Quasi-participatory service design in organizational context: A case study

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Abstract

Service Design is about creating a desirable end to end experience for service-users. Participatory design involving service-users and stakeholders is an established paradigm in service design. There are constraints as well as opportunities while designing for organizational services. The Participatory design paradigm is appropriate in this context, however, the traditional participatory design methods have limitations and need to be adapted to overcome the constraints and leverage the enablers. The suggested approach comprises the aspects: a mix of tacit and explicit knowledge, synchronous and asynchronous working, full and partial participation, and a mix of 'lite' and in-depth application of design methods, and leveraging the knowledge externalization techniques. This service design case study is about high-touch hiring and joining experience of new entrants in a large IT organization. The outcomes confirm the benefits of the proposed approach suggesting its appropriateness for designing services within organizational context. It also offers the promise of wide applicability.

KEYWORDS: participatory design, service design, organizational services, tacit knowledge, employee onboarding, quasi-participatory design

Introduction

Ideas such as 'collaboration', 'working together', 'co-design', and 'participatory design' are widely discussed in the design field. In the era of specialized knowledge workers, it is imperative that employees of organizations master the art of collaboration to succeed in today's highly dynamic and networked world. Collaboration is essential and beneficial, but it has its own challenges such as conflict and disagreement in the team, business functions wrangling, snail-paced decision-making, and bureaucratic tangles. Unless these challenges are overcome, collaboration is likely to fail (Weiss & Hughes, 2005). For successful collaboration which goes beyond cooperation or teamwork, the process must ensure that every contributor's voice is heard and acknowledged. The elements of cooperation are knowledge

sharing and performing assigned tasks, but it might not imply generative interactions, debate, and working towards common goals (Campbell, 2011). Innovation culture can be nurtured through effective collaboration of employees (Kelly & Schaefer, 2014). Trust, communication, a shared vision and a purpose are critical for effective collaboration. Participatory Design hinges on successful collaboration among experts from diverse fields to come up with design outcomes that are useful, usable, and innovative. Involving not only primary end-users but also secondary end-users and other stakeholders was found to be useful in participatory service design (Korpela, et al., 1998).

Services are multi-dimensional, complex, intangible, and heterogeneous in nature. Hence there is a need to include various stakeholders who have a stake in the success of the design outcomes. These stakeholders are likely to have different kinds of knowledge and expertise which could strengthen the multidisciplinary collaboration. To design user-centric services, designers need to understand the expectations and needs of the users; keeping in mind the service context and environment. Different stakeholders also enrich the understanding of service situation. As a result, participatory design is gaining ground across domains (Sangiorgi & Clark, 2004).

Organizational Context and Organizational Services

Increasingly the organizations are turning to in-house service design teams for business purposes and for internal services (Blomkvist, 2015) (Mrad, Vandertuyn, & Mahraj, 2015) (live|work, 2016). Service design within large organizations can however be markedly different compared to design done through external design consultancies (Atvur, Rau, & Wilson, 2015) (Marlovits, Fischl, & Mang, 2015). The organizational conditions can either aid or hamper traditional design approaches (live|work, 2016). Design teams are generally aware of organizational structures, culture, politics (Blomkvist, 2015), informal opinions, and sometimes restricted knowledge. The design teams may face challenges of support and investment from leadership (Mäkijärvi, 2015; Katz, 2015), and lack of resources or competency skills (Katz, 2015) (Beyerle & Wend, 2015). Organizational structures lead to segregation and 'department' perspectives or silos which makes sustained collaboration difficult (Atvur, Rau, & Wilson, 2015). While recognising the constraints these factors impose, they can be leveraged as well to support the design activity. For instance, a team can build long-term relationships with employees and create a knowledge pool (Mrad, Vandertuyn, & Mahraj, 2015).

The design of organizational services could be as challenging as that of services designed for clients. However, human centric, thoughtful design of organizational services aimed at employees often receives inadequate attention leading to impaired service experience and loss of morale. There is a direct correlation between positive employee attitude and an organization's business performance (Koys, 2001). Also, the employees can be co-opted as responsible organizational citizens and offered opportunities to contribute to initiatives, including in designing organizational services, through voluntary participation (Podsakoff, MacKenzie, Paine, & Bachrach., 2000). High-touch services that require empathy towards end-users might be particularly benefited by fostering a sense of 'organizational citizenship' among the stakeholders and this could lead to improved quality of organizational services.

