THE HISTORY OF PIXAR

"From the beginning, I kept saying it's not the technology that's going to entertain audiences, it's the story. When you go and see a really great live-action film, you don't walk out and say 'that new Panavision camera was staggering, it made the film so good'. The computer is a tool, and it's in the service of the story."
—John Lasseter, co-founder of Pixar

Pixar Animation Studios, a wholly-owned subsidiary of The Walt Disney Company, is an Academy Award®-winning film studio with world-renowned technical, creative and production capabilities in the art of computer animation and creators of some of the most successful and beloved animated films of all time.

History

Pixar's climb to the pinnacle of computer animation success was a quick one, and the company continues to push the envelope in its art and technology inspired movie-making endeavors.

1979-85: Origins

Pixar's tenuous evolution began in the 1970s when millionaire Alexander Schare, then president of the New York Institute of Technology (NYIT), was looking for someone to create an animated film from a sound recording of Tubby the Tuba. Enter a computer scientist named Ed Catmull with a Ph.D. from the University of Utah, who along with several others set up house (at Schare's expense) at NYIT's Long Island campus to work with computer graphics. Though Tubby the Tuba was never made, the team successfully produced video artwork. When creative mogul George Lucas proposed moving the team to the West Coast in 1979 as part of Lucasfilm Ltd., the breeding ground of the original Star Wars trilogy, Catmull and his colleagues agreed.

Over the next few years, Catmull and his ensemble created innovative graphics programs and equipment for Lucas, including an imaging computer called the 'Pixar.' The Pixar was then used to develop high-tech graphics and animation sequences for Lucasfilm projects. Unlike other computers, Pixar's software constructed high-resolution, three-dimensional color images of virtually anything, from buildings and cars to tornadoes and aliens. Remarkably, Pixar was also capable of helping medical professionals at Johns Hopkins diagnose diseases from 3D renderings of CAT-scans and x-rays; giving weather technicians new images from satellites; and even helping prospectors locate oil from enhanced seismic readings--all at a speed some 200 times faster than previous computer programs.

In 1984, John Lasseter, who had met Catmull at a computer graphics conference and was employed by Walt Disney Studios, visited Lucasfilm for a month-long stint. Lasseter, who had graduated from the California Institute of the Arts where he had won two Student Academy Awards for animated film, decided to stay. Meanwhile, after spinning off a joint venture called Droid Works, George Lucas started shopping around Pixar with hopes of a second spinoff. Pixar caught the interest of several companies, including EDS, then a division of General Motors, Philips N.V., and computer whiz-kid Steve Jobs, cofounder and chairman of Apple Computer Inc.
Unable to convince Apple's board of directors to invest in or purchase the fledgling graphics company, Jobs reluctantly abandoned his hopes for Pixar.

Yet circumstances changed drastically for Jobs in 1985. Stripped of his responsibilities and deposed from his Apple kingdom (at about the same time the first Pixar computer went on the market for $105,000), Jobs sold the majority of his Apple stock and started over. Plunging $12 million into a new computer enterprise named NeXT Inc., specializing in personal computers for colleges and universities, Jobs approached Lucas in 1986 and paid $10 million for the San Rafael-based Pixar and created an independent company. Though Catmull, Lasseter, and crew regarded Jobs as kin in their quest for high-tech fun and games given his laidback reputation and status as a computer wonder boy--the new boss instructed them to put aside their dreams of animation and film and to instead concentrate on technical graphics they could sell.


Luckily, Pixar's crew came up with several software innovations, which they used to create a myriad of products. In 1986 came the first of many Oscar nominations from the Academy of Motion Picture Arts and Sciences for a short animated film called *Luxo, Jr.* Next came *Red's Dream* in 1987, then the development of RenderMan, for which the company applied for and received a patent. A revolutionary graphics program that allowed computer artists to add color and create texture to onscreen 3D objects, RenderMan produced stunningly realistic photo images almost indistinguishable from actual photographs. RenderMan's brand of images paid off when *Tin Toy*, written and directed by Lasseter as the first computer-generated animation, won an Academy Award as Best Animated Short Film in 1988.

