing you build very strong units at a relatively early point in the game. This does cost map control though, so there's a great amount of choices you can make every game. It's not a surprise that the Panzer Elite was received a lot better than the British, being both innovative and very fun to play. If you compare the Panzer Elite to other factions from other games, it's pretty safe to say that they have many different and viable strategies. Most of the time, there's only one or two cookie-cutter strategies you can pursue with a faction if you want to win and even then, you know exactly how your opponent is going to react.

Relic's Support

The last thing that deserves a mention about Opposing Fronts is the support from Relic. While pleasing the community may be a hard thing to do, Relic's support has been very good. There has been a public beta to test a patch before its release, allowing the community to create a lot of the patch changes and thanks to it, it's never impossible to win in a certain matchup because the balance has improved significantly. Apart from that, there was also the introduction of Arranged Team Automatch several months back, allowing 2v2 teams to fight other teams and compete on a ladder. This was also playtested in a beta and it works pretty well, evidenced by the fact that the 2v2 arranged team ladder is as active, if not more active, than the 1v1 ladder.

As mentioned before, the British do cause an imbalance in 2v2, so the game isn't perfect yet. But at the time of this writing, a beta patch is available for playtesting, making some of the less viable units more viable and some things which fall into the category "a little bit too good" fall into the category "lookie, I'm nerfed into oblivion." For the reader who doesn't recognize sarcasm, or who isn't familiar with the CoH community, that was a joke, by now Relic seems to know what they're doing when it comes to balancing.

Another thing that is new with this beta patch is that player-submitted custom maps will be tested for balance and possible inclusion in the automatch rotation in order to create a more diverse game with
more viable maps, each requiring different strategies. Suffice to say that Relic has done a fine job with the post-release support and rumor has it that there's more coming, though a non-disclosure agreement unfortunately keeps it at just that. Rumors. The more speculative rumors do include the fact that Company of Heroes was released September 2006, Opposing Fronts was released September 2007 and, as of this writing, September 2008 is only 3 months away...
Supreme Commander

Developer: Gas Powered Games  
Publisher: THQ  
Release Date (Supreme Commander): Feb 16, 2007  
Release Date (Forged Alliance): November 6, 2007

Overview

Supreme Commander is the long-awaited "spiritual successor" to the cult RTS classic, Total Annihilation. "Sup Com" – as it is otherwise known – was developed by Gas Powered Games, a video games developer formed and led by Chris Taylor, the man behind the design of Total Annihilation. It shouldn't be at all surprising then, to learn the Supreme Commander effectively is the sequel to Total Annihilation in terms of gameplay, style, atmosphere, and cutting-edge game design.

The game is set in the distant future featuring three playable factions – the United Earth Federation (UEF), Cybran Nation, and Aeon Illuminate – with the Forged Alliance expansion pack adding a fourth faction, the Seraphim.

If I had to use one word to describe Supreme Commander, it would be "scale". Battles range from tiny, early game, one unit skirmishes; dominated by who can micro their unit best, right up to epic clashes between armies of colossal proportions, where the victor is the one who can manoeuvre his army best as a whole, while still executing surgical strikes on the enemies’ key units.

Supreme Commander allows for this disparity in magnitude by offering the player what's called "strategic zoom". This revolution in RTS control allows players to zoom right out from the battlefield simply by scrolling the mouse wheel, and zoom right back in, in the same way. This allows you to easily switch between bullet-dodging micro mode in early game to epic-warfare macro mode in late game. The game also introduces several other enhancements in RTS UI, such as real time command modifications, automatically repeating build queues, and automatic ferry routes that tell your transports to continually transport units from one point to another.

Gameplay

In Supreme Commander, you start the game with an Armoured Command Unit (ACU) that is able to walk around and construct buildings as well as provide early game offense and defence, much like the Commander from Total Annihilation. He is essentially your avatar on the battlefield, and as such, if he...
dies, you lose. Fortunately – as his name suggests – the ACU is heavily armoured, and can easily hold his own in early game. However, in late game the player must invest a significant amount of resources and effort into defending him otherwise he could (and often is) "sniped" via bombers, gun ships, and tactical missiles, among other things. As you can imagine, players often use these "ACU snipes" as a last resort once all hope of a more conventional victory is lost.

The ACU is not the only thing Sup Com has in common with Total Annihilation; Supreme Commander also shares a very similar economy system, with the two main resources being mass and energy (as opposed to TA's metal and energy). Mass is primarily collected by constructing mass extractors – or "mex" as they are often abbreviated – that are constructed on discrete mass deposits around the map, and provide an infinite source of mass. Energy on the other hand, does not require any map control, and generators can be produced wherever there is room to build. Another main source of mass income is from the wreckages of fallen units, which can be reclaimed by engineering units (which include the ACU) to regain in the region of 80% of the mass originally spent on those units. This makes it even more important to win battles, as the winner has the best access to those wreckages. As the standard of competition has progressed, it has become common for players to try and reclaim those wreckages in the heat of battle, really pushing the limits of a player's ability to micro.

Unlike most RTS games, Supreme Commander features land, air, and naval units, all in equal proportions. For example, the UEF's military units consist of 16 land units, 14 air units, and 13 naval units (including their three amphibious land units). Units are built from either the land factory, air factory or naval factory, and each factory has three tech levels, which are upgraded independent of other factories. For example, it's entirely possible to have just one tier 3 land factory and still have several tier 1 and 2 land factories. This tech tree model is much simpler than the likes of StarCraft, but still allows for a variety of tech-oriented strategies. For example, players can best counter tier 2 navies by using tier 2 aircraft, and tier 2 ground anti-air provides the best defense against tier 2 air.

Speaking of counters, Supreme Commander opts to use a counter system based on intuition rather than hard-coded damage multipliers. For example, mobile artillery will counter static defenses because of range, and static defenses will counter tanks/bots due to pure brute strength, and tanks/bots will counter mobile artillery due to manoeuvrability. You also have obvious counters such as anti-air units against air, and torpedo bombers against naval units. The benefit of using these intuitive counters is that players can jump right into the game and know what units to use in every situation without having to study various armour and damage types.

One area that Supreme Commander really pushes ahead of other RTS games is in its intelligence warfare game mechanics. Sup Com has five distinct types of intelligence: line of sight, radar, underwater line of sight, sonar and omni. Line of sight is the traditional form of vision where units will
uncover the Fog of War to reveal enemy units. Radar intelligence allows you to see enemy units under the Fog of War, but only as indistinguishable blips. Underwater line of sight is simply line of sight for submerged units. Sonar is like radar, and allows you to see submerged units that are not within your underwater line of sight. Omni simply allows you to see everything within its range.

