Restructing Xerox Customer Service

A proposal to redesign the employee learning experience

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333a: Analyzing needs and functions in learning environments
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“The single greatest challenge facing managers...is to raise the productivity of knowledge and service workers...it will determine the very fabric of society and the quality of life in every industrialized nation.”

PETER DRUCKER, 1991

“The use of appropriate learning environments, designed to support the appropriate degree of collaboration and self-direction, is key to promoting learning within any school or organization. As new interactive technologies and multimedia training programs emerge, the role of the environment becomes even more important.”


Introduction
The organizational structure of Xerox Customer Service is divided into supplies/sales, billing, and telemarketing. This functional structure made sense in that it was based on Xerox’s internal workflow, however it does not translate to an effective customer service model.

It was typical for a customer to call in with a problem that crossed these functional boundaries, for instance, needing both service assistance and account/billing intervention. This would result in the Customer Service Representative (CSR) to transfer the call to another division in order to complete it, forcing the customer to restate their story multiple times.

Once the call was transferred, the new CSR would then need to type in the information again, a less effective use of their time. Basic work satisfaction was being compromised since they were not able to help the customer completely solve the problem.
By separating telemarketing into its own division, the structure does not take advantage of the fact that CSRs have a customer on the phone, offering a prime opportunity to sell more Xerox products.

All of these considerations have brought Xerox to redesign their Customer Service organizational structure, requiring new learning for all employees.

Learning problem
The CSR environment is designed to support a representative’s technology needs: a computer and a phone. The CSRs are in a typically corporate environment: shared cubicles customized to their tastes with many people milling around the space creating background noise and distractions. There are not many opportunities for collaborative learning unless the CSR seeks it out themselves.

Current CSRs do not have expertise in the knowledge of multiple subjects as they are now being asked to have. They do not possess the skill of using the chosen software, CasePoint. This requires building new skills and understandings, and creating an environment for learning.

Design objectives
As a result of our design solution, we would like the learners to:

*Develop new practices that enable a high level of participation in their learning*

Our design of the training program provides explicit opportunities for CSRs to participate in all aspects of training from curriculum development to teaching to immediate deployment of suggested practices in their work space. The CSRs should become more intentional in their work practices.

Our redesign of the work space is motivated by the principle that if you can see a resource then you are more likely to use it – be it people, manuals or ideas. We want to make sure that all resources are explicitly accessible to everyone.

*Develop more lucid understandings for problem solving*

The CSRs need to form understandings not just of the material systems but also of the psychology of customer interaction. This is to help them develop an overall mental model of what it is to be a CSR in the integrated environment. This will add context to their daily work environment.

*Use new technologies designed to support their performance*

The aim is to introduce new tools to the CSRs which will help them to make better use of their time and keep them up to date on the relevant information.
Design rationale
The main motivation behind this restructuring is that the environment is not geared to the integrated customer service approach because there is no conscious attempt to integrate individual employee expertise into a common whole. It is essential that they are enculturated into this new community.

We use a mix of the three perspectives in designing a learning environment that facilitates the employees acquiring new skills and understandings along with work practices. We concentrate on redesigning their physical space and embed curricula and training in this new environment. This design approach employs principles that are mainly situative in nature, but also include principles from the cognitive and behaviorist learning perspectives. The list of actual design principles used can be found in the appendix.

Design solution
The quantity of informal learning is surprising: The U.S. Department of Labor estimates 70% or more of work-related learning occurs outside formal training. Our proposed design solution takes this reality into consideration, focusing on three main areas:

– Organizing people to facilitate learning
– Redesigning the work environment to create a culture of learning
– Creating training curricula, processes, and tools that will be embedded in the learning environment

Organizing people to facilitate learning
1. Team structures
In order to create environments of participation and social practices of inquiry and learning, our redesign organizes people into multi-disciplinary teams. The target team size would be 8 people, constructed of a mix of experts in the different structural domains: billing, service, supplies/sales, telemarketing. The teams would sit together, create a name for themselves, and have regularly scheduled meetings to touch base with each other regarding their productivity goals, report challenges and successes, and exchange ideas about problem-solving techniques. Our recommendation is that the teams meet for a maximum of 30 minutes a week, at the time and location of their choice. Teams should stagger their meeting times with each other, to not interrupt the customer call flow. [Employs Greeno principles: S2, S2, S6, B1]

