Accord Project Plan

July 8, 2018

Summary

Training for phase 1 of Accord is due prior to the release of the software, which is expected by the end of Q4, 2018. Technical Support and Implementation Engineers must be trained in advance of the software's release, based on a requirement provided by product management. This project details the plan for four 2-day training sessions, to be designed and supported by Vocera's Learning and Organizational Development department, in conjunction with Engineering, Technical Publications, and other subject matter experts. Project scope, timeline, budgeting, and other concerns are outlined in the following document.

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VOCERA COMMUNICATIONS SUGGESTED PROJECT PLAN FOR ACCORD TRAINING

July 8, 2018

OVERVIEW

This project plan was created by Liz Cashman, Senior Technical Instructor, and part of Vocera's Learning and Organizational Development (L&OD) team. It was created using a pragmatic approach as detailed by Caffarella and Daffron (2013); this approach was selected first and foremost because of its flexibility, which combines well with the dynamic nature of Vocera's business needs. Programs planned with the pragmatic approach take company's needs into consideration, but also pay attention to "the context and culture in which they are working" (Caffarella & Daffron, 2013, p. 13). The needs of the learner are also considered to be highly important; previous experience in the technical support department, feedback from former colleagues, and observations from a recent event of a similar nature played a very large part in the planning of this particular project.

This plan will cover the project background, its scope and exclusions, and will include a rough budget and schedule suggestion. There is also a project timeline that will need to be followed in order to have training complete before the new product is made available to customers. Stakeholders, project contributors, and potential partners are also identified, as well as business systems that may be affected for the duration of the project, tentatively scheduled for December 2018.

PROJECT PLAN DETAILS

1. Project Background and Description

In the last half of 2018, Vocera will release its next major version of software (version 6.0), known internally as "Accord," which will bring together three previously separate pieces of software onto a single platform. This will impact all areas of the business, from sales, who must know how to properly position and sell it to customers, to professional services, who must know how to properly install and configure it, to technical support, who must know how to troubleshoot and resolve issues. The release is intended to take three phases, with smallest customers able to upgrade in phase one (code name "Akaar"), mid-sized customers of up to 500 end users in phase two (code name "Bashir," anticipated to release in Q2 2019), and largest customers in phase three (code name "Chekov," anticipated release date in Q3/Q4 2019).

Given the staggered release time, both professional services (including clinical informaticists, project managers, and implementation engineers) and technical support must continue to provide support for the existing disparate pieces of software while still learning how to install, configure, troubleshoot, and otherwise make the new platform work for both new customers and those who choose to upgrade.

This project will focus on providing training for implementation engineers and technical support, as those are the two groups that need the most technical level of training and education on the new platform. The needs of other groups, particularly clinical informaticists, project managers, and other professional services personnel, will be covered as part of the higher-level, less detailed objectives for these two teams.

Through a combination of lecture, hands-on labs, and scenario-based learning, attendees to this seminar will be introduced to the basics of the new software, including installation, configuration, and troubleshooting. Once they have completed the program, they should be able to install and configure the software, whether in a lab or on site with a customer. In addition, they should be able to set up and configure the required databases, explain basic product function, troubleshoot any issues that may occur, and collect any required information if they are not able to determine the cause of a problem on their own.

2. Project Scope

The goal of this seminar is to introduce a new product to technical support and implementation engineers, and give them tools and knowledge to implement, configure, and troubleshoot it. Participants will include 30 implementation engineers and 35 technical support engineers, all with varying years of experience with the company and the existing technology. Training will be spread over two days and will target installation, configuration, and troubleshooting by using a combination of lecture, hands-on lab work, and simulation. This seminar is intended to give attendees a broad understanding of the new platform, but it will not cover every possible scenario that they might encounter either in the field or working with a customer; some critical thinking will be required for troubleshooting and other duties once attendees leave the classroom.