In addition to having many layers of intelligence, there are several layers of counter-intelligence. They are: stealth, cloaking, and jamming. Stealth counteracts radar and sonar, allowing your units to stay hidden under the Fog of War. Cloaking on the other hand, hides units from direct sight, forcing your opponent to use radar or sonar to spot them. Jamming doesn't actually hide intelligence, but fakes it instead – a unit with radar jamming will produce several false radar blips that confuse the enemy and, perhaps more importantly, trick the enemy's defenses into firing at a non-existant unit.

Continuing Supreme Commander's usage of realism, GPG have incorporated real 3D Newtonian physics into the game, which allows for some interesting – and sometimes hilarious – gameplay. In Supreme Commander, any projectile can collide with any (enemy) unit, and not just the one it was aimed at like in many other RTS games. For example, it is entirely possible for aircraft to get hit accidentally by artillery firing into the air, or even for nuclear missiles to get intercepted by aircraft so that it doesn't destroy your base! Also, the realistic simulation allows for more intuitive combat. For example, artillery can hide at the bottom of a mountain and shoot onto a plateau while being relatively safe from attack from above. Similarly, building structures behind hills and mountains can protect them from long-range artillery.

Forged Alliance

While not changing any major game mechanics, Supreme Commander's first expansion pack – Forged Alliance – was very warmly received by the fans. It improved visuals, made units more responsive, fixed some major imbalances, added an extra faction, made existing factions more diverse and generally improved the game all-round. To make sure they did things right, GPG held a closed beta for many of the top players to balance the game, and then an open beta later on for the rest of the players to join in.

Conclusion

Like Total Annihilation, Supreme Commander is a one-of-a-kind RTS. Many hardcore RTS players are scared off by its massive scale, and unorthodox feeling. But, at its heart, Supreme Commander has all the same gameplay elements that traditional RTS games have – it just takes them all up a notch, allowing players to think and act at a higher level.
Command and Conquer 3: Tiberium Wars

**Developer:** EA Los Angeles (C&C3 and Kane's Wrath), BreakAway Games (Kane's Wrath)

**Publisher:** Electronic Arts

**Release Date (C&C3):** March 28, 2007

**Release Date (Kane's Wrath):** March 24, 2008

With the success of Battle for Middle Earth and Battle for Middle Earth II, Electronic Arts Los Angeles (EALA) decided it was a fitting time to return to Command and Conquer's original Tiberium universe. At E3 2006, EALA Executive Producer Mike Verdu revealed that production of Command and Conquer 3: Tiberium Wars was underway. Like Battle for Middle Earth II before it, the game was being developed for both the PC and Xbox 360. It had been almost seven years since Tiberian Sun was released. For many fans, the long wait was over.

The game’s overall purpose was to reintroduce players to the world of Command and Conquer. Many long-time fans of the series felt disappointed by how Generals and Zero Hour eschewed a serious story and wanted a new C&C game more like the "classic" C&C games. To that end, C&C3's story returns to the classic struggle between the Global Defense Initiative (GDI) and the Brotherhood of Nod, but added a new wrinkle by introducing an alien faction known as the Scrin. The story begins during the year 2047 when Earth is divided into three separate zones. The GDI holds the Blue Zones, which contain the world’s major populations, while the Brotherhood of Nod holds the Yellow Zones, which contain most of the world’s third world countries. The third area, the hellish Red Zones are areas heavily infested with Tiberium, making them inhospitable to humans, but quite comfortable to the Scrin.

The EALA development team also reintroduced many of the classic C&C features and modernized them. For example, the classic C&C side bar interface was revived, as were Mobile Construction Vehicles. EALA also reinstated the resource system seen in Tiberian Sun, which consists of green Tiberium and the more valuable blue Tiberium. Many of the iconic units, structures, and weapons that were used during Tiberium Dawn (the unofficial name for the original Command and Conquer) would also making a comeback, including units such as Mammoth Tanks, Flame Tanks, Orca aircraft, Stealth Tanks, commandos, GDI's Ion Cannon superweapon and Nod's Nuclear Missile. EALA also created many new units for both the GDI and Nod, including the Firehawk fighter-bomber, Zone Trooper heavy infantry, Avatar War Mechs, Venom patrol craft, and Vertigo stealth bombers. The introduction of the alien faction also brought in many new units which had no precedent in any C&C game. Some of the most notable ones were Annihilator Tripods, Devastator Warships, and Planetary Assault Carriers.

EALA also met another desire of the fans and reintroduced live-action cinematic movies for the single-player mission briefings. The most popular actor featured in the live-action cinematics was Joe Kucan, reprising his role as Kane, the leader of the Brotherhood of Nod. Several other notable actors, most of them professional ones, also made an appearance in the live-action cinematic as well, including Michael Ironside, Billy Dee Williams ("Lando Calrissian"), Grace Park from Battlestar Galactica, Josh Holloway from Lost, and Tricia Helfer also of Battlestar Galactica fame.
Although billed as a "fast, fluid, and fun" game, Tiberium Wars did not turn exactly as EA expected. Instead, the game's multiplayer gameplay became dominated by spam-based strategies (involving the use of massive numbers of units). For example, in version 1.00 the game's strategy revolved around spamming Nod’s Scorpion Tanks or trying to survive that spam (depending on which player you were). The tank's speed and firepower made it lethal in large numbers. When EALA released the second balance patch many players simply switched from spamming one type of unit to another, always with the goal of overwhelming their opponent with both speed and firepower. EA altered the balance several times, but ultimately some fast and powerful unit dominated the game. It soon became evident that the underlying problem was not the units themselves, but the runaway economic system the game employed. Eventually EA made changes to the economic system to curtail these strategies, but in one form or another, the game largely remains centered around quickly producing large numbers of units and overwhelming one's opponent with sheer speed and firepower.

There were also other abusive tactics that were used in the game, including the use of Engineer/APC strategies used to capture either the enemy’s Construction Yard or Tiberium Refineries in order to shut off any of the enemy’s future production capabilities. Another absurd tactic used by players was "base creeping" by placing structures in a line and expanding one's ground control (building area) towards the enemy base. The base creeping player would then place tier three defenses outside his opponent's base and let them do the attacking, rather than building an army to accomplish that goal.

Since the launch of Tiberium Wars, many players complained that the multiplayer gameplay of Tiberium Wars was lacking depth due to the focus on spamming single units en masse. Another complaint raised by the multiplayer community charged EA with not taking effective actions against cheaters and disconnectors exploiting the C&C3 ladder system. Initially the C&C community took the initiative and helped alleviate the problem by compiling names of cheaters and sending them to EA. After EALA had established a firm policy against cheaters and disconnectors during the first ladder season, the responsibility of handling the community's bad apples slowly shifted from the community itself to EA's customer service, which was still aided by reports from community members.