Participatory Service Design

There is ample evidence in literature of the benefits of participatory design in general as well as in organizational contexts. Design concepts generated by participatory design teams are more innovative and useful than those generated by design professionals alone (Trischler, Pervan, Kelly, & Scott, 2017). End user as well as stakeholder participation in service design helps in gaining better knowledge of users' needs, generating out-of-box ideas, improved focus on users' needs, generation of innovative solutions that enhance service experience, and long-term benefits such as more successful innovations, increased loyalty of users and higher user satisfaction (Steen, Manschot, & De Koning, 2011). One of the keys to success in designing internal services could be the effective use of the rich tacit knowledge that stakeholders have about the end-users and the service context. Ehn (1988) suggested that participatory design attempts to steer a course 'between tradition and transcendence' that is, between participants' tacit knowledge and designers' more abstract, analytical knowledge. Therefore, participatory design methods should appropriately leverage the stakeholders' tacit knowledge and designers' explicit knowledge in a productive synthesis (Spinuzzi, 2005). The departmental and hierarchical structures of large organizations lead to, therefore, narrow perspectives or incomplete understanding of a problem (Atvur, Rau, & Wilson, 2015). A key aim of participation of multi-disciplinary stakeholders in organizational service design should therefore be to bring diverse and important perspectives together to solve complex service design problem.

The stakeholders could be motivated to participate in a design project by acknowledging the value of their skills, experience and effort towards the design outcomes (Kensing & Blomberg, 1998). It is challenging though to sustain their interest and enthusiastic participation throughout the service design life cycle. Therefore, the participants need to be selected carefully, taking into account their motivations for participation and scope of participation (Kensing & Blomberg, 1998). Further, the mix should be such as to leverage the appropriate tacit knowledge spread among various stakeholders. However, practical problems such as unavailability of team members throughout the design process, multi-location teams, and effort required in coordination remain. Participatory design takes a good deal of time, resources, and institutional commitment (Spinuzzi, 2005). The stakeholders in an organization have their own mainstream responsibilities and they might be spread across different locations (Keller, 2014). They often have business demands and unanticipated obligations which lead to interruptions or limited availability. The coordination of participatory work also requires considerable effort and time. This could lead to delays in project completion. These limitations might adversely affect the progress of the project and ability to meet the goals of design. Participatory service design studies, have exhibited challenges such as time crunch and logistical difficulties (Bowen, et al., 2013), which could get aggravated if the team is geographically dispersed; a common situation in large organizations. Learning and collaboration among stakeholders from different 'communities of practice' transcending the perspectives and paradigms of their fields morphing into 'community of interest', that is, those having shared design outcome objectives is a complex and multi-faceted phenomenon (Fischer G. , 2001). Spatial (across distance), temporal (across time), conceptual (across different communities of practice, and technological barriers prevent effective collaborative design and formation of communities of interest. (Fischer G. , 2004). A participatory design method must address these challenges.

The team had experienced such challenges previously while designing services in the organizational context using traditional participatory design process (Mahamuni R. , Khambete, Mantry, Das, & Verghese, 2016) (Khambete, et al., 2015). We discuss some of them and partial solutions which were tried out. To begin with, there was often a demand to show quick progress. A partial solution was to blend an agile approach, multiple iterations, and stakeholder workshops. The iterations also helped fortify the learning of design methods by the stakeholders, who had no previous exposure to designing. Since the participants had diverse backgrounds, skill levels, and experience levels, it was necessary to arrive at a shared vocabulary. A Pattern Language for Service Design (Khambete P. , 2013) was used to address this need. We also found early evidence that flexibility in the mode of working

(synchronous, asynchronous, sequential, individually, and so on.) along with the use of the externalised artefacts as mediators helped establish continuity across sessions, and effective collaboration leading to the overall progress. A few members of the participatory design team were not able to participate adequately due to reasons such as mainstream work pressure, change in work priorities and context change. This led to discontinuity and interruption of the functioning of the participatory team. Sometimes new members were added to the team as their replacement which led to considerable additional effort to bring everyone on the same page and to ensure the quality of the engagement, their motivation and enablement to contribute. There were occasions where insight synthesis took a lot more time than expected. All these had direct or indirect impact on the time and effort required to design the chosen services.