As CEO of Pixar, Jobs expanded the company's leading edge graphics and animation capabilities by joining forces in July 1989 with the San Francisco-based Colossal Pictures, a live action, animation, and special effects studio, for collaboration purposes and to broker Pixar for television commercials and promotional films. With Colossal's background and experience in broadcast media and Pixar's unique computer capabilities, the partnership was poised for tremendous success. By 1990 when more than a dozen RenderMan products were introduced, RenderMan licensing fees finally began to pay off. Not only were many hardware and software packagers incorporating the graphics program into their products, but RenderMan was endorsed by such industry heavyweights as Digital Equipment, IBM, Intel Corporation, and Sun Microsystems. In addition, Pixar created two commercials in its association with Colossal. The second commercial, for Life Savers 'Holes' bite-size candies (which took 12 weeks to produce using RenderMan's software), aired in March and was a hit with audiences.

In April 1990 Pixar signed a letter of intent to sell its valuable yet stagnating hardware operations, including all proprietary hardware technology and imaging software, to Vicom Systems of Freemont, California. The move, which included the transfer of 18 of Pixar's 100 employees, was finalized several weeks later and allowed Pixar to devote the company's full energy to further development of its rendering capabilities. Before the end of the year, Pixar moved from San Rafael to new $15 million digs in the Point Richmond Tech Center of Richmond, California, and reached revenues of just under $3.4 million, though still not reporting a profit.
While Jobs's other company, NeXT Inc., seemed to prosper and was expected to reach $100 million in computer sales, Pixar still struggled to make ends meet in 1991. In February, 30 employees were laid off, including President Charles Kolstad. Jobs, sometimes criticized as a mercurial spinmeister with too little substance to back up his visions and words, was brought to task in the media for the shortcomings of both companies. Yet salvation came to Pixar in the name of *Toy Story*, the first full-length computer-animated feature film, as a collaboration between Pixar and Lasseter's old stomping grounds, Walt Disney Studios. Signing a contract to produce quality 'digital entertainment,' Pixar was responsible for the content and animation of three full-length films; Disney provided the funding for production and promotional costs, owning the marketing and licensing fees of the films and their characters. Though Disney retained the lion's share of revenue and profit, Pixar negotiated for a slice of the gross revenues from the box office and subsequent video sales. At this juncture, neither Disney nor Pixar knew the potential of their alliance—one that proved successful beyond their wildest expectations.

**1992-95: Magic & Mastery**

In 1992, the joint project between Pixar and Disney, called CAPS (computer animated production system) was another stellar development, winning Pixar's second Academy Award (shared with Disney). The following year, Jobs's NeXT Inc., like Pixar before it, was forced to lay off workers and sell its hardware division to concentrate on software development and applications. Yet 1993 was a banner year for Pixar, with RenderMan winning the company's third Academy Award and a Gold Clio (for advertising excellence) for the funky animated Listerine 'Arrows' commercial. The next year, Pixar won its second Gold Clio for the Lifesavers 'Conga' commercial, a colorful romp with a contagious beat. Despite such heavy accolades from critics and peers, Pixar still had not managed a profit since its spinoff in 1986, and reported a loss of $2.4 million on revenue of $5.6 million for 1994.

The following year, in 1995, Pixar was wrapping up its work on *Toy Story* and everyone was anxious for the finished result to hit theaters in November. Tom Hanks, Tim Allen, Don Rickles, and Annie Potts had signed on to voice major characters, and Randy Newman was composing the film's musical score. By the end of the third quarter with more than 100,000 copies of RenderMan sold and a huge licensing deal with Bill Gates and Microsoft, Pixar announced its first-ever profit of $3.1 million on revenues of $10.6 million.

For Pixar, 1995 was a string of accelerating successes: first came *Toy Story*'s pre-Thanksgiving release, grossing over $40 million its first weekend, with rave reviews from critics and families alike. Leading box office receipts, both Disney and Pixar hoped *Toy Story* could best *Pocahontas's* $140 million take earlier in the year. Next came Pixar's IPO of 6.9 million shares in November on the NASDAQ; the market closed at $22 per share, up from its initial offering of $12 to $14 each, giving Pixar a market value of some $800 million. Jobs, who since his purchase of Pixar for $10 million had sunk an additional $50 million into the enterprise, recouped a handsome paper profit of more than $600 million for his 80 percent stake (the shares eventually hit a high of $45.50 on November 30th).

Another boon came when *Toy Story* garnered several award nominations, including Randy Newman's score for two Golden Globes and an Oscar; an Oscar for Catmull and Thomas Porter,
director of effects animation or digital scanning technology; and an additional Special Achievement Oscar for Lasseter's writing, direction, and technical wizardry for *Toy Story*.

1996-99: Lightning Strikes!