**RTS as a Sport**

Aside from advertising the game as "fast, fluid, and fun," EA also promoted the idea of "RTS as a sport." The idea was nothing new, having been developed in Korea during the glory days of Starcraft's
reign, but C&C3 included built-in battlecast features designed to promote spectating and commentating activities within the community. The most visible presence of the "RTS as a sport" mentality would be reflected in "Battlecast Primetime," a short Internet show that premiered on August 1, 2006. Battlecast Primetime featured replays of some of the best matches played by the best players in the C&C 3 community and also provided EA a platform for showcasing their newest developments related to the C&C series.

Although the game was advertised as a next-generation competitive RTS, both the community and the developers agreed that the game needed improvement in many areas. Due to the game's fundamental gameplay deficiencies, the entire e-sports campaign surrounding C&C3 did not meet with the kind of success EA had hoped. But it was very clear, unlike with EA's previous C&C RTS titles, Generals and Zero Hour, that EA was committed to getting it right.

So in response to the many complaints raised by the community, during the premiere of Battlecast Primetime, EALA officially announced the development of C&C3’s expansion, Kane's Wrath. The developers stated that the purpose of the Kane's Wrath expansion would be twofold. First, it would fill in many ambiguous gaps in the story from the time of Tiberium Sun to the time of Tiberium Wars. Second, it would add some much needed depth and diversity to the game by introducing six new subfactions. The latter move was the same trick EA had used when developing Zero Hour, and EA had hoped to imitate that game's multiplayer success using the same strategy.

Kane’s Wrath

The campaign for Kane’s Wrath touches on events back in the history of the C&C series right from the start. It is perfect for those who are nostalgic for the older games in the series. Essentially, the campaign is timeline based, starting back during the Rise of the Brotherhood, to the supposed death of Kane and the resulting factions, and plays up into where Command and Conquer 3 was, and then further afterwards. During this whole campaign, units are "revived" from the older parts of the series for both Nod and GDI. And of course sub-factions for the three main warring factions are revealed and explained in the campaign.

As for gameplay, it has an older feel to it when a player begins the campaign, rushing you back into the past and setting you into the time of roughly after the first Command and Conquer and throughout Tiberian Sun. Live action cut-scenes are a huge dynamic of the campaign, keeping up with Command and Conquer 3. But for a seasoned gamer, the campaign provided little or no challenge.
Overall, the campaign is an enjoyable experience, but mainly for recreational gamers. If anything, it has added much suspense to the ongoing series, although the ending cliffhanger disappointed many.

Kane’s Wrath also introduced the "Global Conquest" mode, inspired by the "War of the Ring" mode in EA’s Battle for Middle Earth II, to the Tiberium universe. The idea of the mode is that you choose a faction, build up your army, and gain ground control in hopes of conquering the world. The player finds himself facing off against other AI generals with the same hopes of world domination and it gives the game variant a very Risk-like feel.

Gameplay

Overall, the game feels very smooth and its rich graphics, excellent unit response time, and unit "microability" make the game very fluid. The building production and "insta-build" scheme of Tiberium Wars and Kane's Wrath has received some criticism, but was included since it was such a distinct part of the early C&C games.

With the introduction of the new units and subfactions, Kane's Wrath really set out to solve many of the problems that plagued Tiberium Wars. In many cases it did just that. It added a lot more depth to a seemingly flat game that rewarded spam. Although it has taken forever to get to the current state of Kane's Wrath (patch 1.01), the game is finally beginning to emerge as one centered on macro and some fine-tuned micro.

The game rewards higher tiered units and, due to the less boom-oriented economy of the game, each unit has become much more important. The game itself plays like previous C&C games and features units that can gain veterancy once it kills enough enemy assets. Like Tiberium Wars, the game itself is all about ground control and gaining an economic advantage. It is important to scout your opponent so you can counter his moves appropriately, as the game features multiple counters to most units, which brought a Zero Hour-like feel to the game.

Sub Factions

A lot of thought went into the creation of the six new sub factions and many of them are based on references dating back to Tiberian Sun.

GDI's Steel Talons, as explained during the campaign, were a pre-Tiberium Wars battalion formed after Tiberian Sun. They stuck to the older technology like the Wolverines, Titans, and Behemoths, instead of advancing along with the GDI as a whole. Although they have been proven to be an underdog in the game, the Steel Talons has also become a fan favorite. GDI’s second sub faction,
ZOCOM (short for Zone Operations Command), was a breath of fresh air as it introduced a faction specializing in sonic weaponry, a technology which only played a minor role in Tiberium Wars. The faction stands alone among the GDI factions in terms of quality of Infantry and features Harvesters with rockets, which, unlike the puny machine gun of other GDI factions, finally provided GDI harvesters a reliable means of self-defense.

Nod's history was further developed in Kane’s Wrath and its first subfaction, the Marked of Kane, brought cyborgs back into the mix, and in a big way. The Marked of Kane excels in stealth combat and EMP abilities. It features supercharged particle beams and an elite infantry squad that is to be feared. Their elite "Enlightened Cyborg" infantry squads are comparable to GDI's Zone Troopers, and are armed with supercharged particle beams and an EMP attack that has an even bigger radius than that of the regular Awakened Cyborgs. Nod's second subfaction is the Black Hand. Considering some of the earlier issues with infantry spam in Tiberium Wars being overpowered and horribly annoying, this was a risky move. Luckily, in Kane's Wrath, with its additional units and the importance of working up the tech tree, lower tier spam isn't often rewarded. The Black Hand specialty is in Infantry and not much else, making it a very straightforward faction.

Since EALA was working with a new main faction in the C&C family, the Scrin sub factions had a lot of possibilities and fans could only guess what EALA would think up. Traveler 59 ("T-59") is an infantry and air-based subfaction which prides itself on faction-specific units and reminds players of the Yuri faction in Red Alert 2: Yuri's Revenge with its mind control ability. T-59 brings back everything from that game but the Grinder. Lastly, as Scrin was well known for its late game prowess due to its Tiberium field Growth Accelerators, Reaper 17 was introduced as the Tiberium faction. Reaper 17 is all about using Tiberium against your opponent and does so with some faction-specific units that deal massive damage and have helped make the faction one of the easiest factions to play. The Gun Walker is upgraded and renamed the "Shard Walker," while the Annihilator Tripod is upgraded to the "Reaper Tripod," which converts Tiberium into extra damage in the same way the Scrin's Devourer Tank can.