Along with the challenges, organizational context also provides opportunities such as the ease in accessing the stakeholders and having participatory team members that are themselves also service-users of some services and providers of others. The later offers a unique opportunity of a well-rounded set of perspectives. These opportunities are utilized in the proposed approach, which is holistic and brings together suggestions from literature and previous experiences of successful partial solutions.

Proposed Approach

To overcome these challenges and keeping the benefits of the participatory design process intact, we used a modified participatory design approach, the elements of which are explained in table 1.

Challenges	Approach elements
Time availability, multi-location	Team members working together and separately
Time availability, multi-location	Synchronous and asynchronous work
Time availability, multi-location	Team members working concurrently but from different locations
Time availability, multi-location	Facility of full or partial participation
Different kind of expertise and tacit knowledge, time availability	Distribution of work items to match the team member expertise and available time
Access to end-users, constraints on time available for user research	Enablement for leveraging tacit knowledge
Inadequacy of explicit knowledge due to constraints on time available for user research, triangulation of tacit and explicit knowledge	Synthesis of tacit and explicit knowledge through team interactions and consensus
Multi-location, fluid team, carrying forward the knowledge and common understanding throughout the design life cycle	Conversion of synthesized knowledge into shared artefacts
Multi-location, fluid team, quality of knowledge synthesis, solutions and artefacts	Planned face-to-face interactions at critical junctures

Table 1 – Challenges and associated solution elements in proposed quasi-participatory design approach

A similar approach was successfully used by Ajiboye and Ajitoni (2008) in participatory learning, where learners worked independently at their own pace and then met in groups to share the learnings. Similar to the collaboration aspect discussed in participatory design, computer-supported cooperative work (CSCW) focuses on supporting collaboration among spatially and geographically dispersed group involved in an activity, though keeping technology at its centre (Carstensen & Schmidt, 1999) (Johansen, 1988). Distributed

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computing is another technological paradigm, in which a task is divided into multiple and each one of them is solved by one or more computer systems which interact with each other (Distributed computing). These different approaches in various fields give one the basis for proposed approach.

We refer to the proposed approach as quasi-participatory design as depicted in figure 1. This approach was validated in the context where stakeholders had rich tacit knowledge about service-users as described in the following section. In general, for organizational services, the service-users are its employees including the stakeholders. Also, stakeholders have regular and varied exposure to other employees which helps them to build tacit knowledge. These interactions are formal as well as informal, which help them build rich tacit understanding of service-users. As part of the service design team, the stakeholders' tacit knowledge can be uncovered through group processes and leveraged to draw insights which can inform design. In such situations, stakeholders also may come with their own biases and hence there is a need to triangulate the data with user research methods like observations, surveys and interviews.

The following section explains a service design case study in an organization, where quasi-participatory design approach was used. The study followed research through design methodology, which focuses on addressing a research problem, while also focusing on the end product of design (Godin & Mithra, 2014). We used this methodology to validate the proposed approach. In further section, we put forth actionable recommendations for service design in participatory manner.
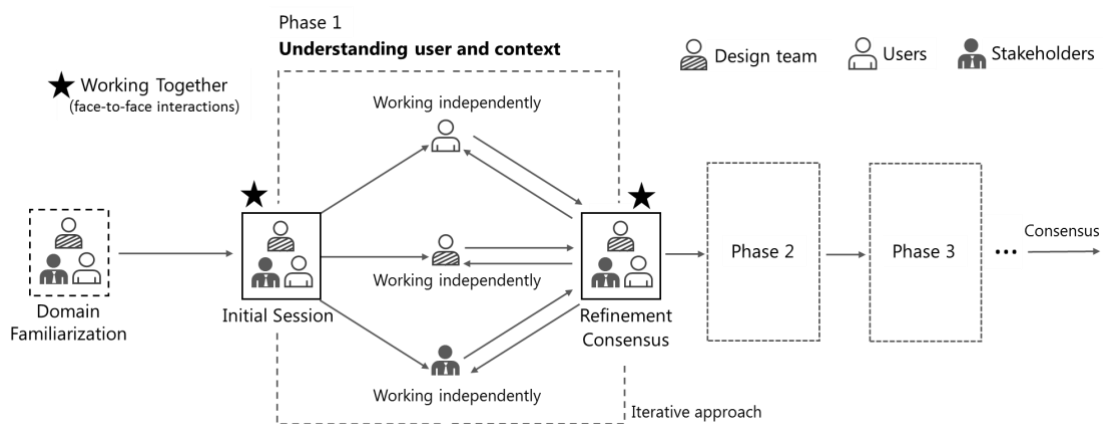

