### Rapid Service Design for Service Continuity in Pandemic-like Disruptions

Bhaskarjyoti Das<sup>1</sup>, Ravi Mahamuni<sup>1</sup>, Sylvan Lobo<sup>2</sup> bhaskarjyoti.das@tcs.com, ravi.mahamuni@tcs.com, sylvan.lobo@tcs.com <sup>1</sup>TCS Research, Tata Consultancy Services, India <sup>2</sup>TCS Research, Tata Consultancy Services, Australia

### Abstract

The COVID-19 pandemic has impacted employees' lifestyles as well as organizational service experiences. Disrupted service experiences have led to changes in employee well-being, behavior, and responses, disrupting existing organizational structures and leading to diminished effectiveness of workplace and workforce management. Employee satisfaction at work has become more crucial post-pandemic for retaining employees in the organization. To thrive in the postpandemic situation, offering improved flexibility and adaptability in the employee lifecycle will enable employees to respond and recover faster and better. In this paper, we analyse the employee service experience problems and disruptive scenarios that have occurred due to the pandemic. We propose a Rapid Service Design (RSD) approach to mitigate gradually unfolding challenges, accelerate the service design process cycle time, and creatively and iteratively respond to service continuity in pandemic-like disruptions.

Keywords: service design, organizational services, design research, resilience

### Introduction

Organizations increasingly innovate on organizational interventions that facilitate employee happiness. However, situations such as the recent COVID-19 pandemic had severely disrupted internal organizational services and impacted the overall employee experience in organizations. To enhance customer services and provide captivating experiences, organizations have often overlooked the well-being of their employees. For the workforce, the change in the work environment has also not been gradual as the change and impact were immediate, resulting in a complete rethinking of work and workforce management. Early in the pandemic, most of the offices had been shut down and non-essential service-providing organizations had to work in situations where almost all their employees were locked at home or collaborating remotely over digital mediums such as Cisco Webex or Microsoft Teams.

In the current digital transformation era, IT services are critical for various service organizations. IT organizations cannot afford to delay or deter their services as they are essential for the business continuity of their customer organizations. Hence, such organizations were quick to respond and support adequate connectivity and resource availability when employees were working remotely. As the pandemic situation started improving, organizations have requested one-third of their workforce to return to office premises as part of their business continuity plans (Moorthy, 2020). However, a majority of the workforce continues to work from remote locations (Bailey & Rehman, 2022) because of the comfort of home and flexible work schedule. However, that does not apply to all employees. Senior executives see benefits of working from the office whereas non-executives prefer working from home (Fadilpašić, 2021). There is a need for in-depth studies by organizations to identify the right balance of interventions to enable the process of facilitating a 'new normal' hybrid mode of work operations. To expedite this transformation, organizations would need higher orchestration of their internal processes by empathizing with the different stakeholders who are beneficiaries of the organizational interventions.

Service design during a pandemic is challenging and must work within unplanned scenarios and constraints (For example, restricted movement across cities due to lockdown laws). There is an urgency to respond. At the same time, organizations want to be creative and innovative in the responses they provide as services, both for internal services and customer projects. Further, due to limited data on the problem and shallow knowledge of employee experiences, many of the service design process phases such as primary user research get restricted. In pandemic-like scenarios, where the service scenarios are unplanned and there is no certainty to the range and time of impact, service design projects are constrained by the availability of time and adequate relevant user research data to respond to. There is a need for more iterative design exercises to discover problems as they emerge and identify design solutions quickly. Thus, there is a need to accelerate the total service design process cycle without compromising the quality of outcomes.

In this paper, we do not discuss participant reviews but focus on conceptual design. Our contribution is a service design research method motivated by speculative design approaches. We propose a service design approach aimed at mitigating service experience disruptions in organizations. We discuss the approach to probing experience challenges in employee services. But it is not limited to that as our approach can help service designers and innovators ideate new service design concepts. Using Research through Design (RtD) (Swann, 2002; Zimmerman, Forlizzi,



& Evenson, 2007) and leveraging speculative design methods, we discuss a rapid service design (RSD) approach to shorten the overall process-cycle time of service design projects and enable quick response to service experience disruptions in the organization.