Kane's Wrath took into consideration all that was lacking in Tiberium Wars, introduced a more balanced economic system, and stressed faction differences with the six new subfactions. This forced players to work with their faction's strong points and exploit them to succeed, in much the same way Zero Hour did. But unlike Zero Hour, with its twelve factions, there is some hope for Kane's Wrath, with its six factions, to ultimately evolve into a balanced game.

**Patching and Balance**

The early version of Kane's Wrath (version 1.00) received a lot of well-deserved criticism for its lack of follow through and support by EALA. The game was derided for its technical problems such as desyncing problems, as well as the imbalance caused by Mechapede spam, a Scrin crawling unit that clearly was superior to all that stood in it’s way. It took the development team nearly four months to produce a playable and successful second patch for the game, which is the primary reason current low morale of the Kane's Wrath community.

EALA has also taken full responsibility for its actions (or lack thereof) with Kane's Wrath and EALA's general manager Mike Verdu wrote a personal letter to the community vowing that the situation would improve and shared some of his future plans. Since EA's takeover of Westwood, many C&C fans have been skeptical of EA's ability to produce a game that could live up to the fondly remembered name of Westwood Studios, but in his letter Verdu promised a brighter future for EA's RTS franchise and
acknowledged the importance of keeping the C&C franchise alive.

**Criticism and Player Responses**

Kane's Wrath is becoming well-known for its strides in economy management, without upsetting the classic rule of thumb for RTS players--that the player with bigger economy always wins. Kane's Wrath has been a pioneer in its ability to counter the "turtle" gamer. There are build orders that one can use to make a fast offensive push, nearly ignoring your own economy in order to take out your opponent's. That said, the game has become very two-faced for a few reasons. Firstly, this duality has made the game either very fast-paced, or very slow-paced. You could end up playing games where both players go for an economy boom by building early harvesters, or you could play a game where both players go for "all in" build orders. In effect, the game can easily boil down to a game of "build order poker," meaning one build order will always dominate another no matter how well you play.

Despite these problems, with the new patch Kane's Wrath has really worked towards breaking away from a lot of its criticism, especially complaints about the game being too linear, too fast, and revolving around unit spam. The early game has become very entertaining in the sense that you have the option to go for risky aggressive strategies and must be aware that your opponent can do the same. In the early game players sometimes sell their Construction Yard, quickly spam units, and rush their opponent in search of a quick win. This has become a very controversial issue in the new patch, as players are wondering how much of the game should be based on this "build order poker" and how much should be dependent on micromanagement.

Since Kane's Wrath was not developed entirely by EALA, but largely built by BreakAway Games, creator of numerous serious games, fans have been unsure how much criticism is due to EALA, and how much is due to BreakAway Games. In contrast to the well-received partnership between Ensemble Studios and Big Huge Games that was initiated to develop Age of Empires 3: The Asian Dynasties, the partnership between EALA and BreakAway Games has been used by critics to argue that EALA, despite its claims to the contrary, does not care about the C&C franchise enough to take care of its development "in house."

Love it or hate it, Kane's Wrath made further innovations in the C&C series by introducing new gameplay mechanics such as "epic units" into the franchise. These units are much like the "experimental units" of Supreme Commander, but not quite as powerful or expensive. Epic units brought a whole new dimension into the game and caught the eye of gamers across many genres. The prospect of building epic units gave a whole new definition to "teching up" and made players re-evaluate some of their prior playing styles, ultimately emphasizing the importance of working your way up the tech tree rather than spamming lower tier units, as in Tiberium Wars. Tiberium Wars and Kane's Wrath produced a lot of
firsts for the C&C franchise, made a strong impact on all C&C fans, and has given them an idea of what to expect from EA in the future.
Chapter 5: The Stuff of Dreams

“We are such stuff / As dreams are made on; and our little life / Is rounded with a sleep.”

William Shakespeare, The Tempest Act 4, scene 1

Epilogue: The Future of Real Time Strategy

Once upon a time, in an obscure and nearly forgotten era, games were built by small teams of creative entrepreneurs with a singular vision of their creation. A handful of individuals, and sometimes a single person, could bring that vision into being. But times have changed. There are no more programmer-designers, no more developer-publishers, and no more garage-built games. Generalist designers gave way to specialist employees. Independent developers succumbed to the immense financial dominance of large publishers. And in the process, the singular spirit of the garage-built game was lost.

Perhaps it is solace for the nostalgic ones among us that garage-built games were invariably awful. But if so, it is a small solace, for such retrospective fans do not bemoan the inevitable eclipse of inferior games, but the ideal they embodied. They feel that, in the genre's unstoppable march towards immense complexity, ultra-realistic graphics, and increased specialization, something was lost that should have been preserved. So when modern games fail to preserve that peculiar essence which made their cherished childhood games so memorable they are forced, in the end, to preserve it only in memory.

But the history of the RTS genre is replete with cases of borrowed ideas. If an idea can be taken from an old game and incorporated into a new one, can the same be done for the spirit of the great RTS games of the past? Probably not. This is because not only the games, but also the players themselves, have changed. They have evolved along with the genre they enjoy. The RTS fan of today is more competitive, more fastidious, and more devoted to his chosen franchises. As a result, creating RTS games is more demanding and more expensive than ever before. Both the genre and its fans have matured. The question on every RTS developer's mind is simply, "Where do we go from here?"

God of the Box

To some, the answer to that question is a single phrase: Massively Multiplayer Online RTS, or MMORTS. The champions of this new type of game are not the nostalgic ones mentioned before. Indeed, the MMORTS is the antithesis of the classical RTS. Even in theory, a MMORTS would be unprecedentedly complicated, demand powerful computers, and probably require specialization of player roles within the game universe. But the idea will not seem to go away. The possibility of fighting battles across entire planets—or even between planets—with thousands of fellow RTS fans across the globe has enormous appeal to many people. RTS games have always been limited by fixed map sizes and players have always been asked to play "inside the box". But some are getting tired of playing in the same old box and want to expand. Rumors of MMORTS games in development circulate every now and then. Some attempts at creating one have already failed due to cost barriers and the limits of current technology, but many continue to believe that PCs will ultimately become capable of simulating entire wars in real time, instead of just individual battles.

The objection voiced by opponents of the MMORTS is that it is not scale that matters, but the feeling
of control one experiences while playing the game. If you have a massive army at your command, does that still equate to control when the limitless game universe is filled with equally large armies commanded by a multitude of allies and enemies? Would you feel more powerful in such a situation, or more feeble? Would your actions be more significant, or more invisible? Would whatever feeling of control you experienced be nothing more than an illusion?

Indeed, to the "old school" RTS fans, the boundaries of the map and the limited scale of the game are necessary. To them, it does not matter if you have to play within a box, nor does it matter what size the box is, as long as you can dominate your opponent and control the whole box.