Figure 1 – Quasi-participatory Design Process

Re-Designing the On-boarding Service

It is vital to create an impactful and desirable experience of joining an organization for the candidates going through the hiring and joining process. Research has shown that new employees form their attitudes and beliefs toward their organization very early in the job, which influence their decision to remain in the organization (Bauer & Green, 1994). It is important therefore to treat every new employee as a new 'customer' that the organization is prospecting and invest in building the relationship. Organizations should ensure that not only the new employees' expectations are met but the experience in the initiation in the organization is of high quality. Taking into account time, people, and costs incurred in hiring, onboarding and training the candidate, losing new entrants, particularly the experienced professionals, leads to high monetary losses, opportunity costs and could impact the morale. This acted as a key motivation for us to redesign the existing joining and onboarding service of a large IT organization with over 350,000 employees. The team believed that the effectiveness of the onboarding program can be enhanced significantly by framing it as a 'service' where new employees will be the customers. Such a reframing shifted the focus

from simply improving operational processes to addressing each component of the service, keeping the candidate's holistic experience as the central concern. To achieve this, the design team was formed comprising of 'customers' of this service that is, employees of the organization; service owners, that is, representatives from the talent acquisition group and the human resource management group. The key areas to focus upon were identified as – creating an appropriate mix of high-touch and technology-mediated hiring and joining experience for the candidate, helping them to get assimilated in the project teams in the initial period of one year after joining, thereby reducing the attrition of newly hired employees.

The stakeholders identified the hiring and onboarding phases as shown in figure 2. The brief activities associated with the phases are **Considering job change** – usually while employed at another company; **Exploring options** – including various employment platforms, social media and contacts; **Applying for a job** through the organization's career portal or other channels such as referral programs and emails; **Selection phase** –primarily, interviews of the accepted applicants; are scheduled and conducted; **Acceptance phase**–the candidate receives an offer letter, along with details about the job; **Joining preparation** –the candidate conveys the acceptance of the offer, and initiates arrangements such as providing authentic documentation, possibly for relocation, , and leaving the prior employment; **Onboarding**–the candidate joins the organization and attends induction sessions. This is followed by assignment to a project which has an 'Initial phase' in which necessary infrastructure and support is provided, a longer '**Assimilation phase**', and at the end of one year an event, celebratory **Joining anniversary'**.
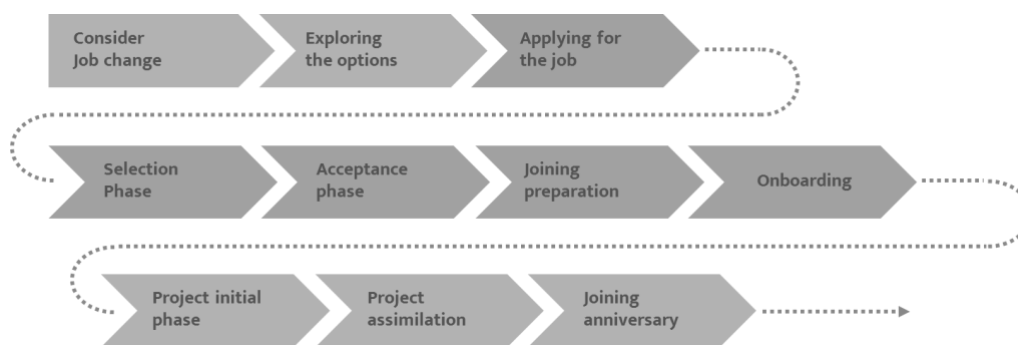

