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Proposal for AggregateSpend360 eLearning Replacement

**Introduction**

QuintilesIMS’s (QI) AggregateSpend360 (AGS) software provides a solution to help group purchasing organizations (GPO) such as pharmaceutical and health care manufacturers to comply with local and national mandates regarding transparency. AGS tracks transfers of value between GPOs and health care providers/organizations required the United States Food & Drug Administration (FDA) and the European Federation of Pharmaceutical Industries and Associations (EFPIA) regulations. AGS gives GPOs the ability to comply with these reporting requirements.

This paper will discuss a proposal to replace the current eLearning models. Topics related to this proposal include:

* Instructional design and project management models
* Target group key characteristics
* Multimedia rationale
* Advantages and disadvantages of online learning solutions
* Evaluation criteria
* Delivery
* Outline
* Project Team Roles and Responsibilities
* Roll-Out Plan

**Instructional Design and Project Management Models**

The development team uses the Successive Approximation Model (SAM) as the instructional model to develop the eLearning modules for this project (http://www.alleninteractions.com/sam-process). The three phases of SAM include the preparation phase, the iterative design phase, and the iterative development phase. SAM starts with the preparation phase where the development team gathers background knowledge on the subject matter and discusses preliminary design prototypes. The iterative design phase includes project planning and additional design prototyping. Finally, the iterative development phase includes the creation of the design proof used to build the alpha version of the eLearning. Figure 1 presents a graphical representation of SAM.

**Figure 1.** Successive Approximation Model (SAM)



*Figure 1.* The SAM Process. Adapted from “Leaving ADDIE for SAM,” by Allen Interactions, Inc., 2016. Copyright 2016 by Allen Interactions, Inc.

The project manager will create a Gnatt chart for tracking project milestones during the project planning phase (Russell, 2000). The activities needed to achieve each milestone of the design and development phases will specify the start date, end date, and the person responsible on the chart. The project manager will use Microsoft Project to develop the project plan.

**Target Group Key Characteristics**

QI AGS360 clients are located throughout the world and must become familiar with application functionality quickly after installation. GPOs in the United States must report the previous year’s spend to the Centers for Medicare & Medicaid Services (CMS) on March 31st (https://www.cms.gov/OpenPayments/Downloads/Open-Payments-User-Guide.pdf). Since physicians can dispute expense data, QuintilesIMS clients have incentive to vet expense data prior to reporting to CMS. As a result, QI clients are interested in shortening the learning curve of new AGS users.

A focus group conducted with experienced AGS360 users explored the skills that new AGS360 users must acquire. The top required skills involve entering and editing expense data as well as completing spend reports. These content choices were corroborated during a review of support cases which showed the same content areas resulted in the largest amount of calls.

**Multimedia Rationale**

Technology can provide the just-in-time, just-in-place learning needed for the target audience. “Technology- supported environments-computer-mediated communication, computer-supported collaborative work, case-based learning environments, and computer-based cognitive tools, for example- can offer the field of distance education alternative approaches to facilitating learning” (Jonassen, Davidson, Collins, Campbell, & Haag, 1995, p. 15). Multimedia learning solutions for this project consists of asynchronous computer-based solutions using QI’s proprietary eUniversity learning management system.

The current QI AGS360 eLearning solution consists of asynchronous eLearning modules that document an older version of the software that concentrates solely on click paths with no contextual knowledge. An upcoming version of the software necessitates an update of these modules. At the same time, the modules will use case-based learning scenarios which will help learners make better sense of how to use AGS360 (Jonassen, et al., 1995; Mayer, 2009).

**Advantages and Disadvantages of Online Learning Solutions**

Research cannot determine the superiority of either face-to-face instruction or distance education modalities such as eLearning. Reeves and Hedberg (2003) as well as Kozma (1994) support the viewpoint that eLearning modalities help enhance learner understanding. Clark (1994) attributes learning as a product of instructional design, not from the media itself. Vaughan (2010) supports a blend of face-to-face and online instruction. The target audience lives in different time zones which make an online solution the preferred modality.

**Evaluation Criteria**

A modified version of the learning object review instrument (LORI) will serve as the evaluation criteria for the pilot (Nesbit, Belfer, & Leacock, 2004). The standard dimensions defined in Nesbit et al.’s (2004) LORI instrument are content quality, learning goal alignment, feedback/adaptation, motivation, presentation design, interaction usability, accessibility, reusability, and standards compliance. The modified rubric will not include the dimension of accessibility as QI’s proprietary eUniversity learning management system only functions on computers and not on mobile devices. The modified rubric will not include the dimension of reusability due to the nature of the highly specialized content required for this project.

