

Case Study: Jack Waterkamp and Complex Data Systems' Complex CRM Software Rollout

Barry P. Langer

Purdue University

### Stakeholders

**The designer:** Jack Waterkamp is the relatively new Director of Curriculum Development at Complex Data Systems (CDS). He is ambitious, and wants to move up the org chart quickly and become a member of the executive leadership team. A path for growth has been presented to him with a new proposal that will fundamentally change the content he currently directs: a new instructional program for CDS's new-to-market CRM software. He has years of experience in delivering these types of projects outside of CDS, and must now take action to convert the existing materials – which he had previously scoped to exclusively classroom-based learning – to web-based training. Jack's experience as an eLearning professional gives him a salient view of what difficulties come with this type of instructional shift, including major financial and time constraints and costs. Jack identifies his primary problem as his upcoming November deadline; this is non-negotiable, and includes both the classroom program and Internet instruction for the new CRM software.

**The audience:** The audience in this case are CDS' clients. They are accustomed to classroom-based instructor-led training. Their primary concern is that the web-based program may impede the progress of their CRM users acquiring the necessary skills to learn the product. They are also worried about the anonymization of training through the loss of direct contact with the CDS training team.

**The clients:** There are a two primary clients in the case: Elizabeth Henderson and the CDS executives. These two clients have issues for Jack that work hand-in-hand. Elizabeth, the Vice President of Human Resources, is Jack's manager, and cares about the proper messaging on the web-based training. She wants all consumers of the training, both internal employees and external customers, to have a positive experience with the new program, while the other

executives want to ensure that this new customer experience is well-enough-received to stem the losses coming from shrinking revenues in the current classroom training program.

***Subject matter experts:*** In addition to the clients directly related to Jack's team, he has some subject matter experts (SMEs) – functionally clients unto themselves – whose needs must also be met. These SMEs include:

1. Lewis Ramirez, Director of Software Research and Development. He has expressed concern about the engineering readiness of the new software.
2. Katherine Tracey, Product Manager for the CRM software. She worries that the product will not be ready to go-to-market by the deadline set for implementation. She also serves the role of director of software testing for the CRM tool.

***Jack's teams:*** Jack has additional stakeholders in this case, all of whom can be catalogued as a member of either the design or deployment teams. The design team are Jack's direct reports, and are comprised of a graphic artist, an audio-visual expert, and a developer. Their team goals are aligned to Jack's: they must build web-based programming for a software title that is under development. Their biggest risk is creating a set of tools that are out of alignment with what the CRM software turns out to be at the ship date.

The deployment team is made up of the other employees at or above Jack's level who will be critical to the customer-facing rollout of the CRM software. These include:

1. Tom Slade, Director of Operations. Tom's goal is to keep his department under budget by only working with current systems.
2. Melissa O'Connell, Director of Client Training Services. Melissa manages a large team of 130 trainers, and is apprehensive that web-based training will eat into her billable

hours as her team ramps up on the new modality. She also worries that her satisfaction scores will drop – both among her staff and her clientele.

3. Larry Edwards, Vice President of Sales. Larry wants to promote this new product to his sales team so that they can promote it in turn to their existing and prospective clients.

Larry and the sales force can build excitement around the new product and the training to support it, but without pricing or properly built training materials, the sales organization will not be able to sell the CRM software

### **Challenges**

***Design challenge:*** The primary design challenge that Jack faces is a common one within the software industry: designing complete instructional materials for an incomplete product. This is especially apparent during the initial stages of development, but can easily be seen as a problem downstream. The constantly iterating Software as a Service model of development requires that the instructional materials supporting a product must also be constantly updated. This has the potential for extremely high costs and can quickly lead to overruns. Jack and the design team are placed at the end of this process, as their instructional materials are not aligned with the product after it has undergone some amount of beta testing within Katherine’s team. This forced the design team to rework some of those materials, which caused delays to ripple across the timeline as the project began to diverge from the projected timeline.