Figure 2 – Candidate journey from phase of considering the job change till joining anniversary

Participants

The service-users included candidates and new employees that had joined through "lateral hiring" (that is, professionals with experience ranging from 2.5 years to 12 years) who participate in the hiring and joining process. The service providers included interviewers, recruiters, trainers, human resource teams, project managers and other employees of organization (who could be acquaintances of the service-users). The design team comprised service-users (employees at large), service owners (recruitment function and human resource management function), and people with technology background and Service Designers who acted as facilitators throughout the project. The participatory design team was spread across two different cities, but in the same time zone. Having stakeholders from different domains, different locations and who closely interact with service-users helped us understand and identify the improvement areas. Also, the team had rich tacit knowledge about the service-users due to their long period of engagement with the service uses as a part of their roles. This knowledge was leveraged whenever the service-users were inaccessible.

Method

Domain Familiarization

Members of the team lack understanding of others' work domains. Therefore, initially, the recruitment team sensitised the Service Designers about various aspects of experienced candidate recruitment and onboarding. The current challenges such as the gaps in communication, long process duration, in-process dropouts, employee satisfaction, and infant attrition were discussed. Subsequently, two workshops were held to familiarize all stakeholders with the service design concepts as well as to gel as a team. During these workshops, the explicit and tacit knowledge was captured and externalized in artefacts. The workshops enabled the stakeholders to collectively reframe the problem as 'service' and reach a consensus on the service experience goals and the data collection strategy. The participatory philosophy was followed from the earliest stages of this service design project.

Data Collection – Understanding User and Context

The data collection was done through observations, survey, and informal and formal semi-structured interviews with key stakeholders. Service Designers attended one full day of induction sessions anonymously and created observation notes. They also informally discussed with the new employees during tea and lunch breaks to know their feelings about the induction programme. They also went through the process of form filling during the induction along with the new employees. To understand the issues faced by the new employees in the organization, two survey questionnaires were developed – one for understanding the issues in the hiring phase (spanning from candidates applying for the job till they join the organization) and another for the on-boarding phase (induction and training of two days after joining). The Service Designers' observations during the induction, along with tacit knowledge from other stakeholders, was the basis for the design and development the survey questionnaire. Since the service-users (newly hired experienced professionals) were easily accessible during the two days of onboarding, the survey was administered at the end of second and last day of onboarding. Also, the organization has presence in several cities in India, the surveys were administered (ensuring anonymity) in two cities so as to know the differences, if any, in processes across cities. Care was taken so that both teams followed the predefined protocol to maintain the consistency and rigor of the process. The survey data was collected from 66 respondents altogether. The survey analysis pointed to several service design and execution related issues.

The team conducted in-depth semi-structured interviews of those who had joined the organization within last one year to know the details and nuances of the problem areas identified in the survey. The interviews were conducted with stakeholders as well. The interviews also probed to uncover behavioural traits of employees, based on their motivation, triggers and abilities (Fogg, 2009). Interviews were conducted in two Indian cities – Pune and Mumbai by two different teams of two or three members. Care was taken in this case as well that both team followed a predefined protocol to maintain the consistency and rigor of the process. Together, 23 formal and informal interviews were conducted spanning the representative cross-section of the stakeholders.

The collected survey data, audio recordings, and interview notes were analysed during subsequent workshops conducted by team, which resulted in identifying the key contexts, service encounters and personas. It helped us identify the negative as well as positive key scenarios in the process from user's perspective. We also understood various feelings like anxiety, apprehension, uncertainty which users go through, throughout the hiring and onboarding process.

To illustrate, we summarize some representative findings. We found that candidates as well as new employees used many informal channels to interact with each other. We also found that candidates had pre-set perceptions about large organizations, which generally led to certain expectations and allowances – for example, some candidates expected and accepted

the delays in responses from the company, though it caused anxieties. Another example was that candidates considered induction sessions as expected formalities in a large organization but were pleasantly surprised by socialization activities. We realised that it was important to understand the positive and negative preconceived perceptions about the organization the candidates might have. This will enable guiding the service design to leverage the former and counter the later.

