

C O N F I D E N T I A L
DISNEY PROJECT: EXECUTIVE SUMMARY

Pixar

May 24, 1986

THE CAPS PROJECT

The Disney project is officially called the CAPS Project, for Computer Animation Production System. The primary goal is to digitize the conventional 2-dimensional cel animation process to reduce the cost of Disney-quality animation. The secondary goal is to give Disney access to the latest techniques and technology for producing animation, particularly in three dimensions.

PIXAR'S CONTRIBUTION TO CAPS

Pixar has proposed to supply the *software* for the CAPS Project. Substantial hardware purchases from Pixar are implicit in the proposal. A complete summary of it is attached as Appendix A.

Briefly, the Pixar proposal to Disney is a software proposal for eleven workstation designs. A majority of the code at a workstation would be the same for all workstations. These eleven workstations would comprise the basic Disney animation system. For real production they would have to install five to ten copies of each workstation type.

HIGHLIGHTS OF PIXAR'S PROPOSAL

- Disney would pay Pixar \$3.9 million for the eleven software systems. Appendix B is the detailed payment schedule proposed.
- The total time commitment by Pixar would be 3 years and 42 weeks.
- Disney would have to purchase and install two Pixar systems at Pixar and one Pixar system at Disney before the contract clock would start. This cost to Disney would be separate from the \$3.9 million.
- Pixar would retain all rights to software developed which would be general in application.
- Software which would be specific to the Disney market of theatrical release cel-animated films would not be available to Disney competitors.

- Disney would have source license to all software, restricted from third party access as is Unix source.
- Disney would have one person on Pixar premises for one week of each month.

CURRENT STATUS

Disney personnel presented the full CAPS concept to top Disney management May 15. Present were the two top managers of Disney, Eisner and Wells, the second rung, Katzenberg and Frank, and the third rung, Rocklis and Schneider. Also present was Roy Disney, vice chairman of the board. This group gave final approval to the concept and to proceeding to negotiate a contract with Pixar - as opposed to Digital Productions or Cranston/Csuri Productions with whom we have been in competition for this project. This was the final hurdle at Disney both for Pixar and for the people at Disney who have worked two years preparing for the meeting.

It is understood by Disney that the proposal currently in their hands has not had Pixar board approval and is hence not legally binding.

Carey Heckman at Ware & Freidenrich is preparing the contract between Pixar and Disney based on the Pixar (draft) proposal. He is proceeding with the knowledge that the Pixar board has yet to give its approval to contract negotiations.

Disney is currently awaiting Pixar board approval to begin negotiations. They will treat the contract as the final Pixar proposal. They hope to start the project in September.

BENEFITS TO PIXAR

- \$3.9 million, with \$400 thousand up front.
- Expected profit (software only): \$1-2 million (about \$250-500 thousand per year).
- \$2+ million, from implied hardware sales, with \$500+ thousand before contract commencement.
- Potentially large hardware sales if CAPS becomes Disney's production system (50-100 Pixars)
- Potential sale of one or two laser scanners at \$500 thousand each, paying for internal development of a scanner.
- Development of widely applicable workstation software, paid for by Disney.
- Experience with networks of Pixars, financed by Disney.
- Experience with animation production logistics, financed by Disney.

- Showplace for Pixar.
- Continued leadership of digital computer character animation. Denial of access to this position to Digital Productions.

RESOURCE USAGE

The CAPS project has used a great deal of Alvy's time over the past two years. It will continue to use his time for two or three months while the contract is negotiated. He would have to be involved after about two years in the required renegotiations proposed by Pixar (see Appendix A).

Pixar estimates that 4-6 people will be required to fulfill the software tasks of the Disney project. One of these would be the project leader at Pixar. All, but perhaps the leader, would be new hires and would require the necessary employee facilities.

The hardware used by the project would be supplied by Disney, but floor space, power, air-conditioning, etc. for it would be supplied by Pixar.

Disney would visit the project for one week of each month. Space would have to be provided for this person each month.

There would be parttime use of such company-wide functions as budget, facilities, and maintenance.

APPENDIX A: SUMMARY FROM PROPOSAL

A proposal for the software of a Computer Animation Production System (CAPS) for Walt Disney Productions is presented by Pixar. The total cost of the proposed system to Disney would be \$3.9 million. The total time required for completion would be 3 years and 42 weeks, including testing and holidays.

The proposed system would consist of 11 subsystems, one for each of 11 workstations:

- Digitizing Camera Workstation
- Digitizing Camera Check Workstation
- Cel Coloring Workstation
- Image Composite Workstation
- Color Models Workstation
- Scene Planning Workstation
- Layout Workstation
- Background Painting Workstation
- 2-D Animation Workstation
- 3-D Animation Workstation
- 3-D Rendering Workstation

The work is proposed to occur in three phases, as follows:

Phase I.

The first four workstations would be the Digitizing Camera Workstation, the Digitizing Camera Check Workstation, the Cel Coloring Workstation, and the Image Composite Workstation. All of these would be complete except for the Digitizing Camera Check Workstation which would be sufficiently complete to perform a "proof of concept" test on CAPS. Phase I would include installation, test, and documentation of the workstation software. A source license for all Pixar software in the workstation systems would also be included.