***Case-specific challenges:*** Jack and his two teams have an intertwined goal: the creation and deployment of instructor-led classroom and Internet-based training for CDS’ CRM product. As is true with virtually any business project, they need to accomplish this on time and under budget. This means that they cannot hire contractors or additional personnel to work on their rollout. Jack also has a significant amount of crosstalk happening from the numerous

stakeholders in his case. Though it could be argued that his audience is the actual customer, Jack is not at the stage where the CRM product is yet being sold. Rather, his audience consists of the SMEs, the executives, and the deployment team; meeting their individual and conflicting needs is what will ultimately drive customer adoption and promotion of the CRM software.

Jack appears to have an issue with product development. His training product has, at minimum, doubled in scope, yet has remained the same with regard to his available resources. Every need expressed by the other members of the other stakeholders has instant impact to the viability of Jack's product. These issues could be largely solved through the implementation of formal project management techniques. Jack is not unlike many instructional designers in his deficiencies on this skill, and even though his previous experience is valuable, this project is the most complex and far-reaching work he has had to date.

Jack needs to prioritize the project management challenge he faces. Certainly he faces a real design challenge on building multiple types of complete training materials for an incomplete product without proper resources. However, that is a challenge that Jack can handle far more easily with properly implemented project management. Jack's design team will be better able to handle the design constraints that have been handed to them if their entire project is better managed. This responsibility squarely belongs to Jack.

### **Readings and experience**

Williams van Rooij (2010) discusses that project management training is neglected in most formal instructional design curriculum. Instructional design is generally a component of educational programs within universities, which does not traditionally emphasize processes that do not advance the cause of teachers and school administrators. Though this week's readings do not provide concrete recommendations towards how this should be integrated (instead opting for

theory and anecdotal evidence), the application of project management will help Jack manage this difficult project. Brooks' Law (Carnegie Mellon University, 2009) indicates that additional workers will not necessarily speed up the development of the product, and could simply cause greater budgetary damage. Jack is fortunate in that he cannot argue for additional employees, as the case cited in Carnegie Mellon (2009) points to likely failure if he were to suggest additional contractor or vendor support.

Jack's experience mirrors one on a project on which I am currently working. A woman within my technical writing team is retiring. She maintained the single largest library of content of any of our writers – articles which supported end user help, rather than the technical administrator support materials that the rest of my team writes. However, because her content directly impacts users, both technical and non-technical, much of the feedback she has received has been negative. This negative feedback is so heavily weighted that its ratings have pulled down the ratings of all other content. As I have been coming online, I have developed project stages towards completing the goal of improving the scores on her content, which will in turn cause all of our satisfaction scores to summarily rise. I have been given my scope by my managers, who have not authorized additional staff, but have authorized additional travel to other offices as needed. I have established and confirmed my deliverables with my managers and product managers. I am currently determining what corrective actions need to be taken, and already have a series of metrics and A/B tests under development to attack this very real problem. This type of approach would very easily suit Jack's problem; he and I both work in the software industry, and it is painfully apparent that he needs this skill to proceed and make it into his desired upper echelons of management.

### **Recommendations**

**Implement project management:** Throughout this project, Jack has tried to control all of his stakeholders' inputs. This is not feasible, as Jack's control truly can only extend to his design team. His design team can only design training based on what they know the product to be. Jack has been finding out key product developments later than he has needed to because his only source of knowledge came through his manual review of the product's development. Jack needs to involve himself more fully with the development organization; in doing so, he will give his team much more immediate information about any changes, improvements, updates, or slippage in the CRM software's development lifecycle. If Lewis is reluctant to include Jack in their regular standups, Jack can make the argument that the usability, functionality, and even the quality of the product is irrelevant if no users understand how to operate it. Jack does not need to be in the room for these meetings, rather dialing in through Skype (or similar), or getting added to the correct email distribution lists. He should similarly request this type of information and access from Katherine's beta testing organization, and will enable his team to be much more agile in their approach to their materials.

Jack has an additional issue that requires fixing: Melissa's apparent lack of responsiveness. Jack's brute force approach of contacting her large staff of trainers directly was effective in disseminating the information, but also alienated their leader. Jack should have escalated this much earlier on by involving Elizabeth, who could have helped him manage the relationship and communications between herself, Jack, Melissa, and Katherine. Involving Elizabeth will also show the support that Jack has received from upper management on his newly-developed project management plans.