3. High-Level Requirements

After completing the seminar, attendees should be able to meet the following objectives:

- Describe the three phases of Accord’s release
- Identify the phase in which Accord will apply to various customers
- Install and configure the software in a lab environment
- Identify tools used for troubleshooting and demonstrate how they will be useful
- Solve basic scenarios related to configuration problems

4. Deliverables

To be fully determined after the project has been fully scoped, but a preliminary list of deliverables is as follows:

- A module on installation and configuration of the software
- A module on the changes between software versions
- A hands-on lab so that attendees can install and configure the software themselves
- A module on the tools used for troubleshooting and common error signatures
- Scenarios for attendees to work their way through in order to show comprehension

5. Affected Parties

Affected teams are all from the services organization, including implementation engineers and their practice managers, and technical support engineers along with their management structure. Learning and Organizational Development (L&OD), also part of the services organization, will also be affected, as they will be responsible for managing the project. Services Operations (Service Ops) will help with the administrative tasks, such as arranging for accommodations and catering. Specifics for each team are listed below. In addition, engineering and technical publications (tech pubs) may be impacted, as they may be called upon to help subject matter experts in validating content.

Technical Support: Because there is no way to shut down the technical support team for operation, even for training, this team's participation will need to be done in phases. No more than 25% of the team can be taken off the job at any one given time in order to ensure that existing customer service is not negatively impacted. Additionally, there are technical support employees in three separate locations in the US and two internationally. Some individuals on the technical support team will need to travel in order to attend training, which will impact phone coverage and budget for the project. Technical support managers will likely need to assist in getting budgetary support from company leadership, and will also need to help arrange scheduling due to the concerns listed previously.

Implementation Engineers: Although direct customer impact is not as obvious for the implementation engineers, some consideration does need to be given to their schedules. Since all implementation engineers are expected to attend training, no projects can be scheduled for the dates when the training is to be held. Project managers need to be aware of this when scheduling resources for any customer projects, as will practice managers, to whom the implementation engineers support. There are budgetary concerns for this group as well, though it is not as prevalent, as most of the implementation engineers work from home offices when they are not on customer sites.

Vocera Learning and Organizational Development (L&OD): L&OD will serve as project managers for the summit, and will assist subject matter experts in creating content for training. They will also be expected to participate in all status meetings, which will take away from their normal duties of content creation/validation (for instructional designers) or customer-facing training (for facilitators). They will work with the affected teams to try and minimize impact as much as possible, and will set up meetings with team members who will attend training to gather interviews and feedback on what type of training the teams would find most helpful.

Services Operations (Services Ops): Services Ops has an administrative assistant in both locations. They will arrange for hotels for any remote employees attending in their location, and will also be responsible for catering and menus for their respective locations. Since meals will be provided, they will also assist in managing any special dietary requirements for attendees at their facilities. Services Ops assistants may also serve as on-site resources if any problems arise for attendees, such as needing to depart early due to family emergencies, etc.

Engineering and Technical Publications may also be impacted. Prior to being able to train on product function, documentation for its installation and features will be required. Engineering will also be asked to provide insight into general product function along with any defects or limitations, and any tools built into the software to assist in troubleshooting efforts.

6. Affected Business Processes or Systems

Depending upon where the training is to be held, other employees at the corporate offices may be impacted. Conference rooms that may otherwise be available during other times of the year will not be available during the summit. In addition, employees will need to be made aware that there is a potential for distraction with so many visitors on site. Facilities should also be made aware of the impact that increased conference room occupancy may put on the air conditioning/heating systems, the need for temporary access badges to allow visiting employees to enter the building, and the increased demand on catering for lunches for the duration of the training (also a budgetary concern).

Aside from these concerns, there are no known affected processes or systems at this time.

7. Partners

Potential partners identified for this effort: engineering, technical publications, and human resources.

Engineering: As stated in section 5, engineering may potentially be impacted by project planning efforts. Additionally, provided they are willing and have the available resources, they may act as partners in the planning, particularly when it comes to any scenario-based troubleshooting. Engineers can provide potential scenarios, and will also be invaluable in providing material to

cover for both troubleshooting and issue resolution. Any discussion of or material on tools built into the product to increase supportability will be essential to cover; engineering will act as subject matter experts for this facet of the project plan, and L&OD will assist in designing the instruction for it.