After the release of *Toy Story* while part of Pixar's crew worked on a CD-ROM game of the animated film, others were busy working on several Coca-Cola commercials for the Creative Arts Agency, hired by Michael Ovitz. Pixar was also immersed in its next Disney film, *A Bug's Life*, which was scheduled for release in two years. By February 1996, *Toy Story* had grossed over $177 million at the box office and in March Lasseter attended the Academy Awards to receive his Oscar. He brought along Woody and Buzz Lightyear, who were part of several sketches and fodder for running gags during the live telecast. Pixar completed the year with a huge leap in revenues, up to $38.2 million (from 1995's $12.1 million), extraordinary net income of $25.3 million, and stock prices hitting a high of $49 per share in the fourth quarter.

Though it had been said by Bob Bennett of Autodesk, Inc., a client and competitor of Pixar, that 'Pixar is the best in the world at what it does,' continued advances in computer and graphics technology brought considerable competition. Everyone it seemed--from Digital Domain and Industrial Light & Magic to Microsoft and Silicon Graphics--was trying their hand at graphics software development. After the stellar success of *Toy Story*, all the major motion picture studios were creating computerized animation, including DreamWorks SKG, Turner Broadcasting, Warner Bros., and even Disney.

Other developments surrounded Jobs, as Apple stumbled horribly and the company came close to financial ruin. Still attached to the company he had cofounded and brought to enormous success, Jobs came to its rescue in 1997 shortly after Apple bought his NeXT Inc. Few doubted Jobs's ability to juggle both Pixar and Apple, and they were right. Not only did Jobs bring Apple back to the forefront of the computer industry with the flashy iMac, but Pixar went on to rule the box office with *A Bug's Life*. During the magic 'holiday' window of October, November, and December 1997, *A Bug's Life* was up against four animated films, including another insect-related story by Dreamworks SKG, entitled *Antz*. Dreamworks had also released *The Prince of Egypt* and Nickelodeon brought *The Rugrats Movie* to the big screen as well. Yet Pixar beat the pack and went on to ring up over $360 million in worldwide box office receipts, even topping *Toy Story*.

Once again Pixar was nominated for and won big at the Academy Awards: two separate awards for Scientific and Technical Achievement (for the Marionette 3D Animation System, and for digital painting), as well as another for Best Animated Short Film (*Geri's Game*). Pixar also finally received a sizeable financial boost in 1997, as revenues and net income reached $34.7 million and $22.1 million, respectively. The box office and critical triumphs of both *Toy Story* and *A Bug's Life* also brought a new deal with Disney to produce an additional five pictures within the next ten years, with both companies as equal partners. The agreement eclipsed the previous deal; the former's remaining two films became the first two of the new five-picture negotiation. Lastly, Pixar would sell Disney up to five percent of its common stock at $15 per share.

In early 1999 *A Bug's Life* was released on video and DVD simultaneously and Pixar's top guns worked feverishly on the sequel to *Toy Story*, slated for release in November. The sequel was a gamble, since only one animated feature film had ever spawned a theater-released follow-up,
Disney's *The Rescuers Down Under*. Most sequels or prequels were released directly to video; Pixar was ready to buck the trend. Dollars from its venture with Disney continued to slowly trickle in and Pixar finished the year with $14.3 million in revenue and net earnings of $7.8 million. 1999 also brought more kudos for Pixar: David DiFrancesco won the company's ninth Academy Award (for Technical Achievement), *Toy Story 2* opened in November to sweeping box office dominance (even higher receipts than *Star Wars: The Phantom Menace's* first few weeks of release the year before), and the company celebrated its fifth consecutive profitable year, with revenues of $121 million and earnings topping $50 million.

**2000-2009: The New Century**

Pixar was as busy as ever in the 21st century: the company was preparing to move into its new 225,000-square-foot headquarters in Emeryville, California, due for completion in mid-2000 and were hard at work on its next full-length animated film in collaboration with Disney. The new feature was scheduled for release in 2001, under the working title of "Monsters, Inc." The company's fifth film was tentatively slated for release in 2002, was a top-secret project to be directed by Andrew Stanton, who had worked on both *Toy Story* and *A Bug's Life*. Despite a slow, financially difficult beginning, Pixar Animation Studios had landed on the fast track and was known throughout the world. With its technological breakthroughs and brilliantly crafted animated films, the sky was the limit in the coming decade and beyond. As stated in its 1996 annual report, Pixar succeeded because it was well aware of the pitfalls of filmmaking:

*Monsters, Inc.* was followed by *Finding Nemo*, *The Incredibles*, *Cars*, *Ratatouille*, *WALL-E* and *Up*, which cemented Pixar's reputation as one of the best-critically acclaimed movie studios in history.