The duration of Phase I work would be 65 weeks as follows:

System-wide Software: 8 weeks

Digitizing Camera Workstation: 10 weeks

Digitizing Camera Check Workstation (First Portion): 10 weeks

Cel Coloring Workstation: 16 weeks

Image Composite Workstation: 13 weeks

Installation at Disney: 2 weeks

Proof-of-Concept Testing: 2 weeks

Documentation and Manuals: 4 weeks

Disney estimates that it requires 8 weeks for its proof-of-concept tests. Pixar would contribute 2 weeks of its time to assisting Disney during these tests. Pixar would prepare the documentation and manuals during the remainder of this testing period. Should Disney require still more time, then Pixar would delay the start of Phase II for up to a maximum of 2 weeks. Assuming 2 weeks of holidays makes the maximum duration of Phase I 69 weeks.

Either Disney or Pixar would have the option not to proceed with Phase II or Phase III at this time. The total payment due at this time would be \$1.3 million should either company choose to exercise its option.

Should either company exercise its Phase I option to terminate the project, Pixar would add 2 weeks of training to Phase I at no additional cost to Disney.

Phase II.

Pixar would complete the Digitizing Camera Check Workstation and the remaining three workstations: the Color Models Workstation, the Layout Workstation, and the Scene Planning Workstation. Thus Phase II would result in a complete 2-dimensional scan and paint production system consisting of seven workstations and the system resulting from their interconnection. This includes installation, test, documentation, and training. It also includes a source license for all Pixar software included in the system.

The duration of Phase II work would be 49 weeks as follows:

Digitizing Camera Check Workstation (Second Portion): 4 weeks

Color Models Workstation: 10 weeks

Scene Planning Workstation: 10 weeks

Layout Workstation: 14 weeks

Documentation and Manuals: 5 weeks

Installation at Disney: 3 weeks

System Integration and Check: 2 weeks

Training: 1 week.

The total time required for the system consisting of the first seven workstations thus would be 114 weeks (plus up to 2 additional weeks for Disney proof-of-concept testing in

Phase I and 4 weeks for holidays).

The cost to Disney of Phase II would be \$0.8 million, so the total payment due on the project at this time would be \$2.1 million.

Pixar would agree to propose Phase III near the end of Phase II, incorporating the then current state of Pixar's software and hardware products and the sharpened set of requirements developed at Disney by that time. The following summary of Phase III represents the content and extent of that proposal. Disney would agree to consider the Phase III proposal from Pixar at that time.

Phase III.

Four additional stations would be added to the system: the Background Painting, 2-D Animation, and 3-D Animation and Rendering Workstations. These would include installation, test, documentation, training, and source license for all software.

The total cost to Disney for Phase III would be \$1.8 million, so the total project cost would be \$3.9 million.

The time required for Phase III work would be 75 weeks:

Background Painting Workstation: 20 weeks

2-D Animation Workstation: 18 weeks

3-D Animation Workstation: 20 weeks

3-D Rendering Workstation: 10 weeks

System Integration and Check: 2 weeks

Documentation and Manuals: 3 weeks

Installation at Disney: 1 week

Training: 1 week.

So the total project time would be 189 weeks (plus up to 2 additional weeks for Disney proof-of-concept testing in Phase I and 7 weeks of holidays).

This is a software proposal only. A condition of the proposed work is that it be designed for particular hardware configurations. The cost of the hardware and its maintenance is not included in this proposal. See Appendix B for required and recommended hardware and its estimated prices.

A second condition is that the hardware for two complete systems be purchased by Disney and installed at Pixar for the CAPS development work prior to the beginning of the project. Pixar also requires that Disney purchase and install at least one complete system at Disney; two are recommended for network testing.

The proposed software would run under the Unix 4.2 operating system. The cost of Unix source licenses is not included in this proposal. The suggested hardware has the right to use Unix included in the prices.

Phase I proof-of-concept testing requires film output. Pixar suggests that Disney have Pixar build a laser raster output scanner (ROS) for film. A separate proposal will be issued to Disney for this purpose. The scenario which Pixar believes best fits the needs for both companies has Disney ordering a laser scanner at the beginning of Phase I for acceptance at the end of Phase I and use in Phase I testing.

This proposal completely replaces the one submitted to Disney March 5, 1985 and withdrawn at the recent formation of Pixar - on February 3, 1986 - as a separate company from Lucasfilm Ltd., of which Pixar was formerly the Computer Division.

APPENDIX B: PAYMENT SCHEDULE FROM PROPOSAL

The payment schedule would be as follows:

- \$400,000 at the beginning of Phase I.
- \$100,000 at the delivery of each Phase I workstation to Disney. This includes the first part of the Digitizing Camera Check Workstation. So Phase I payments of this type would total \$400,000.
- \$200,000 at the end of Phase I.
- \$300,000 additionally at the end of Phase I if the Phase I option is exercised by either company. Thus the total Phase I payments by Disney would be \$1,100,000 if the project proceeds to Phase II or \$1,300,000 if a Phase I option is exercised.
- \$200,000 at the beginning of Phase II.
- \$100,000 at the delivery of each Phase II workstation to Disney. This excludes the second part of the Digitizing Camera Check Workstation. So Phase II payments of this type would total \$300,000.
- \$300,000 at the end of Phase II. So the Phase II payments would total \$600,000 and the Phase I and Phase II payments would total \$2,100,000.
- \$400,000 at the beginning of Phase III.
- \$200,000 at the delivery of each Phase III workstation to Disney. So Phase III payments of this type would total \$800,000.
- \$600,000 at the end of Phase III. Thus the Phase III payments would total \$1,800,000 and the Phase I, II, and III payments would total \$3,900,000.