Technical Publications (Tech Pubs): Also addressed in section 5. Partnering with Tech Pubs will ensure that any relevant documentation is ready prior to the project. Installation and administration guides will be used at time of install and to perform initial system configuration, and release notes will provide details on any known issues that are not fixed prior to the software's release. While they will not be subject matter experts, they may be able to provide additional supporting material to the project.

Human Resources (HR): Since travel and budget are concerns for this project, partnering with Human Resources may provide some help. With non-US employees attending the session, HR may need to provide temporary visas or other documentation to allow those employees to enter the country. In addition, HR may also be aware of any partnering companies (hotels, airlines, etc.) that provide services to the company at a discounted rate, thereby reducing the funds needed to perform the session.

8. Specific Exclusions from Scope

As previously stated, this training is intended as an introduction to the new product platform. This training ***will not*** cover the following:

- Changes to technical support process for case management
- Changes to design process for implementation engineers
- Detailed, step-by-step troubleshooting for every foreseeable problem that may occur
- Any other process-specific requirements

This training is intended as an introduction to the *software*, it is not intended to teach process, whether for technical support or for implementation. Any process-oriented materials will come from the respective departments; since L&OD has no insight into process, they are not able to provide training for it.

9. Implementation Plan

Given the nature of this project, is it expected that all material will be created prior to holding the seminar. Learning and Organizational Development staff will meet with subject matter experts to create the necessary training material, including any troubleshooting or scenario-based exercises. L&OD has previous experience in creating game-based presentations for training, and will work with subject matter experts to develop and implement any games. Engineering and tech pubs will

be asked to review material for accuracy, and the hope is that they will also offer any additional information that the subject matter experts miss as part of the review process.

The goal is to avoid a traditional "Death by PowerPoint" seminar and engaging the learners by offering a combination of lecture, hands-on lab work, and scenario-based training or games with each module. Scenario- or problem-based learning has been shown increase both retention and motivation (Hwang & Kim, 2006); the hope is that this will ensure that learners will remember the information conveyed in their training. In addition, we plan to use games to help support delivery, as games "teach employees to solve problems in a non-traditional way" (Azadegan, Reidel, & Baalsrud, 2012, p.75). By providing additional support for critical thinking, we can ensure that we do not need to cover every potential problem in detail, as long as we give a good foundation of knowledge.

Learning will be spread over two days, 8am to 5pm, with a one-hour lunch break in the middle of the day, and will comprise four sessions, two each day. Periodic breaks during each two-hour session will also be provided; although mid-session break times will not be scheduled, strict adherence to a return time by the session attendees will be expected. Each session will have a lecture component, then a supervised lab, and finally, a scenario to be resolved to encourage critical thinking about the material covered. The intent is to ensure that each section builds upon those that have come before, so product installation will take place first, followed by configuration, and scenario-based and troubleshooting content.

Although teach-backs have been used in the past for training attendees, it has been determined that they will not be used for this program. The intention is to ensure that learning occurs, but without causing undue stress on the participants. Based on discussions and previous experience with the technical support team in particular, it has been determined that teach-backs will be more harmful than helpful for most of the team. While they are accustomed to engaging with customers individually, most are not used to presenting, and uncomfortable doing so in front of large groups. Since the intention of this program is to increase technical skill rather than soft skills, at this time, teach-backs will not be part of the project plan.

10. High-Level Timeline/Schedule

Phase 1 of "Accord" is expected to be released before the end of Q4, or December 31st, 2018. Training for implementation engineers and technical support has been identified by Vocera's product management team as a 'gate' or requirement that needs to completed before the software can be released. However, past experience has shown that this type of training must not be provided so far in advance of the product release date that any training is rendered ineffective.