**2010-present: To Infinity and Beyond!**

On April 20, 2010, Pixar opened a new studio in the downtown area of Gastown, Vancouver, B.C., named Pixar Canada. The studio is primarily creating projects featuring characters from *Toy Story* and *Cars*. The studio was shut down on October 8, 2013 to "refocus creative and business efforts and resources under one roof."

Pixar released *Toy Story 3* on June 18, 2010, which met with universal acclaim and box-office success. It made over $1.603B and is the highest grossing animated film of all time.

John Lasseter fueled speculation on Pixar's future sequels when he stated, "If we have a great story, we'll do a sequel!" *Cars 2*, Pixar's first sequel not based on *Toy Story*, was released on June 24, 2011. *Brave*, Pixar's first fairy-tale, was released on June 15, 2012. *Monsters University*, a prequel to *Monsters, Inc.* was also announced on April 22, 2010, for release on June 21, 2013. Three original films were announced in early 2012: *Inside Out*, set to be released on June 19, 2015, *The Good Dinosaur*, to be released on November 25, 2015, and an untitled Día de los Muertos film. The Day of the Dead film was reported by Comingsoon.net to be released in 2016. A sequel to *Finding Nemo*, titled *Finding Dory*, was announced in April 2013, for release in 2016.
Technology

Since its incorporation, Pixar has been responsible for many important breakthroughs in the application of computer graphics (CG) for filmmaking. Consequently, the company has attracted some of the world's finest talent in this area. Pixar's technical and creative teams have collaborated since 1986 to develop a wealth of production software used in-house to create its movies and further the state of the art in CG movie making. This proprietary technology allows the production of animated images of a quality, richness and vibrancy that are unique in the industry, and above all, allows the director to precisely control the end results in a way that is exactly right for the story. Pixar continues to invest heavily in its software systems and believes that further advancements will lead to additional productivity and quality improvements in the making of its computer animated films.

Pixar also has a long standing tradition of sharing its advances within the broader CG community, through technical papers, technology partnerships, and most notably through its publicly available RenderMan product for the highest-quality, photo-realistic images currently available. RenderMan remains the standard in CG film visual effects and feature animation and has been honored with an Academy Award for technical achievement.

In 2001, the Academy of Motion Picture Arts & Sciences' Board of Governors honored Ed Catmull, president of Pixar and Disney Animation Studios, Loren Carpenter, senior scientist, and Rob Cook, vice president of software engineering, with an Academy Award of Merit (Oscar) "for significant advancements to the field of motion picture rendering as exemplified in Pixar's RenderMan." In 2002, the Producer's Guild of America honored Pixar with the Guild's inaugural Vanguard Award, which recognizes outstanding achievement in new media and technology.

Creative Team

Pixar's creative department is led by Chief Creative Officer John Lasseter, an Academy Award-winning director and animator. Under the guidance of Lasseter, Pixar has built a creative team that includes a department of highly skilled animators, a story department and an art department. This team is responsible for creating, writing and animating all of Pixar's films. Pixar strives to hire animators who have superior acting ability - those able to bring characters and inanimate objects to life, as though they have their own thought processes. In order to attract and retain quality animators, the company founded Pixar University, which conducts three-month long courses for new and existing animators. Pixar also has a complete production team that gives the company the capability to control all elements of production of its films. Pixar has successfully expanded the production team so projects may be worked on simultaneously.

Disney

Initially, when Pixar was a high-end computer hardware company whose core product was the Pixar Image Computer, a system primarily sold to government agencies and the medical community. One of the buyers of Pixar Image Computers was Disney Studios, which was using the device as part of their secretive CAPS project, using the machine and custom software to migrate the laborious ink and paint part of the 2-D animation process to a more automated and thus efficient method.
Pixar continued its relationship with Walt Disney Feature Animation, a studio whose corporate parent would ultimately become its most important partner.

Relationship

Pixar and Disney had disagreements after the production of *Toy Story 2*. Originally intended as a straight-to-video release (and thus not part of Pixar's three-picture deal), the film was eventually upgraded to a theatrical release during production. Pixar demanded that the film then be counted toward the three-picture agreement, but Disney refused. Pixar's first five feature films have collectively grossed more than $2.5 billion, equivalent to the highest per-film average gross in the industry. Though profitable for both, Pixar later complained that the arrangement was not equitable. Pixar was responsible for creation and production, while Disney handled marketing and distribution. Profits and production costs were split 50-50, but Disney exclusively owned all story and sequel rights and also collected a distribution fee. The lack of story and sequel rights was perhaps the most onerous aspect to Pixar and set the stage for a contentious relationship.