### Background

### Disruptions and responses to the COVID-19 pandemic

The COVID-19 pandemic had disrupted many services impacting employee health, workforce readiness, and communication and support culture in organizations (Strack, et al., 2020). Employee experiences are affected by disruptions through social stressors such as isolation due to working from home (Zoonen & Hoeven, 2022). Many work-related issues such as high productivity demands, poor support, and lack of control are known to contribute to employee distress (Marchand, Demers, & Durand, 2005). It is important to note that many employees experiencing mental health problems may not have access to adequate help and support (Daly &

Robinson, 2020). Organizations' early responses to the pandemic scenarios have also impacted how employees work and the work procedures. Further, newer challenges are unfolding for both employees and organizations (Spurk & Straub, 2020; Nayal, Pandey, & Paul, 2022).

Many employees in the non-essential service sector have been working from home for almost two years. However, as the restrictions have been lifted globally, organizations have begun to look for a hybrid mode of operation that benefits both employees and organizations (Mint, 2022). The 'new normal' of the hybrid mode of operation impacts the overall organizational structures and work procedures (Spurk & Straub, 2020). Organizations have the task to reimagine employee work style, their work environment, team management and collaboration, customer interactions, secured information management, support function work style, and asset management to adapt to the 'new normal'. For organizations to thrive in the pandemic and post-pandemic scenarios, there is a need for higher orchestration and coordination within and outside the organization (Deloitte, 2020).

### Speculative design and service design research

Dunne and Raby (2013) describe speculative design practice as "world-building", prompting speculation in the designers' mind to challenge how people think about everyday life. Popularly discussed methods of speculative design approaches are: Design fiction—design to tell stories about the near future (Bleecker, 2009); Critical design—reflection on existing values and practices in a culture (Dunne & Raby,



2013); Discursive design—where designs are tools for thinking and raising awareness (Tharp & Tharp, 2009); and Design probes—using scenarios and narratives to generate insights from research and stimulate debate (Auger, 2013). These methods enable designers to speculate futures by analyzing and critiquing the current ecosystem: contemporary technologies, products, services, and systems. Critiques of speculative design methods are beyond the scope of this paper; however, we explore how speculative design can inform the service design process to design new or reimagine the current services.

Design fiction is a speculative design approach that enables designers to imagine, speculate, and articulate alternate visions of design and its related world (Galloway & Caudwell, 2018). Design fiction enables service designers to narrate stories through diegetic prototypes—potential objects and services of the future (Pasman, 2016). The 'diegesis' or 'narrative' in design fiction "is not limited to text and can include objects" (Blythe, 2014). It utilizes methods such as 'storytelling' to generate awareness and inquire about concerns and constraints to understand the impact of emerging products and services of tomorrow (Pasman, 2016; Bleecker, 2009). In comparison to other speculative design methods such as critical or discursive design, the use of prototypes or artifacts help the audience concentrate on services and experiences rather than entire worlds or political trends, or geopolitical strategies (Auger, 2013; Bosch, 2012). Hence, the use of the design fiction approach is preferable to service design researchers to speculate about future services and experiences.

Design fiction can be articulated in the form of narratives, stories, movies, objects, and semi-working prototypes (Blythe, 2014). The goal is to speculate plausible near futures by describing prototypes that do not exist. The use of storyboards, scenarios, and personas in service design is not new and has been used to articulate or illustrate new service designs and touchpoints. Scenarios help to illustrate findings from field studies and create design rationale (Rosson & Carroll, 2002). However, it is often argued that scenarios cannot be considered fiction because they are not provocative and only discuss designs that are yet to be implemented. Also, scenarios are not any future reality but rather representations of present action considering possible and desirable futures (Durance & Godet, 2010) if certain interventions take place between the current time and the time of the scenario setup. In this paper, we do not critique the methods of scenario-building or design fiction but leverage both methods to illustrate future states of employee experience with services and products in focus.



### Method

In our research journey, we were interested in designing speculative scenarios to provoke debate and elicit insights into employee needs and further design services in response to the COVID-19 scenario. In this paper, we aim to investigate the service design approach to mitigate disruptions to employees' service experiences while interacting with their organizations. Utilizing Research through Design (RtD) methodology to plan our research activities and inform our findings, we investigated the disruptions to various existing employee experience services due to various COVID-19 pandemic-instigated organizational changes. Through cycles of *Plan-ActReflect-Refine* cycles based on action research (Somekh, 2005), but applied to service design practice, we reflected and refined our service design journey to mitigate the disruptions and associated challenges to employee services in an IT organization. Our proposed RSD method incorporates speculative design approaches like design fiction to discover challenges and create new services for unforeseen disruptions in existing service experiences.

