

TO: George Rhine, Hiro Moriyasu
FROM: Larry Katz, Don Williams, Dave Heinen, Jack Grimes
SUBJECT: Smalltalk Proposal From Xerox

DATE: August 8, 1980

Xerox PARC has solicited our participation in a project involving the Smalltalk programming system. Smalltalk is an advanced graphics language/system designed for use in a highly interactive personal computing environment. The Smalltalk system is the subject of great interest in the computer science community due to its extensive graphic orientation. Its user interface is renowned for friendliness and ease of use.

1. Summary of the Xerox Proposal

Xerox is preparing a book describing Smalltalk and its implementation. We have been invited to participate in a pre-publication review. (See attached letter for details of the Xerox proposal.) The review is a two-phase process:

1. Phase I - Evaluation of written material.
2. Phase II - Trial implementation.

Phase I - Evaluation - This phase of the review process involves examination of the draft book chapters and some supporting documents. At the conclusion of this phase, both we and Xerox have the option of terminating our involvement in the project.

Phase II - Implementation - This phase of the review process involves an actual implementation of the Smalltalk system as described in the book. During this phase, Xerox will provide more detailed information about the inner workings of their implementation and some amount of consulting aid.

2. Benefits to GCS

This project offers GCS the opportunity to acquire detailed information and "hands-on" experience with one of the most advanced personal computing and graphics systems in existence. This type of "technology transfer" is not available from other sources.

GCS has the opportunity to leverage the experience of the Xerox PARC team into a prototype advanced personal graphics computer system.

3. Obligations to Xerox

Our obligation to Xerox during Phase I is limited to providing written commentary on the book. Our obligation during Phase II is limited to providing Xerox with written questions and feedback concerning our experiences with the implementation activity.

It appears that Xerox would like all information exchanged to be considered "non-proprietary." The implication is that Tektronix would be free to productize any concepts arising from the project without further compensation to Xerox.

4. Resources

Phase I is a two-month effort. We envisage several people working part-time on this activity. Phase II is about a one year effort. We envisage a few people deeply involved and several more as consultants for this phase.

The people involved in this activity can be considered a resource "pool," from which we draw individuals with the appropriate expertise on an "as needed" basis. We envisage this pool to be composed as follows:

1. TMCCP: 3
2. GCS Applications: 1
3. GCS Hardware Staff: 1-2
4. Tek Labs: 1-2

5. GCS Cost Estimate

Assumptions: \$20 hr. labor rate
1 year project duration
3.0 engineer average loading
Phase I Duration - 10 weeks
Phase II Duration - 38 weeks

Phase I Cost	
Labor	\$ 24,000
Phase II Cost	
Labor	\$ 91,200
Computer Time	\$ 15,000 (10 periods @ \$1500/period)
Prototype Hardware	<u>\$ 10,000</u>
Phase II Total	\$116,200
Consolidated Total	\$140,200

5. GCS Cost Estimate Cont.

The funds and personnel required by this project will be obtained by re-deploying the resources allocated to the Tektronix Modular Computer Program for FY100. We anticipate no significant impact on projects and programs currently in progress. Existing Tektronix hardware will be used during Phase II, with some prototype labor support.

6. Project Organization

Management responsibility for this project will rest on Don Williams.

/jkb