**Rise of the RTT**

Although the genre has matured, that does not mean it has stagnated. New and ever-inventive modifications are continually being made to the RTS formula. Most modifications are minor and don't affect the genre in the long term, but some do. One such modification even developed into its own sub-genre, called the "real time tactical" genre. In one respect, RTT games are inherently simpler than RTS games, as players are freed from all economic considerations and are typically concerned only with the tactical behavior of their units. Perhaps this development is a sign of things to come. If the RTS genre has no more surprises in store, maybe its inevitable fate is to branch off from its traditional core and grow into new genres and sub-genres. The abundant specialization of the RTS genre today may give birth to the genres of tomorrow.

**There and Back Again**

Perhaps this specialization will once again present the opportunity of creating simple and accessible strategy games for an entirely new audience, just like Dune 2 and its immediate descendants did for the RTS genre. And perhaps this simplicity will finally allow strategy games to find a comfortable place in the console market. Although some early games, such as the original Command and Conquer, C&C: Red Alert, and Starcraft were ported over to consoles, the results were dismal. Even at such an early stage of evolution, the RTS genre had already become too complicated for an interface as simplistic as a console controller. Following these repeated failures, the idea of porting a RTS to a console was unquestionably accepted as absurd. But then EA threw caution to the wind and created an Xbox 360 version of The Lord of the Rings: The Battle for Middle Earth II.

To everyone's surprise, the game was not a flop. While it was not a top selling game on the 360, its
control scheme did work—though not as efficiently as a mouse and keyboard—proving that there might yet be a future for strategy games on consoles. This belief was further reinforced after EA released Command and Conquer 3 and its expansion, Kane's Wrath, on the 360 and achieved a similar degree of success. Now, not only does EA plan to release its next C&C game, Red Alert 3, on the 360, but its success in the console market has convinced Bungie and Ensemble Studios to develop the first console-only RTS, Halo Wars.

For years, it was an unspoken irony that a genre born on consoles had quickly evolved into an exclusive occupant of the PC. But, despite the irony, this evolution was not accidental. The inescapable truth is that, ultimately, games like The Battle for Middle Earth II are simply too complicated to thrive on consoles with simple control schemes. In order to truly penetrate the console market, developers and publishers may be forced to rethink their assumptions about the nature of RTS games.

**Beyond War**

The questions that must eventually be answered seem remarkably abstract. Does depth require complexity? Does realism add depth, or take it away? Do the physical aspects of the game, such as dexterity and reflexes, matter as much as the psychological parts, such as planning and pattern recognition? What are the boundaries of the genre? Should they be crossed?

To answer these questions, perhaps it is best to look for inspiration outside the traditional RTS domain. In 2001, Nintendo released a quirky game called Pikmin for the Nintendo Gamecube. Although it incorporated aspects of both strategy and tactics, most people do not consider it a RTS. This is because Pikmin is not about war. It has no guns, swords, or lasers. There are no armies, no explosions, and no invasions. Instead, the game focuses on growing and controlling little creatures called Pikmin, who can perform duties ranging from growing other Pikmin to defeating enemies. Every core element of the RTS genre is present. Like every RTS game, Pikmin, at its core, is a game about control.

So why must every RTS be about war? Why is it impossible to have a RTS game about colorful little creatures fighting for survival? Why is every hero in RTS games a warrior? Why is it impossible to have a RTS game where the heroes are CEOs attempting to defeat rival corporations by "economic warfare"? Why do the units have to be men, aircraft, and vehicles? Why is it impossible to have a RTS game where the units are bacteria trying to defeat a human's immune system and reproduce themselves? Is it possible that RTS developers have been narrow-minded for the past decade and a half? Maybe the problem is not that the RTS genre no longer has any innovations left, but that the genre has been constrained by the realistic limits imposed by warfare all along. For a genre about control, the possibilities should be limitless.

**New Horizons**

No one knows for sure which direction the RTS genre will go, but the past sixteen years have seen tremendous growth in its popularity and diversity. What began as a few simple computer programs
inspired by old board games has become an international gaming sensation, with some RTS
tournaments having prizes of up to $100,000. As the simple beginnings of the real time strategy genre
have given way to the complexities of modern RTS games, the players too have evolved. The
expectations for RTS games are now higher than they have ever been. No one knows for sure whether
the RTS genre will experience a renaissance or simply atrophy and collapse, but one thing is certain.
Time will tell. Sooner or later, time will tell.
Appendix

This appendix contains information about various games—not necessarily RTS games—and is presented here as a supplement to the information on the previous pages.

**World in Conflict**

**Developer:** Massive Entertainment  
**Publisher:** Sierra Entertainment  
**Release Date:** September 18, 2007

**Introduction**

What exactly would have happened if the Soviet Union had attacked the United States in the fall of 1989? At that time, most of the world viewed the collapsing Soviet Union with trepidation; wondering if the dying beast would lash out in an attempt to save itself. World in Conflict answers just such a question.

**The Campaign: World War III**

The World in Conflict campaign is told from the point of view of Lieutenant Parker (voiced by Alec Baldwin) a young battle hardened field commander in the US Army. The story begins when a secret Soviet invasion force lands in Seattle, Washington. The player is forced to fight off a massive but surprisingly uncoordinated Soviet assault through Washington state until the campaign goes back in time to France, Norway, and then back to Seattle for the final battle.

Each mission takes about twenty minutes and ends with a penultimate clash. While the AI is not smart, it provides enough of a challenge to be fun and keeping you involved. The main reason to play the campaign are the cut scenes
which intersperse awesome CG action with beautiful watercolor paintings.

**Gameplay: A New Approach**

World in Conflict is quite different from a run of the mill strategy game. There are three prevalent factions in World in Conflict: The United States, The Soviet Union, and NATO (The North Atlantic Treaty Organization). Unlike other games however, the factions are map sensitive. For example, you can't pit the US against NATO. Within these factions, there are four different roles a player may play during a battle:

- **Air:** Consisting of Helicopters which provide Close Air Support for the other roles.
- **Armor:** Consisting of Tanks and APCs which bear the brunt of an assault.
- **Infantry:** Consisting of different Infantry units who provide ground control.
- **Support:** Consisting of Artillery, Anti-Air, and Repair Vehicles to support the other roles.

Within each role, units such as Infantry, Artillery, and Helicopters cost different amounts. For instance, a Tank costs quite a bit more for an Air player than it would for an Armour player. While the units for different factions look unique, they all give and take the same amount of damage. An Anti-Air battery for the Soviets will do the same damage as a NATO battery. World in Conflict also employs a strict counter system. Tanks can dish out quite a bit of punishment to all ground units but are helpless in the face of Heavy Helicopters.