2. Peer Experts
Our organizational structure will also create a new role in the company of expert employees. This will allow people to know who to go to when asking a complex question, and also the experts will help design and teach the curriculum described later in this document. The productivity commitments for this role would be reduced, to reinforce their availability for other CSRs. The role would have designated “office hours” in addition to time where the Peer Expert walks around to see what questions or ideas team members have. [S1, S2]
Redesigning the work environment to create a culture of learning

3. Shared space design

The proposed physical environment for Xerox call centers would be designed to encourage learning through open communication between employees and use of resources. Team members would be seated together in “pods” with a central open space for storage of common resources such as archived company communications and printed manuals. The central space would also include a different copier model in each team pod that can be used by employees to examine features, processes, and parts, or for a peer expert or other CSR to use for demonstration purposes. [S1, S2]

Aerial view of pods. Note CSRs are able to see the people next to and across from them. Bookshelves and a copier are in the central shared team space.
4. Workstation design
The pods would contain 8 desks, with each desk configured for the CSRs tastes. The pods have been designed such that CSRs within teams do not have their backs to each other, encouraging open communication. The walls are low so that CSRs can see and hear each other. Since the open space will generate more ambient noise, the workstations include fabric separators that absorb sound. This allows for both a private and public experience. The design of the workstation includes 2 monitors for the CSR to allow CasePoint to fill one screen, while being able to simultaneously explore other research to answer their questions (such as online manuals, or IM). [S1, S2, B3]

PLAN VIEW OF WORKSTATIONS SHOWS LOW, TRANSLUCENT WALLS AND ACOUSTIC FABRIC FEATURE.

5. Learning tools in the environment
While the physical space provides incentive for and fluidity with communication, learning tools displayed in the public spaces encourage employees to participate in social practices of inquiry.

- Rotating display posters remind CSRs of common answers, tips, or topics to remember while on a call. [S1, B2, C3]

- Comprehensive manuals to supplement CasePoint stored in the easy to access common space in team pods. [S1]

- Informal “did you know facts” placed in random places such as stairs, elevators, and bathrooms would provide a fun, culture building, exchange of information. [S1]

A public tracking of customer service call solves against team goals provides an opportunity for teams to publicly build their identities, or to know which teams to seek
to learn successful practices. A monthly reward would provide further motivation. [S1, S2, B2]

7. Art display space and competitions
As an alternative approach to developing an understanding of what is possible with Xerox’s copiers, the we propose hanging professional artwork made with photocopiers, and a quarterly curated art contest where employees would generate art around a particular theme using the copiers in the call center. The curation creates a reward, and helps individuals build identities around creativity and flexibility with Xerox tools. [S1, S2, S5, S7, C1, C5]

A sketch of the public space that overlooks the main call center floor. Shown are (1) Gallery space for display of winning employee created artwork, (2) Information posters in the environment and (3) Team solve scoreboard.

Creating training curricula, processes, and tools that are embedded into the learning environment

8. Curricula: Training sessions
Instead of taking employees out of the workspace for a sustained period of time, we propose training sessions that are conducted in the public space of the call center. Two teams at a time will go through the training sessions as to not disrupt call response availability too dramatically. The sessions will take place once a week for 2 hours at a time, as to not overload the CSR with information, and to allow them to practice using the new information soon after it has been presented.
To create the session content, the instructional designers at Xerox will work with a Peer Expert to develop the curriculum and eventually present the session, pairing domain knowledge holders with those who understand pedagogical design. With this practice, the Peer Expert will also have an opportunity to learn new skills and practices. The training sessions allow the CSRs to learn new skills and understandings in the following topics. Embedded in the curriculum will be self-assessment and evaluation of each other to provide feedback. [S1, S2, S3, S4, S6, C1, C2, C3, C4, C5, B1, B2, B4]

- **Tools, Casepoint:** Instruction on how to use CasePoint would consist of simulated real-world situations using sample callers. This session would happen early in the training, because it is the master database of expert knowledge and the CSRs do not yet have this information. Incremental sessions of increased complexity for both reinforcement and new learning will happen once a month. The sessions will include instruction on how to interpret customer statements to use CasePoint most effectively. Taking human nature into account, we have modified the principle that CasePoint requires direct transcription of the customer’s problem.

- **Tools, instant messaging and automatic tutorials:** Basic skills required and understanding of when and how to use the new tools available (described in more detail below).

- **Copiers:** includes hands on repairs, identification of parts and processes, instructor overviews and demos with hand-outs

- **Customer service:** includes simulations of challenging customer calls (such as a complex problem, or an irate customer) for the CSRs to practice with, and discussions of strategies for coping.

