

Logical Ink Software Project Plan

Revision History

Date	Version	Author	Explanation of Change
2/28/10	1.0	Peggy Harvey	Initial draft
3/4/10	1.1	Peggy Harvey	Added budget information for headcount for the overall project
3/6/10	1.2	Peggy Harvey	Reduced ID headcount to three months instead of four based on workload estimations
3/8/10	1.3	Peggy Harvey	Modified project schedule dates after discussion with Dan Smith at phase 1 review meeting.

Contact Information

Peggy Harvey, ID Project Manager for Logical Ink
Logical Progression
123 Oxford Lane, Suite 103
Pittsboro, NC 27565
Ph.: 919.655.5545
Fax: 919.655.9878
pharvey@logicalpro.com

Approved By

Name	Position	Date
Chris Joyce	Chief Executive Officer	3/10/10
Reed Panil	Chief Financial Officer	3/10/10
Dan Smith	Project Manager for Logical Ink	3/10/10

Project Overview

Description of the Larger Project

Logical Progression is a start-up software company established in 2005 to provide innovative, tablet-based documentation solutions to the healthcare industry. Logical Progression believes that mobility is critical in the healthcare environment, and the dynamic nature of the physician/nurse workflow requires flexibility and efficiency when dealing with patient-required documentation and forms. At the same time, federal mandates are forcing the healthcare industry toward an electronic model for archiving and storage. With the Logical Ink product, healthcare organizations have the opportunity to replace their paper-based systems with a paper-like electronic charting solution. The pen-friendly design eases the transition to electronic medical records (EMR) with a familiar paper-looking interface, minimizing the amount of training needed to use the tablets productively. Unlike other EMR systems, Logical Ink also compliments existing IT investments to provide a seamless solution. Logical Ink has the ability to help hospitals and private practices save money by going paperless and capturing clean, complete patient documentation more effectively.

Project Vision and Goals

Excessive paper trails often impede nurses and clinicians from providing and retrieving patient documentation in a timely manner. The goal of Logical Ink is to meld the intuitive pen/paper interface with a mobile electronic solution offered through a tablet PC, eliminating scanning and reducing duplicate data entry by extending an organization's EMR to the patient and mobile clinicians. Target healthcare organizations include hospitals and clinical trial labs that are struggling to comply with EMR regulations and reduce their dependency on paper forms.

Project Scope

There are two components to the Logical Ink project: Client software that runs on a tablet PC and backend software that manages server-side configuration settings. Features for these two components include:

Client:

- Patient search
- Chart creation
- Form selection
- Completing forms (handwriting recognition)
- Implementation of validation rules
- Submitting forms to the EMR

Server:

- Licensing
- Tablet activation
- Chart analytics
- Patient search

- Chart lookup
- Form resubmission to EMR
- Permissions and security
- Filter configuration
- Customer administration
- Data source definition
- Application setup
- Logging

Existing documentation for the client is currently very limited, resulting in the majority of topics needing to be created from scratch for this project. The server has no user documentation but does have an engineering specification that information developers will be able to use as a guideline for initial information development.

Project Schedule

Logical Ink development is expected to encompass four months, beginning in March. General Availability is currently scheduled for June 30, 2010.

Milestone	Date
Sign-off on software specification and project scope	3/1/10
Marketing campaign kickoff with Access at HIMSS 2010 in Atlanta, GA	3/1/10 – 3/4/10
GUI components review	4/5/10
Mid-project code review	4/19/10
Code freeze	6/1/10
Final code review	6/2/10
GA for Logical Ink client and server software, including all documentation	6/30/10

Project Budget

Logical Progression has budgeted up to \$500,000, including headcount, for Logical Ink product development and production. All development staff will be on the project for four months. The ID staff come on to the project for the final three months.

Following is the budget for the Logical Ink project, including loaded headcount figures:

Project Manager	\$60,000
Software developers (4)	\$220,000
Database developer	\$55,000
QA Manager	\$55,000
ID Project Manager	\$33,750
Contract writer	<u>\$26,250</u>

Total headcount	\$450,000
Software development	\$32,300
Information development	<u>\$3,200</u>
Total non-headcount	\$35,500
TOTAL BUDGET	\$485,500

All headcount costs are managed by Reed Panil, Logical Progression CFO. The Logical Ink Project Manager oversees all monies specific to software development, such as test servers and production media. The ID Project Manager oversees the budget specifically designated for information development costs.

Description of the Customer for the Product and the Information

The primary recipients of the Logical Ink product and information deliverables are Logical Progression's customers, consisting of people who fulfill several roles in the healthcare environment. These roles include:

- **Purchasers** – The people involved in purchasing decisions are usually IT managers, physicians, and procurement personnel who won't actually use the software they purchase. These people are interested in how Logical Ink can streamline operations both from an IT perspective and on the hospital floor. While they may read marketing brochures and view a product demo they are unlikely to read instructional documentation since they are not the end-users of the product.
- **IT administrators** – IT administrators are responsible for installing, configuring, and maintaining Logical Ink. They are usually managing multiple IT projects simultaneously so adding one more is often an unwelcome addition. They also may or may not have the specific skills required to implement Logical Ink, such as familiarity with the HL7 message structure. And yet they need to be up and running with the software quickly with the least amount of disruption to their already busy schedules.
- **Nurses and other practitioners** – Nurses and other hospital staff use the Logical Ink client. While they are used to working with computer data entry they are often unfamiliar with tablet PC's. They are also usually very busy and have little time to learn a new software product, so the workflow and training needs to be as smooth and seamless as possible.