Various activities involved in the data collection such as observations, informal discussions, surveys, semi-structured interviews, data analysis and insight collection, were carried out following quasi-participatory approach, details of which are mentioned below in table 2.

Activity (phase: understanding user and context)	Primary responsibility (Worked independently)	Secondary responsibility (Contributed in reviews and discussions)	Tertiary involvement (infrequent involvement on request)
Identification of data collection methods and schedule	Service Designers	Recruiters, HR Representatives	None
Observation during Onboarding	Service Designers	Recruiters, HR Representatives	Other stakeholders
Informal discussion with service-users	Service Designers	Recruiters, HR Representatives	Other stakeholders, Service-users
Understanding the Context	Recruiters, HR Representatives	Service Designers	Other stakeholders, service-users
Critical incidents	Recruiters, HR Representatives	Service designers (facilitating)	Service-users
Semi-structured interviews	Service-users	Service Designers	None
Survey design	Service Designers	Recruiters, HR Representatives	None
Survey administration	Service designers, Recruiters	None	Other stakeholders, Service-users
Analysis of survey and interviews	Service Designers	Recruiters, HR Representatives	None
Insights validation	Recruiters, HR Representatives	Service Designers	None

Table 2 – Activities along with participatory team member responsibilities for 'understanding user and context' phase

Personas

Persona creation is a well-established step of user-centered design process that helps designers to build empathy and identify with the service-users. In contrast to the conventional persona creation based on rigorous immersive data, the team significantly leveraged the tacit knowledge of the concerned stakeholders and created concise personas. Concise personas are similar to an assumption personas, ad-hoc personas created on the basis of tacit knowledge, but with established representativeness. To create the concise personas, differentiating characteristics of the service users and the possible service-user segments were identified. Then four to five concise personas were created per segment, using the tacit knowledge of the team which was augmented with insights from observations, survey results and interviews. The representativeness of these personas was established by

validation using the paired comparison method. The most representative personas per segment were then detailed out and further refined with inputs from service-users and stakeholders. These personas were used as primary personas throughout the design study.

While service-user segments were formed in the initial discussion within group, the initial versions of brief personas were developed by the team offline. The team then came together and through consensus finalized the brief personas. This was then subsequently validated by the team with actual service-users. In a similar manner, detailed personas were created and refined.

Figure 3 – Persona evolution from initial idea to Rapid prototype to detailed persona

Customer Journey Maps

As shown in figure 2, there are 10 phases in a candidate's life time journey, where this study focused on the 'applying for the job' phase till the 'on-boarding' phase. The early insights received from the 'understanding the user and context' step, helped to define these stages, where the tacit knowledge available in the team played a very crucial role. As a part of the CJM, the team captured the service-user and business intentions along with the service-user information such as feelings, doing, actions, decisions taken, and resources available.

The team arrived at the CJM template considering the various aspects through consensus, but the Service Designers in the team played a vital role in it. The team members then decided to work on the phases independently. The team utilized the available tacit knowledge along with the insights from previous step of 'understanding the user and context'. The CJM was progressively evolved over a period of time within team discussions.

Service Blueprinting

The team used the technique of service blueprinting to understand and map how the current service operates. Due to limited availability of stakeholders, it was not possible to understand the whole service process (including various encounters, touch points, spanning across various stages) and lay it down in a blue print form in a single day workshop. Hence the team initially had interview-like discussions with the stakeholders and jotted notes. The stakeholders too noted areas where they had doubts about the process and reverted later after independent discussions with their teams. The Service Designers used the notes to independently sketch a first draft of the blue print. Theses sketches were discussed in the next meeting with the stakeholders and refined with their inputs. The designers then created a detailed service blueprint per stage of the service. Wherever the team had doubts, due to the absence of services users and stakeholders, they annotated the blueprints and listed the set of doubts. These doubts were discussed over email and in further meetings with the stakeholders.
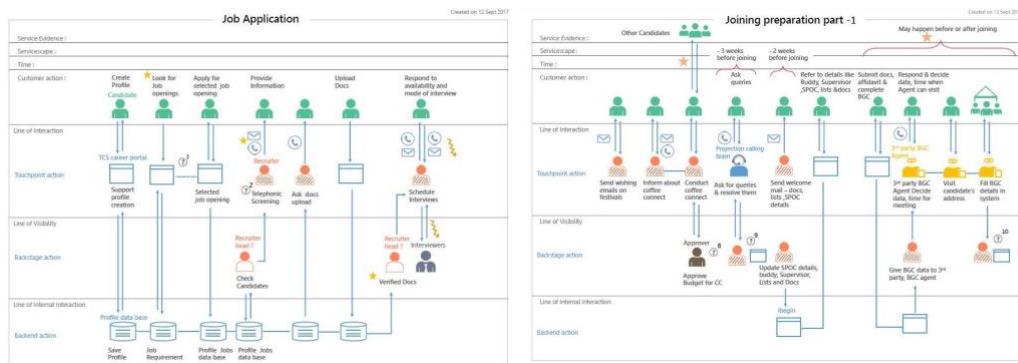
Figure 4 – Service Blueprint for two phases