- **Nature of problem solving:** role-playing game where Peer Expert employee takes “calls” from employees pretending to be customers to see how expert reacts. CSRs can use the opportunity to be creative in how far they push the Peer Expert.

9. **Processes**

The radical change in the environment would introduce new workplace practices for the CSRs including: [S1]

- Going to Peer Experts or other CSRs with questions. Currently CSRs work very independently, and this practice will present a new opportunity for learning.

- Accessing manuals in common space

- Compiling company communications to keep in team shared space

10. **Tools**

New tools will be available to increase productivity. In some cases, tools duplicate information – this accounts for the different learning styles and practices of the employees. [B1, B3]

- **CasePoint:** is the main information resource to address most customer concerns. The software will be expanded to hold the information in the 4 functional silos. This work will be outsourced and included in a separate proposal.
Automatic tutorials/practice screens at workstation: Training tool available at the CSR’s workstation. It offers new information or tutorial about CasePoint, and general copier knowledge.

Instant Messaging system local to Xerox: To enhance productivity during calls

Company-wide message board and mailing list: To gain general understanding separate from the context of the call. This tool can be used to send service information with categories such as:

Common answers to common problems for specific copiers.
For example, “On copier model X8100, it is common for air to fill the toner cartridge. A recommended fix that is not shown in CasePoint is to open and close the door 3 times. Be on the lookout for this.”

New developments.
For example, “The rate for after hour service calls has gone up from $150 to $225”

Challenging questions.
For example, “Has anyone dealt with the F450 having recurrent paper jams. I’ve tried everything in CasePoint and all my calls end with a Service dispatch”

Assessment
The easiest way to assess the success of the new plan would be to look at the solve rate. But in keeping with the user-centered design, we think that larger issues need to be examined.

Ultimately the objective of this redesign was to address customer and CSR dissatisfaction. To this end we propose a two-pronged assessment. We intend to use ethnographic research methods supported by traditional testing of the skills to be acquired. In this manner we can address larger concerns of employee morale and customer satisfaction.

We use the following guidelines to design our study:

Validation of Design Rationale
Do the CSRs form positive epistemic identities? The CSRs will be asked about their level of confidence for the four functional silos before and after the redesign. This is to investigate how they see their role in the larger customer service organization.

Successful Implementation of Design Objectives
The design objectives are as much about how the employees learn the new job as they are about how much they learn. Our assessment process will consist of:

– Anonymous pre and post interviews so as to glean honest CSR opinions about the new environment and training program.
– In these we will ask about their experiences with customers and ask them to compare and call out what if anything is different about new experience.

– Contest to assess their knowledge about the actual workings and the repair of copiers.

– A multiple choice pre and post test on the subject knowledge of the four functional silos.

– A project to be done in the same teams of 8 as above over a period of six months:
  1. To identify the 20 most common customer complaints and write a walk through of the ideal Case Point solution for each
  2. Identify top 5 characteristics of an irate customer and write up an ideal call scenario for them
  3. Identify the top 5 ways to know that you have a satisfied customer
  4. Identify the top 5 ways to turn a service call into a sales order
  5. Each team picks a copier model and writes a comprehensive report for it. (This report will serve an additional role as a repository of copier knowledge).
  6. Each team member assesses who they see as successful CSRs and why, along with a self-evaluation write-up.

– Finally, at the end of six months, take a count of how many employees wish to go back to the old model of working.

**Conclusion**

We envisage that this process of transforming a Tower of Babel into a universal language should take place over a year and lead to greater customer satisfaction coupled with improved employee morale leading to enhanced productivity for the company as a whole.
Appendix: Principles from Greeno, et al.

Learning Environment

S1 Environments of participation and social practices of inquiry and learning

S2 The learning environment provides support for development of positive epistemic identities.

C1 Interactive environments for construction of understanding

B1 Routines of activity for effective transmission of knowledge

B3 Individualizations with technologies

Curriculum

S3 Curricula must support the development of disciplinary practices of discourse and representation.

S4 Curricula must provide opportunities to learn practices of formulating and solving realistic problems.

B4 Sequences of component to composite skills

Assessment

S5 Assessments must focus on the learner's participation in inquiry and social practices.

S6 Learners need to participate in constructing their own assessments.

S7 Design of assessment systems must take into account not only the outcome of the learning process, but also the process of learning practices (e.g. curricula and teaching practices within meaningful activities), and the dynamics of the learning environment.

C5 Credit varieties of excellence

References