Other stakeholders include Logical Progression's sales partners. Logical Progression has few direct sales and primarily works with partners to resell their products, including Logical Ink. Their main partner at this time is a company called Access, which resells Logical Ink as part of a larger forms management solution. Logical Ink must be capable of interfacing with their electronic records systems and Access sales representatives need to be able to learn about and understand the Logical Ink product well enough to pitch it to potential customers.

Other potential partners include large healthcare IT providers such as Siemens or McKesson. Eventually, these organizations may enter into OEM agreements with Logical Progression and sell the Logical Ink product as part of their enterprise solutions. When that time comes these companies' representatives will need informational materials that clearly define Logical Ink's purpose and its place in their IT portfolios.

Usability Requirements

Logical Ink users are very busy and don't have time to read lengthy reference manuals. In the case of IT administrators, they may resent having another project thrust on them, particularly if they weren't involved in the purchasing decision. The product should be as intuitive as possible and documentation materials need to be brief and easily accessible. Using appropriate search aids, users should be able to find what they're looking for in less than a minute for print books and less than 30 seconds for online or quickstart tools. Otherwise, users may feel overwhelmed and not take the time to learn how to use the product effectively.

All deliverables should follow accessibility guidelines for the particular medium. Specific usability concerns associated with each informational deliverable are as follows:

- **Logical Ink Client User's Guide** – Healthcare staff using the Logical Ink client need information that is clear, to the point, and includes terminology that is familiar to them. This guide should avoid computer jargon and use as few steps as possible to explain a concept.
- **Logical Ink Client Quickstart Card** – A Quickstart card will be developed from the Client User's Guide to give healthcare practitioners a reference card they can carry with them with the tablet PC's. The card should be laminated and small enough (or be able to be folded) to carry in a nurse's shirt or jacket pocket. The font needs to be clear and readable (probably at least 10 pt.), and only the most basic functions should be included on the card to avoid it being overcrowded.
- **Logical Ink Server Help System** – The IT administrators that configure Logical Ink need information at their fingertips. For them, an online, searchable Help system is the best solution for providing information where and when they need it. The Help system should follow a minimalist approach and only contain information users need to use the system. Future usability testing and observations of users using the system will help refine the topics that should be included in the Help system.

Information Development

Information Development Product Vision

The current lack of documentation for Logical Progression’s products means that Logical Progression staff perform the majority of implementations on-site, resulting in time lost from further product development. Training is currently done through PowerPoint presentations on a case-by-case basis. Providing a task-based documentation set with the Logical Ink product will enable end users to become self-sufficient with the software without having to depend so heavily on Logical Progression staff.

Project Schedule

The following schedule is dependent on product development making their milestone dates for the product. If those dates slip the information development review dates are subject to change.

Early reviews for the client and server guides will be separate due to different developers (SME’s) being responsible for the product components. The final review will need to include enough time for reviewers to review all informational products together.

Milestone	Date
Begin information development	4/1/10
First draft review, client user’s guide	5/5/10
First draft review, server Help system	5/15/10
All documentation ready for review	6/9/10
Final developmental and structure reviews	6/10/10
Final copyediting review	6/16/10
Final content review by SME’s	6/21/10
Production of all PDFs, online Help, and client quickstart card	6/23/10
Final production edit	6/25/10
Deliverable hand-off	6/29/10
Logical Ink GA, including all documentation	6/30/10

Project Budget

Projected costs related to the information development portion of the project include:

ID Project Manager	\$33,750
Contract writer	<u>\$26,250</u>

Total headcount	\$60,000
Authoring software	\$2,500
Production of the Quickstart guide	\$500
Office supplies	<u>\$200</u>
Total non-headcount	\$3,200
TOTAL ID BUDGET	\$63,200

As noted earlier, Reed Panil, CFO, manages the budget for all employee salaries, including contract staff. The ID Project Manager oversees \$3,200 of the total budget, which is the portion specifically related to ID tasks. Exclusive of headcount, the ID-specific costs are expected to be less than 10% of the remaining project budget.

Information Development Project Scope

Three deliverables are planned for this first release: A user’s guide for the client component delivered electronically in PDF, an online Help system for the server component, and a printed Quickstart card that can be carried around with the tablet PC that the client runs on.

The scope for the deliverables is determined by the audience. Both the client user’s guide and the Quickstart card will be used by healthcare practitioners in a hospital or similar setting. These users are busy and interacting with patients so they need to be able to scan information and become familiar with the software quickly.