Within the game, each faction has their choice of special powers called Tactical Aids (TAs). They are purchased with Tactical Aid points which are earned by capturing Command Points, repairing vehicles, and (of course) killing enemies. TAs come in three flavors, Support, Discriminate and Indiscriminate. Support Powers are non destructive and include mobile bridges, and paratroopers. Discriminate strikes such as Tank Busters and Laser Guided Bombs target very small areas with great precision. Indiscriminate strikes like Carpet Bombing and Tactical Nukes are eye candy and have huge area of effects.

World in Conflict sports three different Gameplay Modes. Domination is the most basic mode. The team which captures and holds the most critical points (called Command Points) on the map wins. The second mode, Assault, features one side attacking an entrenched defender. At the end of the round the teams switch sides so the attackers defend and the defenders attack. Whoever is the most successful is the winner. The third mode, Tug-of-War, features a real time front between the two opposing armies. Whichever team pushes the the front back the furthest is the winner.
The Interface

Unlike most RTS games of its day, World in Conflict sports a new and improved interface. Gone are the command bar and fixed camera. World in Conflict allows the player to roam around the map in three dimensions. You can watch any and all battles from every angle, be it down in the trenches with the Infantry or high in the sky with the Helicopters.

Along with its shiny new look, World in Conflict got a new multiplayer system. Instead of the standard player hosted games, matches were featured on server in a FPS like manner. Each server held up to 16 players and each player was free to come and go as they pleased. World in Conflicts clan challenge system allowed clans to compete without the hassle of setting up a match. Instead, challenges were only a click away.


Despite being a fun and addictive game, World in Conflict ups the ante by being perhaps the most visually stunning strategy game ever created. Each unit and building rendered with the type of detail reserved for FPS games. The interface allows you to swoop down and view gameplay at ground level. You can literally be right next to a Tiger tank as it shells unlucky infantry or fly wingman with an Apache gunship as it guns down on helpless transport trucks. Have you ever wondered what a nuclear blast is like up close? World in Conflict allows you to explore every detail of a mushroom cloud and even go inside it.
Lord of the Rings Games: A Franchise Perspective

After the release of the Oscar-winning movies, the Lord of the Rings (LOTR) rapidly became an object of interest for avid movie-goers around the world. The enormous fan following of the Lord of the Rings universe allowed the franchise to pave its way into the world of gaming. Gamers were captivated by several of Electronic Arts’ productions, including Lord of the Rings: The Third Age, and the action-packed adventure games of all three movies: The Fellowship of the Ring, The Two Towers and the Return of the King.

However, the first-person style of these early Lord of the Rings video games did not possess the control and feel of a true Lord of the Rings battle. In games like Return of the King, there were often too few enemy units at once, and fighting them off felt more like shallow entertainment than a difficult challenge. Seeking to realize the true potential of a tactically deep LOTR game, Sierra Entertainment and Liquid Entertainment produced the first Real Time Strategy game for the popular series in November of 2003: War of the Ring (WOTR).

War of the Ring dared not differ too greatly from other RTS games, as far as the fundamental gameplay was concerned. It relied mainly on its Lord of the Rings theme to sell and focused heavily on re-enacting the adventures from Lord of the Rings. The resource system was derived from the traditional RTS scheme—common builders were the base unit and were responsible for carrying out the simple functions associated with maintaining a healthy economy and strong army. Several were required to gather two types of resources—ore and food—which were obtainable at natural locations throughout the map, on which the correct building needed to be built.

Though the game stuck with the economy system everyone was used to, its battles lacked something and felt unfulfilling. Each unit was produced individually, taking away from the “massed unit” feeling of battle that a LOTR RTS should have. In addition, several units were incorrect or made up, often resulting in the player asking, “What is this?” Among these were Saleme, a hero for the evil side who appeared in neither books nor the movies. The evil faction also consisted of Uruk-Hai Archers, even
though Tolkien’s monsters from Isengard bore crossbows. As a result, the game met with criticism from Lord of the Rings aficionados.

However, the hero element of the game was interesting because heroes did not cost money, but instead cost “Ring Points,” which were spheres earned in battle. As more heroes were purchased, the remaining ones would cost more points, which encouraged players to choose their own path based on their strategy.

Most RTS games have some form of tactical advantages, or bonuses, that boost certain aspects of your military or economy. WOTR contained a relatively simple bonus mechanism in which capturing key landmarks around the map gave certain units a bonus. This was a major step in evolving the feeling of a true battle for a Lord of the Rings game, as fights usually occurred around a sought-after territorial icon and not randomly or at scripted locations.

However, War of the Ring suffered from mediocrity. Its gameplay was largely derivative (especially from Blizzard's WarCraft III) and relatively monotonous. It was a first step, albeit an uneasy one, into new territory for the Lord of the Rings franchise. But, lacking total support from the Lord of the Rings fanbase, and failing to garner interest from RTS fans, the game was condemned to be nothing more than an interesting footnote in the history of real time strategy.

So, striving to launch the Lord of the Rings franchise into the spotlight of the gaming industry, Electronic Arts took the opportunity to spend more money and more time on a game that captured the accuracy of the story and the feeling of an epic battle. Released in December of 2004, The Lord of the Rings: The Battle for Middle Earth (BFME) was the first in-depth RTS game for the popular book and movie trilogy. In the first installment of the BFME duo, EA took a revolutionary turn in the world of real time online gaming and altered several traditional styles of previous similar games, producing several changes to the style of play.

The resources, first of all, were designed to be much easier to manage. Attempting a new scheme, EA implemented the production of resources from a building and not from a pre-placed natural resource such as ore, wood, food, and other materials common in strategy games. This meant that there was only one type of resource obtained, making buying units, buildings, and upgrades relatively simple. There was simply no need to focus on balancing three or four means of income. It was an accessible system, with both fans and critics, but the simplicity of the new resource system eliminated a major obstacle that had been preventing many from entering the RTS genre for years.

With the user-friendly resource scheme in place, gamers were provided with more opportunity to get the feel for their strategy, something EA was still tweaking at this point. One of the main differences
that BFME introduced was the build plot system. Although easy to manage, these confined circles limited the amount of strategy involved in building one's base. Many long time RTS fans found the system boring and repetitive. While their criticisms were valid, RTS games always involve a certain amount of restrictions balanced against a certain amount of freedoms, and the restrictions of BFME’s build system did create a very unique kind of gameplay that many found fresh and enjoyable.

Electronic Arts clearly spent most of their production time on the battle scheme of their first LOTR game. The introduction of battalions immediately boosted the notion that gamers would be fighting true battles instead of mere skirmishes. This helped showcase the game with more emphasis on the “big picture” of war and how strategic decisions influence it. This change was also resisted by many fans of EA’s previous RTS games, although the Lord of the Rings fan base applauded the decision.