A rough timeline follows, to be refined as the project needs are solidified:

Date	Activity
July 15, 2018	Identify project team who will be creating content Send internal needs evaluation to the teams that will be attending to identify their ‘wish list’ of topics to be covered and ideal training format
August 1, 2018	Rough outline of content to be trained; identify any technical or external resources that will be required to create content Review initial evaluation feedback to be considered as part of content design
August 15, 2018	Preliminary attendee lists expected Preliminary draft of training schedule
September 15, 2018	Preliminary location details should be delivered to project team, including information on estimated cost Suggested dates to be confirmed
September 30, 2018	Initial content development storyboards should be complete Short list of locations should be finalized
October 15, 2018	First draft of training materials due for team review
October 31, 2018	Final location and time decisions to be made so that attendees can begin booking travel
November 15, 2018	Final draft of training materials due for team review Beta audience should be identified
November 30, 2018	Initial teach of material to beta audience When 2-day session is complete, send post-training evaluation to the beta audience
December 21, 2018	All implementation engineers and technical support attended seminar Send post-seminar survey
January 1, 2019	Send post-seminar assessment to gauge comprehension

11. Budget

Vocera's services organization leadership has stated that each employee has a maximum of $3000 per year allocated for internal, company-led training. Since there will be 65 employees attending, maximum budget is $195,000. This is, however, a rough estimate; travel costs will be counted against the $3000/employee yearly maximum for the 35 attendees from technical support, but will *not* be counted against the maximum for the implementation engineers who are attending. For attendees from technical support, some funds may need to be 'borrowed' from local attendees in order to allow the remote employees, particularly those from the international team, to attend.

The following will need to be considered as part of the budget:

- Airfare and lodging for visiting attendees
- Airfare and lodging for any presenters who do not work out of the corporate office
- Catering (lunches) for 8 days (4 2-day sessions)
- Conference or meeting space, if the corporate office is not used
- ESTA applications or B-1 Visas, if needed, for international attendees (see section 13)

Recommendations:

Host two sessions at the corporate headquarters in San Jose, CA, and two sessions at the corporate office in Fort Wayne, IN. This will eliminate the need for expensive conference/meeting space. It will be a temporary disruption to day-to-day function at each location, but will save a significant amount of money. Additionally, it will eliminate the need for expenses related to hotel stays/meals for any local employees.

Encourage remote employees to carpool whenever possible. Keep a record of flight information for anyone coming in from out of town to help reduce the number of cars needed. Additionally, for those remote employees who will be attending in the San Jose office, encourage the use of public transit as much as possible; the airport, the corporate office, and many of the hotels that offer a corporate discount are all on the same light rail line.

Encourage remote employees to book travel as soon as they know the dates and location for the session they'll be attending, as airfare prices increase as departure dates get closer. Additionally, as much as we are able, we will try to schedule implementation engineers for the session to which their home office is closest. That may not always be possible, considering there are heavier concentrations of IEs in the east, but a shorter flight will help reduce cost. Similarly, where possible, technical support will attend one of the two sessions at their home office. The UK-based TSEs will attend in Fort Wayne, and the Australia-based TSE will attend in San Jose.

There are two hotels in the San Jose, CA, area and three in the Fort Wayne, IN, area that provide corporate discounts, and all offer an additional discount for a group rate. Reservations for

accommodations will be made by one of the Services Operations administrators to take advantage of the reduced cost.

Utilize existing caterers for all lunches rather than ordering and expensing each meal individually. The existing caterer typically charges anywhere from $10-$14 per person, per meal. Each group will have roughly 16 attendees and 4 facilitators per day, for a total of 20 individuals. Lunch will also be provided for the technical support teams who are *not* in attendance, in order to ensure phone coverage. Management should also be included, bringing the total number of employees to cater for lunch up to 35. Based on these numbers, the lunch catering estimate is roughly $525 per day, $4200 for the entire event.

A rough budget has been created with a few estimates based on past training sessions and has been provided along with this package.

12. Additional Project Details

Steps to complete project:

1. Identify project team, including stakeholders, subject matter experts, content developers, facilitators, and operational planning resources (to determine location, cost, etc)
2. Create learning objectives
3. Identify attendees and location where training will be held
4. Develop content with subject matter experts and instructional designers
5. Review and beta-test content with a small audience
6. Create a survey to be sent to the attendees once the seminar is complete
7. Create an assessment to be delivered two weeks after the seminar

13. Considerations for International Employees

Since international travel will incur significant expense, and due to the potential complications for international employees entering the country, several extra considerations have been part of the planning process:

1. Can international employees be allowed to attend remotely?
2. Will providing travel funds for 4 UK-based employees and 1 Australia-based employee cause issues with the overall budget?
3. Will Visas be required for any/all of the international attendees?