In addition to the LORI evaluation, the study author recommends a comparison of support incidents. This study will take place within a nine month following the final deployment. This comparison will contrast the number and nature of AGS360 support cases for a 30 day period prior to training deployment against a 30 day period after the training deployment.

**Delivery**

The course developer will use Adobe Captivate to develop the alpha, beta, and gold versions of each module. Adobe Captivate allows for easy development eLearning modules that require screenshots of computer screenshots. QI’s proprietary eUniversity learning management system will host the eLearning modules.

**Outlines**

The replacement eLearning modules recommended for this project are:

* Correcting Customer Expenses
* Entering Customer Expenses
* Entering Meeting Expenses
* Running Federal/National Reports

The learning objectives for each module appear in Table 1:

Table 1

*AggregateSpend360 eLearning Module Learning Objectives*

|  |  |
| --- | --- |
| **eLearning Module** | **Learning Objectives** |
| Correcting Customer Expenses | By the end of this module, you will be able to…1. Formulate a quick search to find professionals and organizations
2. Correct spend data from the customer record expense
3. Correct spend data from a customer expense search
4. Identify best practices for searching
 |
| Entering Customer Expenses | By the end of this module, you will be able to…1. Enter new customer expenses from the AGS360 menu
2. Enter new customer expenses using a template
3. Identify best practices for using the customer template
 |
| Entering Meeting Expenses | By the end of this module, you will be able to…1. Describe the three parts of a meeting
2. Enter new meeting expenses from the AGS360 menu
3. Enter meeting expenses to an existing meeting from the AGS360 menu
4. Enter new meeting expense data using a template
5. Identify best practices for using the meeting template
 |
| Running Federal/National Reports | By the end of this module, you will be able to…1. Describe the three parts of a spend report
2. Create a new template
3. Create a new report
4. Identify post reporting options
5. Describe which part of a spend report can influence report output
 |

**Project Team Role and Responsibilities**

The development team will consist of subject matter experts, a project manager, an instructional designer, a graphic artist, and a course developer. Table 2 details the responsibilities of each project team member.

Table 2

*AggregateSpend360 eLearning Replacement Project Team*

|  |  |
| --- | --- |
| **Team Member** | **Responsibilities** |
| Subject Matter Experts | Provides content expertise and reviews training materials during the development of the design proof, alpha, and beta versions. The lead Subject Matter Expert approves the design proof. |
| Project Manager | Coordinates and leads all team meetings. Creates and maintains the project plan. Ensures that project timelines are met. |
| Instructional Designer | Provides instructional design expertise for the project. Creates the design proof. |
| Graphic Artist | Creates any graphical elements needed as part of the solution. |
| Course Development | Develops the Alpha, Beta, and Gold versions of the course based on the design proof and incorporating feedback from subject matter experts. |

**Roll-Out Plan**

Project development for each module will take approximately seven weeks. Each individual module will have a separate individual roll-out plan. Table 3 details a sample roll-out plan for a single module.

Table 3

*AggregateSpend360 eLearning Replacement Project Roll-Out Plan*

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Responsible Team Members** | **Time** |
| Design | Instructional Designer, Subject Matter Experts | 10 days |
| Prototype | Course Developer | 5 days |
| Review & Comment on Prototype | Subject Matter Experts | 3 days |
| Create Design Proof | Instructional Designer | 5 days |
| Review & Comment on Design Proof | Subject Matter Experts | 3 days |
| Develop Alpha | Course Developer | 5 days |
| Review & Comment on Alpha | Subject Matter Experts | 3 days |
| Develop Beta with Alpha feedback | Course Developer | 4 days |
| Review & Comment on Beta | Subject Matter Experts | 3 days |
| Develop Pilot version with Beta feedback | Course Developer | 4 days |
| Pilot & LORI evaluation | Pilot Participants | 1 day |
| Develop Gold version based on LORI feedback | Course Developer | 3 days |
| Test course using the SCORM Cloud | Course Developer | 1 day |
| Deploy  | Course Developer | 1 day |

**Conclusion**

The current AGS360 eLearning modules represent an older version of the software as well as being very point and click oriented. The target audience lives in different time zones which make an online solution the preferred modality. This proposal recommends replacing the existing eLearning modules with new modules that are relevant to QuintilesIMS client’s actual usage of AGS360. SAM and Gnatt charts are used as the tools for instructional design and project management for this project, respectively. Each module will take seven weeks to develop. The modules cover the topics of correcting customer expenses, entering customer expenses, entering meeting expenses, and running Federal/National reports. The project team includes subject matter experts, a project manager, an instructional designer, a graphic artist, and a course developer. Subject matter experts evaluate each module using a modified version of the LORI rubric after completion of the pilot.

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