Even after an extremely successful introduction of Lord of the Rings into the RTS gaming world, EA did not show signs of slowing down at all as barely a year passed before the next big product, The Battle for Middle Earth 2 (BFME2), was announced. The wheels were turning at EA, and with the success of the first installment, a sequel came as no surprise to those who fully enjoyed the epic battles in the first BFME game. Although the BFME was such a hit, EA had tons of room to work with to enhance their profit as well as the exciting gaming world based on the award-winning trilogy.

The first noticeable changes in the sequel were the added factions. The armies of Rohan and Gondor were combined and labeled “The Men of the West.” Striving to focus on battles spread out over the whole of Middle-Earth and not simply the ones in theaters, the Goblins (also known as Corrupted Wild) and Dwarves were added to the scene, allowing more options for both single player and online modes. In fact, BFME2 was nothing short of a “Biggie Size” of its prequel. Larger battalion sizes (most had 10-15 instead of 5-10), more factions to choose from, and even more game modes helped form a large community, which thus meant large profits for Electronic Arts.

With an effort to keep all gamers happy, several new features were implemented including the "Create a Hero" feature, an option that offered the player many options to build a unique hero from scratch. Weapons, powers, and appearance could all be assigned to the unit and taken in game to clash with other custom heroes from around the globe.

Also new to BFME2 was the War of the Ring mode, a style of play much like a board game in which strategic resource and unit decisions took place before the real time battle commenced. This mode of play was not new to the RTS genre—Dune 2 even had a very primitive form of it—but for many years there were almost no RTS games that featured turn-based modes. Along with the Total War series, BFME2 revived and modernized this old style of play for an entirely new audience.
Perhaps the biggest difference in the sequel was the removal of castles and build plots. A “build anywhere” build system took its place, offering more flexibility for expansion and unit production. This new style of play greatly increased the speed of skirmishes and multiplayer games, as every cheap melee unit had extremely high damage output against buildings and the only protection to surrounding buildings was a single arrow tower on the fortress. This speedy style of play, mainly in version 1.04, came with constant raiding, harassing, and made up the “hit-and-run” methods that shortened some games to less than five minutes.

Although requiring quick skills on the keyboard, the early months of BFME2 brought several imbalances and a major change in gameplay was sought after by several members of the community. “I was getting bored of the ‘rush the buildings’ every game,” said GameReplays BFME2 Game Administrator, Ranger08. Headed by long time real time strategy community leader and expert gamer, Maddox, GameReplays.org took on the challenge of testing and writing a brand new balance patch, consisting of over 100 balance changes.

Some of the game’s best players spent months playing together and sharing replays, strategies and discussing the patch in order to perfect the new patch. With their powerful insight, an improved update to the game was complete and BFME2 evolved out of its strategically shallow shell. “[The new patch changes] are definitely a step in the right direction. Now unit mixing is recommended to survive, and things like siege and inn units are actually used,” Ranger said.

Ultimately, BFME2 turned out to be very different from both its predecessors. This difference in gameplay mirrored a difference in opinion regarding which LOTR game is superior. To this day, the BFME1 community is distinct and quite different from the BFME2 community. Although the rivalry between these communities has never approached the level of rivalry between the Starcraft and Total Annihilation communities, it is nonetheless interesting that each community considers the vast differences between BFME and BFME2 as reasons for their preferred game's superiority.

However, EA is not content to dwell on the past. With the recent release of The Battle for Middle Earth 2: The Rise of the Witchking, the Lord of the Rings franchise is showing no signs of slowing down as it continues to attract fans of Tolkien’s popular fantasy world. EA is making it possible to visit places in Middle Earth never experienced in the movies and relive the epic battles that took place in the legendary novels. The Lord of the Rings universe has come a long way from its first step into the RTS genre with War of the Ring. It seems that Lord of the Rings RTS games, riding the wave of success created by Peter Jackson's movies, will be a continual presence in the genre for some time to come.
Timeline of the RTS Genre

3000 BC - 500 BC
Invention of chess.

Early 1950s
The invention of Risk begins to popularize strategy board games.

1983
Stonkers is released.

1984
The Ancient Art of War is released.

June 5, 1989
Populous, a god game with some RTS elements, is released by Peter Molyneux’s Bullfrog Productions.

January 11, 1990
Herzog Zwei, the closest thing to a true RTS yet, is released.

1991
Mega-Lo-Mania is released.

January 1, 1992
A small company called Westwood Studios, operating out of Las Vegas, Nevada releases Dune 2, which defines the real time strategy genre.

January 15, 1994
Blizzard Entertainment releases Warcraft and the first great developer rivalry, one between Blizzard and Westwood, is born.

August 31, 1995
Command and Conquer is released and, along with Warcraft, popularizes the previously niche RTS genre.

December 5, 1995
Blizzard releases the second game in the Warcraft series, Warcraft II: Tides of Darkness.

April 30, 1996
On the exact same day, Blizzard and Westwood simultaneously define the concept of an expansion pack, with the releases of Warcraft II: Beyond the Dark Portal, and Command and Conquer: The Covert Operations.

October 31, 1996
Westwood releases the critically acclaimed Command and Conquer: Red Alert, a prequel to the original Command and Conquer.

March 31, 1997
Westwood continues its tradition of the expansion pack with Command and Conquer: Red Alert: Counterstrike, which added much more content than Westwood’s previous expansion.

September 30, 1997

October 25, 1997
Cavedog Entertainment, a new company started by game designer Chris Taylor, releases its revolutionary Total Annihilation. The game features the first physics system in any RTS and is the first RTS game to use true 3D graphics.
October 26, 1997  The day after the release of Total Annihilation, Ensemble Studios releases Age of Empires, which, like Total Annihilation, takes the scope and scale of RTS games to a new level.

March 20, 1998  Cavedog releases its first expansion, Total Annihilation: The Core Contingency. The expansion adds a great deal of new units and new content to the original game.

April 1, 1998  Blizzard Studios releases its seminal and genre-altering masterpiece: Starcraft.

June 30, 1998  Cavedog releases Total Annihilation: Battle Tactics, partly in an attempt to keep fans interested in Total Annihilation after the release of Starcraft.

November 30, 1998  Blizzard Studios releases its first expansion pack, Starcraft: Brood War, which would go on to be the game of choice for the first major competitive multiplayer RTS community ever.

June 25, 1999  At the height of the Cavedog-Blizzard rivalry, Cavedog attempts to truly shake things up with Total Annihilation: Kingdom. Unfortunately for Cavedog, the game’s fantasy setting fails to interest its sci-fi biased Total Annihilation fans and the game is a very expensive flop.