Service blueprinting being a new concept for the stakeholders, they contributed mainly in terms of knowhow and helped refining the blueprint iteratively. The service blueprints were mainly created by the Designers with the help of other team members. After the initial version, all the team members got hold of service blueprints and started contributing proactively.

Idea Generation

After mapping each phase as a blueprint, the team also annotated the blueprint with insights and ideas using coloured sticky notes. Visualizations of the process in terms of blueprints helped the Service Designers to generate new ideas. Having tacit knowledge about users' expectations and needs, the painful parts of the process and service breakdown points were identified, which again led to some more ideas. While creating blueprints, the Service Designers jotted down the questions and doubts wherever they did not have visibility of what happens in the current service. Design themes were also identified during blueprint creation. Before the next discussion amongst the Service Designers and the stakeholders, a list of questions was sent to the stakeholders so that they can collect details on those if they are not already aware of the facts. Then during the team discussion, the blueprints were discussed and enhanced as per the clarifications to the questions put up earlier.

Besides service blueprinting, the team also used other ideation techniques for inspiration. Some of the significant ideas were also explained to the stakeholders, which helped in maintaining their interest in the project.

Figure 5 – Phase wise ideation and idea clustering

Service Prototyping

All the ideas for the whole user journey were represented in the form of sketches, to give an overall view of future service. The Storyboarding method was used to illustrate the future scenarios with the key ideas. The Service Designers also created a puppet-show like video to depict the selection phase of the future service.

Figure 6 – Sample storyboard

Proposed Actionable Recommendations

As explained earlier, through research through design methodology, we observed during this case study how the proposed quasi-participatory design approach unfolded and was effective. We believe that there is a possibility of its wider applicability. We suggest following this approach will improve the overall effectiveness of the participatory service design process, particularly when the teams face the constraints we have discussed (for example, time and resources, balancing the demands of job responsibilities and participation …). Following are some of the proposed actionable recommendations.

1. **Working independently and working together iteratively:**
   Cross-functional group stakeholders are the domain experts, who leverage their knowledge to contribute to different aspects of the design project. One of the challenges identified was to get them together all the time, throughout the project duration as they have their own work responsibilities. A way out is participation that happen in stages, where at times teams work together synchronously at one place and at other times they work concurrently but asynchronously, followed by review and consolidation, improving upon each other's outcomes. The Service Designers could also gather findings after the 'together' sessions, improve, and later meet with stakeholders again to refine further. The stakeholder representatives in the team, on the other hand could be tasked with, for instance filling gaps in knowledge in their respective spheres and evaluating in-progress concepts. Iterations of such asynchronous and synchronous working seem to be more appropriate to overcome to the challenges to effective participation by adapting to and working within the constraints of time and distance to produce quality outcomes. Another significant benefit could be that the team members will be motivated to participate throughout the project as it enables them to fit the project work in their other work commitments. In this way, one of the core principles of participatory design, that people have a basic right of autonomy or working in their own way (Simonsen & Robertson, 2012) is adhered to without compromising the benefits of collective wisdom.