<b>Pros</b>	<b>Cons</b>
<ul style="list-style-type: none"> <li>Jack will be able to work with the other stakeholders and convert their needs into collaboration. He will be able to use the</li> </ul>	<ul style="list-style-type: none"> <li>Katherine could be offended that Elizabeth has to be involved with all communications. If so, this will impact</li> </ul>

Pros	Cons
<p>live information he receives to immediately impact his own team and improve their results.</p> <ul style="list-style-type: none"> <li>By showing that he understands and wants to be responsive to the similarly difficult requirements that the other teams are under, the other members of the deployment team will likely be more willing to work with Jack on this and future projects.</li> </ul>	<p>her willingness to work with Jack on this project and subsequent ones.</p> <ul style="list-style-type: none"> <li>Elizabeth may also believe that Jack cannot handle the project without her direct involvement; this will (unfortunately, rightly) show Jack to be a poor project manager.</li> </ul>

***Building instructional materials for incomplete software:*** Regardless of whether Jack chooses to implement project management techniques, he needs increased access to both the development status and testing regime for the CRM product. Although industry-specific project management would likely be helpful, the simple addition of live access to this information would allow Jack’s team to stop building materials that are immediately outdated. It is possible that Jack will not need to engage with the development team going forward; if he simply waits for features to enter beta testing, his team will be able to document and build materials supporting a version of the product that is closer to an actual release candidate. This is how my team generally operates, although we are involved with the development lifecycle in a limited capacity to support user interface text. Jack should also consider finding tools that allow him to build materials and release them at later schedules as part of the product release cadence.

Pros	Cons
<ul style="list-style-type: none"> <li>Jack will be able to minimize the lag between feature development and the instructional materials’ buildout.</li> <li>By deliberately remaining one step behind the testing team, the design team will no longer need to worry about features that</li> </ul>	<ul style="list-style-type: none"> <li>Though lag is minimized, it will still exist and be directly related to the speed at which Jack’s team can iterate on the product builds that are provided to them.</li> <li>If the product release is occurring at a faster rate than Jack’s team can compensate for, it is likely that training materials will not be completed this</li> </ul>

<b>Pros</b>	<b>Cons</b>
drop off due to failures found during testing.	deadline or potential future deadlines. This could cause significant customer dissatisfaction.

### **My recommendation**

Jack needs to develop a communication plan that supports the development of his materials. He currently lacks direct insight into the development process, and is concentrating on the wrong stages of the product's creation. He needs to back out and re-examine what the goal of his training materials are: not to supply release notes, but rather to provide training on the release candidate for the product. Subsequent stages within the Gantt chart will fall into line, and he can create timelines based off of the information that is relevant to his team based on what is relevant to their customer base. He will need to incorporate the web-based training content development into his timelines; this is simply another part of his communications plan.

Jack also needs to maintain effective, collaborative relationships with all members of his deployment team. Rather than acting as an end to the process, Jack needs to be heavily engaged in what the state of testing is. By bringing the deployment and relevant development team members together, they can align about which features are most relevant. It seems likely that Jack will not make the deadline with a complete web-based training product; If Jack is going to have a satisfactory release, he will need to ensure Elizabeth is aware of this, and that he is getting feedback from the other stakeholders to release a minimum viable training product. He still has time, and although I do not recommend that he hire any outsiders into his team, it is likely that having individual contributors within his and Katherine's team will enable him to build this training. He can then make sure to keep both Melissa and Larry apprised of his status, and in so doing can improve the quality of his team's materials and the adoption rate of the product.

## References

Carnegie Mellon (2009). *Brooks' Law*. Available online:

<http://www.sei.cmu.edu/library/assets/brooks1.pdf>.

Williams van Rooij, S. (2014). Jack Waterkamp: Managing scope change in an instructional design project. In P.A. Ertmer, J.A. Quinn, K.A. Glazewski (Eds), *The ID casebook: Case studies in instructional design* (4<sup>th</sup> ed.), (pp. 259-271). Boston: Pearson.

Williams van Rooij, S. (2010). Project management in instructional design: ADDIE is not enough. *British Journal of Educational Technology*, 41, 852-864.