Remote training: Many of the activities *could* be done remotely, as employees have access to their lab systems from their own offices, or from their homes (when connected to VPN). A Webex could be set up to allow remote attendance, if necessary. There are two significant challenges, however. First and most significantly, the program is intended to run from 8am to 5pm at the hosting office's local time. 8am-5pm pacific time is 4pm-1am GMT for the UK

audience, and 1am-10am the following day for the Sydney, Australia-based engineer. The eastern timezone might provide a marginally better experience for the UK audience; 8am-5pm eastern time is 1pm-10pm for the UK audience, but the Australia engineer would attend from 10pm-7am. Additionally, after discussion with the director of technical support, remote training should only be offered as a 'last resort' option. Since the technical support teams rarely spend time together, this program is being viewed both as a training opportunity and also a networking or team-building opportunity. Attending remotely would defeat this purpose.

Budget: Based on the request of the technical support director noted in the 'Remote training' paragraph immediately above, budget will be approved for international travelers.

Visas: After brief discussion with Human Resources and some independent research, a Visa is not required for citizens of Australia and the UK (among others), provided they have applied and been approved for the Electronic System for Travel Authorization (ESTA). ESTA will allow visits of up to 90 days for either business or leisure, and will negate the need for a B-1 Visa. There is a small fee to apply for the program ($14 US), which can be submitted as a business expense, and according to the US Customs website, approval is typically immediate, or may take up to 72 hours. If approved, ESTA is valid for 2 years. This is significantly faster, less expensive, and less labor-intensive than the B-1 Visa, which can take up to 60 days to process, costs $160 for a single visit, and requires more documentation and an in-person interview with US Customs and Border Patrol. Since the project is still several months out, the 3 UK attendees and 1 Australia attendee will be able to apply to ESTA now, and if denied, the Visa process can begin. In addition to joining ESTA, Human Resources also recommends that international attendees travel with a welcome letter that explains the purpose of their trip and its duration, in addition to printed copies of travel itineraries indicating a hotel reservation and a date of departure, as that may ease any issues when entering the country.

14. Observations

This project plan was developed based on more than six years at Vocera, both working in technical support and training, and also working with implementation engineers and engineering. We have always had a need for more training; in the past, product training has been an afterthought, usually given after software was made available, and led by engineers who were not used to delivering highly technical information to an audience that needed a more generalized view.

Additionally, previous experience with 'transfer of information' (TOI) sessions was also put to use during planning. Most TOI sessions have been delivered solely by PowerPoint, with no hands-on lab work, or labs that didn't function because the demand was higher than expected. Nearly all post-TOI surveys have complained about information delivered in this fashion, with

many attendees remarking that retention was difficult based on the way that the information was presented.

My biggest concerns are the availability of information from engineering and tech pubs, and whether the release date for the software will slip. If the software release date schedule changes, then the training schedule will need to change as well, since neither software nor documentation will be released on time. While we could, in theory, hold off on the training program until we had a completely firm release date for software, that would mean a lot of scrambling, from creating training in time for the project to making arrangements for travel for any remote attendees.

Before working on this plan, I talked to several technical support engineers and a couple of implementation engineers and asked what they thought their ideal training scenario would look like. While there's no way to accommodate every single request, all potential participants advocated against a purely lecture-based training, and most embraced the idea of scenario-based learning and hands-on lab exercises.

Based on the feedback both from previous TOI sessions and from the individuals directly, I think that this program has a good chance of capturing and keeping their interest, and also increasing retention. Lecture will still need to be part of the program, at least to do some basic information delivery, but if we can set labs up to maximize their time working with the new software, I believe that will be the best thing we can do to ensure the attendees have all the tools they need to learn.

References

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