The IT administrators using the server component need information to be available in-context, therefore, we determined that an online Help system would be the most appropriate form of documentation for them. Since the product is Microsoft-based HTML Help is the best solution.

Deliverable Title	Part No.	Delivery Method	Languages	% Changed	Topic Count
Client User’s Guide	LICUG10	PDF	Eng	0	20-30
Server Help System	LISHS10	HTML Help	Eng	0	60-70
Client Quickstart Card	LICQS10	Print	Eng	0	5-10

Roles and Responsibilities of the Project Team

Information Development Project Team

Role	Name	Location	Responsibility
Project Manager	Peggy Harvey	Cary, NC	Provides all project management support including project planning, tracking, and ensuring deadlines are met. Due to limited resources associated with a start-up company Peggy will also act as Information Architect, Information Developer, and Editor for this project.
Information Developer	Hannah Kaplan	Cary, NC	Works with Peggy and the software development team to develop the client and server documentation, and performs some editing.

Larger Project Team

Role	Name	Location	Signoff/Responsibility
CEO	Chris Joyce	Cary, NC	Works with Dan on initial design concepts. Signoff on all projects.
CFO	Reed Panil	Cary, NC	Works with Chris to determine budgets for all projects. Reviews all expenses. Signoff on all expenses and budgets.
Project Manager	Dan Smith	Cary, NC	Helps with design concepts and manages the overall project. Signoff on all changes and software deliverables.
Software Developer	Mike Underhill	Cary, NC	Developer and SME for Logical Ink server component. Signoff on documentation accuracy for area of expertise.
Software Developer	Tim Strong	Cary, NC	Developer and SME for Logical Ink server component. Signoff on documentation accuracy for area of expertise.
Software Developer	Nate Jones	Cary, NC	Developer and SME for Logical Ink client component. Signoff on documentation accuracy for area of expertise.
Software Developer	Jakob Marsala	Cary, NC	Developer and SME for Logical Ink client component. Signoff on documentation accuracy for area of expertise.
Database Developer	Roger Spratley	Cary, NC	Developer and SME for Logical Ink backend database. Signoff on documentation

			accuracy for area of expertise.
QA Manager	Matt Leary	Cary, NC	Performs quality assurance and testing for all software and documentation deliverables. Signoff on all products before hand-off to production.

Project Dependencies and Risks

Project Assumptions

Assumptions inherent in this project plan include:

- Development will make their milestone dates as stated in the overall project schedule.
- Product features and functions will be developed according to the spec.
- Any changes made to the product that deviate from the spec will be communicated to the ID group according to the established change process.
- Information developers will be included in project meetings and have access to the software developers throughout the project in order to ask questions and clarify issues.
- Reviewers will perform reviews when requested.

Risk Analysis

Risk Description	Probability	Potential Impact	Prevention Plan	Contingency Plan
Development's milestone dates slip.	Medium	High	Stay in communication with Dan Smith to ensure product development is on schedule.	Reduce scope of ID deliverables or postpone GA.
Project is delayed due to other commitments.	Low	High	Stay in communication with Dan Smith and Chris Joyce regarding other projects	Eliminate the contract ID position.
Developers are too busy to meet with information developers.	Low	Medium	Get to know developers and work with them, conveying how important their input is to the documentation.	Ask Dan Smith to intervene and encourage the developers to make time for SME meetings.
Reviews are not completed in a timely manner.	Medium	High	Schedule a brief training meeting early in the project to notify people of their duties as reviewers.	Review the documents ourselves and do the best we can with the information we have. Notify Dan Smith and Chris Joyce of quality concerns.

ID team members don't collaborate well.	Low	Medium	Peggy and Hannah will spend some time getting to know each other and talking about the project before information development begins.	Replace Hannah with a different contract writer.
---	-----	--------	---	--

Dependencies Calculation

		Average Hours/Page:	<input type="text" value="4"/>
Dependency	Ranking	Factor	
Product Stability	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	x	1.00
Information Availability	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	x	1.00
Prototype Availability	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	x	0.95
Subject Matter Experts	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	x	0.95
Review	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5	x	1.05
Writing Experience	<input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	x	0.95
Technical Experience	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5	x	1.05
Audience Awareness	<input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	x	1.00
Team Experience	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5	x	1.05
Tools Experience	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5	x	1.05
		Hours/Page Projection:	4.16

Project Total Hours and Costs

Deliverable Title	Topic Count	% Change	Total Hours	Total Cost
Client User's Guide	29	0	121	\$18,950
Server Help System	65	0	271	\$40,150
Client Quickstart Card	8	0	34	\$4,100

Project Resource Requirements

As noted above, we will need to be included in project meetings and have access to the developers in order to ask questions and clarify points about the software. We will also need access to software builds to take screenshots and perform functions ourselves as we document them.

Other resource requirements include:

- A tablet PC on which to install and run the client software. The tablet can be borrowed from development so we don't need to purchase a new one.
- Both Peggy and Hannah will need accounts on the test server in order to use the Logical Ink software.
- Access to the conference room for Phase 1 and Phase 2 review meetings.