2. **Externalizing artefacts for team collaboration across time and locations to enable distributed cognition:**
   In-process artefacts help in supporting each other's thought process by transferring and refining the commonly held understanding of the problem, ideas, concepts, and solutions (Mahamuni, Khambete, & Mokashi Punekar, 2017). These play a key role in participatory design team collaboration. While working independently, team members could create such artefacts to share their understanding and ideas in the team discussions, which will be the basis of the evolution of the artefacts. Tacit knowledge of stakeholders could also be made visible through the artefacts. The key to success is conscious efforts to build common understanding about the types and nature of the artefacts to be co-created and used in the design process (for example, Personas, Scenarios, Journey Maps, and so on.).

3. **Adapting simplified versions of design methods for early engagement of stakeholders:**
    Though stakeholder representatives including service-users might be introduced to design methods and concepts, being novices, they may have difficulties in using the design methods that could be perceived as complex. Therefore, in the initial stages of design, the Service Designers could use methods and artefacts that the stakeholders are familiar with, but adapted to align with the design methods. For example, instead of taking notes of the discussion as a document, each point can be noted on a sticky note. The collection of sticky notes could be used to build affinities. The Service Designers could also otherwise asynchronously build a "draft" affinity diagram which can be shared and discussed with the other team members, and refined together. This approach could give more clarity of the design method to the stakeholders and ensure they do not feel intimidated, and help in building mutual trust. It could also be an effective process of team building. Therefore, it could enable them to contribute and make an impact on the outcomes.

4. **Collectively representing inaccessible service-users through available tacit knowledge:**
    As service-users, especially external to the organization, may not be accessible every time for the design project activities, we can depend on rich tacit knowledge of participatory team and arrive at common understanding through deliberations and consensus. The emergence of trust in other team members and greater appreciation of their perspectives, an outcome of the process discussed earlier can support open and constructive deliberation and resolution of conflicts. Whenever a possibility arises, this understanding can be validated and refined to make it closer to the reality.

Conclusions and Directions for Future Work

The primary objective of this study was to validate the quasi-participatory design approach in the form that was appropriate for the project at hand. Further, we aspired to validate this flavour of participatory design approach for designing organizational services by in-house design teams. We observed that individually and collectively the elements of the approach helped to overcome the adverse impact of the contextual challenges such as unavailability of stakeholders across all the design activities, sustained engagement, and effective collaboration. The well-coordinated way of working enabled the team members to be productive together as well as independently, take advantage of the mix of the synchronous as well as asynchronous working, feel empowered by the freedom to work from multiple locations and the flexibility of full or partial participation. This helped to mitigate the adverse impact of the unavailability of stakeholders as well as the disadvantages of geographical dispersion. Distribution of work items to match the team members' expertise and available time helped them to contribute confidently. The issues related to the access to end-users and limits on the available time for user research was mitigated through enablement for leveraging tacit knowledge within the team. It was evident in the case study that the blend of tacit and explicit knowledge supported to triangulate findings and expedited the synthesis through team deliberations and consensus. In this case study, the team was distributed across three offices from two cities, but conversion of synthesized knowledge into shared in-process artefacts helped to carry forward the knowledge and common understanding throughout the design life cycle with optimal face-to-face interactions only at critical junctures. Apart from the quality design outcomes, we also observed stakeholders acquiring a sense of ownership, developing a service-user centric mind set and a sense of accomplishment. We consider it as a significant achievement as perforce there is a likelihood of conflict of interest, say in a recruiter's objectives and the service user's (that is, job applicant's) expectations.

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We acknowledge that this approach was validated only in the organization context and the design output was validated with a limited number of service-users. We plan additional validation with a wider service-user base in the near future. As part of the future work, we intend to refine this quasi-participatory design process in similar organizational contexts as well as in different business domains. In particular, we observe the potential in the Social Impact space, which may be well-disposed due to the tradition of the participatory action research. We observed the possibility of Service Designer playing different roles like team facilitator, mentor, educator, and moderator to build consensus. The different roles the designers could play, that is, 'wearing different hats', and the contribution of appropriately incorporating the roles in the quasi-participatory design approach could be an interesting area of future research.

In spite of its limitations, we hope that this study will serve as a useful point of departure for discussion around quasi-participatory design approach, our suggestions and how to utilize the available tacit knowledge. We see the applicability of this approach in organizational service design as well as in social impact sectors which have similar challenges.

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