The two companies attempted to reach a new agreement in early 2004. The new deal would be only for distribution, as Pixar intended to control production and own the resulting film properties themselves. The company also wanted to finance their films on their own and collect 100 percent of the profits, paying Disney only the 10 to 15 percent distribution fee. More importantly, as part of any distribution agreement with Disney, Pixar demanded control over films already in production under their old agreement, including *The Incredibles* and *Cars*. Disney considered these conditions unacceptable, but Pixar would not concede.

Disagreements between Steve Jobs and then Disney Chairman and CEO Michael Eisner made the negotiations more difficult than they otherwise might have been. They broke down completely in mid-2004, with Jobs declaring that Pixar was actively seeking partners other than Disney. Pixar did not enter negotiations with other distributors. After a lengthy hiatus, negotiations between the two companies resumed following the departure of Eisner from Disney in September 2005. In preparation for potential fallout between Pixar and Disney, Jobs announced in late 2004 that Pixar would no longer release movies at the Disney-dictated November time frame, but during the more lucrative early summer months. This would also allow Pixar to release DVDs for their major releases during the Christmas shopping season. An added benefit of delaying *Cars* was to extend the time frame remaining on the Pixar-Disney contract to see how things would play out between the two companies.

Pending the Disney acquisition of Pixar, the two companies created a distribution deal for the intended 2007 release of *Ratatouille*, in case the acquisition fell through, to ensure that this one film would still be released through Disney's distribution channels. (In contrast to the earlier Disney/Pixar deal *Ratatouille* was to remain a Pixar property and Disney would have received only a distribution fee.) The completion of Disney's Pixar acquisition, however, nullified this distribution arrangement.

Acquisition

Disney announced on January 24, 2006 that it had agreed to buy Pixar for approximately $7.4 billion in an all-stock deal. Following Pixar shareholder approval, the acquisition was completed...
May 5, 2006. The transaction catapulted Steve Jobs, who was the majority shareholder of Pixar with 50.1%, to Disney's largest individual shareholder with 7% and a new seat on its board of directors. Jobs' new Disney holdings exceed holdings belonging to ex-CEO Michael Eisner, the previous top shareholder, who still held 1.7%; and Disney Director Emeritus Roy E. Disney, who held almost 1% of the corporation's shares. As part of the deal, Pixar co-founder John Lasseter, by then Executive Vice President, became Chief Creative Officer (reporting to President and CEO Robert Iger and consulting with Disney Director Roy Disney) of both Pixar and the Walt Disney Animation Studios, as well as the Principal Creative Adviser at Walt Disney Imagineering, which designs and builds the company's theme parks. Catmull retained his position as President of Pixar, while also becoming President of Walt Disney Animation Studios, reporting to Bob Iger and Dick Cook, chairman of Walt Disney Studio Entertainment. Steve Jobs' position as Pixar's Chairman and Chief Executive Officer was also removed, and instead he took a place on the Disney board of directors. Lasseter and Catmull's oversight of both the Disney and Pixar studios did not mean that the two studios were merging, however. In fact, additional conditions were laid out as part of the deal to ensure that Pixar remained a separate entity, a concern that analysts had expressed about the Disney deal. Some of those conditions were that Pixar HR policies would remain intact, including the lack of employment contracts. Also, the Pixar name was guaranteed to continue, and the studio would remain in its current Emeryville, California location with the "Pixar" sign. Finally, branding of films made post-merger would be "Disney•Pixar" (beginning with Cars).

Products

RenderMan

RenderMan is the render software Pixar created in 1988, and now uses to help produce its CGI films. Since its creation, RenderMan has become the industry-standard and has since been used to render many films including The Abyss, Terminator II and Jurassic Park.

Marionette

Marionette is the animation software developed and used in-house by Pixar Animation Studios in the animation of their movies and shorts. Marionette is not available for sale and is only used by Pixar. As a result little is known outside of Pixar about the detailed workings of this software.

Pixar claims that Marionette is designed to be intuitive and familiar to animators who have traditional cel animation experience. Pixar chooses to use a proprietary system in lieu of the commercial products available and used by other companies because it can edit the software code to meet their needs.

Source: http://pixar.wikia.com/wiki/Pixar_Animation_Studios