August 27, 1999  Westwood responds to the multiplayer phenomenons of Starcraft and Total Annihilation with Command and Conquer: Tiberian Sun. Instead of attempting to compete with Blizzard or Cavedog in terms of multiplayer dominance, Westwood instead used Tiberian Sun to create the most immersive and compelling singleplayer experience yet seen in a RTS.

November 15, 1999  The new developer Relic releases its epic space drama, Homeworld.

March 7, 2000  Westwood releases Tiberian Sun: Firestorm, which furthers the story of Tiberian Sun.

October 21, 2000  Westwood releases Command and Conquer: Red Alert 2, which, in stark contrast to Tiberian Sun, features a laughable singleplayer component but an incredibly fast-paced, critically acclaimed multiplayer mode.
June 12, 2001  Westwood's 3D remake of the Dune 2, *Emperor: Battle for Dune* is released. While the game is a moderate success and its 3D engine succeeds, signs of decline can be seen in Westwood as it becomes clear that the company is no longer the genre leader that it once was.

August 14, 2001  Influenced by *Homeworld*, developer Fire:Pitch releases *Conquest: Frontier Wars*, only to have the game doomed to obscurity.

August 24, 2001  Creative Assembly separates strategy from tactics in its *Shogun: Total War*.

October 10, 2001  Westwood follows up on the success of *Red Alert 2* with *Command and Conquer: Red Alert 2: Yuri's Revenge*, which, although an excellent addition to *Red Alert 2*, is plagued by problems of imbalance and cheating.

October 21, 2001  Firefly Studios releases the first medieval RTS: *Stronghold*, which was not highly successful due to its niche nature and increasingly heavy competition between RTS developers.

November 13, 2001  Stainless Steel Studios releases *Empire Earth*, a game seen by many as unoriginal and derivative of the *Age of Empires* series.

July 2, 2002  Blizzard melds RTS gameplay with role-playing elements in *WarCraft III*, which goes on to become one of the most successful and competitive RTS games to date.

August 10, 2002  Creative perfects its unique RTS formula with *Medieval: Total War*.

September 23, 2002  Firefly expands its *Stronghold* franchise with *Stronghold: Crusader*, which, just like its predecessor, was a niche game that established something of a cult following.

February 10, 2003  EA, after buying and assimilating Westwood Studios, releases *Command and Conquer: Generals*, a highly controversial and very different kind of *Command and Conquer* game.

May 20, 2003  Big Huge Games, a rookie RTS developer, releases *Rise of Nations*, a large-scale RTS game that incorporates many concepts from turn-based strategy games.
July 1, 2003  Blizzard releases its expansion WarCraft III: The Frozen Throne, which decreases the importance of creeping.

September 16, 2003  Following up on the success of the first Homeworld, Relic releases Homeworld 2, which features the same basic gameplay as Homeworld, but with improved graphics and a better interface.

September 22, 2003  EA follows up on its success with Generals and releases the expansion Command and Conquer Generals: Zero Hour.

April 27, 2004  Big Huge Games releases the expansion pack to Rise of Nations, calling it: Thrones and Patriots.

September 26, 2004  Relic goes from the cold and solemn vacuum of outer space to the visceral and bloody battlefields of the Warhammer 40,000 universe with Dawn of War.

September 22, 2004  Creative brings its blend of strategy and tactics to the masses with its popular Rome: Total War.

December 6, 2004  EA lets its Command and Conquer franchise rest and releases The Lord of the Rings: The Battle for Middle Earth, a game both loved and criticized by many.

March 15, 2005  Eugen Systems releases its intense modern war-based RTS, Act of War, but fails to advertise it successfully in the US and as a result the game is largely unknown in America.

September 21, 2005  Relic releases the expansion pack Dawn of War: Winter Assault, featuring a new teching system modified from its predecessor.

September 27, 2005  Creative releases its first Total War expansion, Rome: Total War: Barbarian Invasion.

October 19, 2005  Ensemble releases the stunningly realistic Age of Empires III.

February 16, 2006  New developer Petroglyph Studios, largely composed of old Westwood employees, releases Star Wars: Empire at War, which gains approval from the Star Wars fans but disregard from RTS fans.

March 2, 2006  EA expands its Battle for Middle Earth franchise, as well as its RTS catalogue, with the release of The Lord of the Rings: The Battle for Middle Earth II.

May 5, 2006  Big Huge Games applies the basic gameplay of Rise of Nations to Rise of Nations: Rise of Legends, but adds a fantasy twist.
May 31, 2006 — Eugen creates an expansion pack for *Act of War*, calling it *Act of War: High Treason*. Once again, the company fails to successfully advertise the game in American markets, causing the game's potential to go unfulfilled.

June 15, 2006 — Creative releases *Rome: Total War: Alexander* almost two years after *Rome* was released.

September 12, 2006 — Relic releases their World War II masterpiece, *Company of Heroes*, a game which many herald as the most polished RTS since *Starcraft*.

October 5, 2006 — Relic releases the second expansion to *Dawn of War*, called *Dark Crusade*.

October 17, 2006 — A year after the release of *Age of Empires III*, Ensemble releases its expansion: *The War Chiefs*.

November 26, 2006 — EA releases the expansion to *Battle for Middle Earth 2*, calling it *Rise of the Witch King*.

February 16, 2007 — Gas Powered Games, a new developer led by *Total Annihilation* creator Chris Taylor, develops the long awaited "spiritual successor" to TA, *Supreme Commander*.

March 28, 2007 — EA releases *Command and Conquer 3: Tiberium Wars* and fans respond with mixed opinions.

September 15, 2007 — Massive Entertainment releases *World in Conflict*, which quickly becomes the most successful RTT game to date.

September 24, 2007 — Relic releases *Company of Heroes: Opposing Fronts*, the follow up to their previous RTS.

October 3, 2007 — Big Huge Games and Ensemble Studios partner to develop the second expansion for *Age of Empires II*, *The Asian Dynasties*.

November 6, 2007 — Gas Powered Games quickly follows up on *Supreme Commander* by releasing an expansion pack, *Forged Alliance*.

November 30, 2007 — New developer Vertex4 releases *SunAge*, a sprite-based RTS with 3D graphics, to dissatisfied reviews.

December 10, 2007 — Petroglyph releases its second game, *Universe at War*, a cleverly designed RTS that ultimately failed due to the poor online service provided by Microsoft's Games for Windows Live.

March 4, 2008 — Relic releases the fourth expansion in their *Dawn of War* series, called *Dawn of War: Sculstorn*.

March 24, 2008 — EA releases an expansion pack to *Command and Conquer 3*, calling it * Kane's Wrath*.
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