In our design journey, we conducted think-aloud group discussions and collective ideation with eight service design researchers across all the design journey phases: data collection, insight mapping, analysis, and ideation of new service concepts. We leveraged their tacit knowledge of experience challenges as employees of the organization. We compiled descriptive data gathered through these discussions. We also engaged in secondary research through available company reports and design documents of previous internal service design projects on employee services. We also conducted informal discussions with managers in the business units of the organization. With pertaining communication and accessibility issues due to the pandemic, our primary research relied on the convenient sample population.

### **Service Design Journey**

In the IT organization, we observed that various employee services were disrupted due to the sudden movement of the workforce to remote locations. A majority of office communications and activities shifted from physical spaces to digital platforms. Our 8-membered service design team had various difficulties in designing employee services in the disruptive scenario. The pandemic-hit service scenarios were new to the current generation of employees and designers. Also, there was low availability of knowledge on user issues and challenges. The problem areas were gradually unfolding with time and new challenges were emerging as the design inquiries progressed. The number of secondary resources available was insufficient to deduce the right insights for design consideration. Further, the collection of primary user data



was difficult as communications and interactions with employees were already a challenge in the pandemic scenario. Also, employee services and overall user experience were severely impacted leading to high attrition and reduced employee engagement across the organization. This instigated the service design team to undergo a shorter and quicker service design exercise such that the problem context could be quickly studied, and new designs could be rapidly ideated, validated, and made ready for implementation. Based on these challenges, we embarked on the service design journey illustrated in **Figure 1** to mitigate service experience disruptions.



Figure 1. Outline of the service design journey in the project

### 1. Discover: Understanding the current context of employee services

To begin the service design journey, service designers had to familiarize themselves with the problem context and user problems. We listed the various services being catered to employee experience in IT organizations (**Table 1**). To do this, we referred to our previous work on the design of organizational services with a multidisciplinary team of stakeholders including leadership roles, various HR roles, administration, technical implementation teams, and designers (Lobo, Das, & Mahamuni, 2020).

Employee journey phase Description of employee services adapted from (Lobo,

Das, & Mahamuni, 2020, p. 764)

1.	Attracting the right talent	Services to proliferate awareness of the organizational work culture, benefits, and opportunities for associates' career progression
2.	Talent selection	Services to identify and assess candidates efficiently for further selection
3.	Joining and Onboarding Associates	Services to facilitate onboarding of selected associates to the organization



4.	Training for induction and project assimilation	Services to help new associates to learn and train to become project ready
5.	Daily operations	Services and resources to ensure smooth functioning of day-to-day work
6.	Engagement	Services for continually engaging associates with activities to motivate them for maintaining higher productivity
7.	Retention	Support services for issues such as grievance redressal, compensation, and growth management,

Table 1. Phases of employee journey in an organization

### 2. Empathize: Mapping the service experience disruptions

The next task in our service design journey was to identify the various disruptions to employee experiences and understand the challenges faced by the organization. The organization under study is a large IT consultancy company with a presence in several countries across the globe. We focus our study on the disruptions and impact of organizational services for its IT professional workforce based in India. For user research, we gathered information from both primary and secondary sources. As we had limited access to employees during the pandemic and the service design project had a time constraint, we identified research participants through convenient sampling and subsequently conducted semi-structured interview sessions. The participants included IT employees as service users and decision makers such as the HR department as service providers. We also had informal discussions with leaders of business unit teams in the IT organization to understand the current experiences of their associates and teams located in the India geography. Since the problem area under study was continuously evolving, we engaged in periodic secondary data collection for updated information on service disruptions and employee experiences from recently published company reports, employee stories, and testimonials available in internet sources. Table 2 illustrates the key service disruptions and associated challenges in employee services along the phases of the employee journey in an IT organization.

Employee journey		Disruptions	Impact
1.	Attracting the right talent	Increase in job losses and pay cuts. Pre-placement visits and sessions may not occur, instead, digital platforms are used to connect with college students.	Job safety is a concern. Building awareness and trust of candidates in an organization for benefits such as flexibility/convenience at work, and job stability.



# SERVDES 2023

2.	Talent selection	The transition of in-person interviews to audio/video conference calls. The current screening process is not effective for selections over digital communication.	Difficult to assess the personality traits of candidates and select the right talent.
3.	Joining and onboarding associates	Candidate joins work from home instead of the office/workplace setting; socializing with new joiners may be difficult without inperson interaction.	Acculturation of employees into the organizational culture is difficult. Essential to train existing managers or buddies for remote onboarding.
4.	Training for induction and project assimilation	Knowledge transfer is slow due to a lack of in-person interactions with office seniors; reduced informal learning from peers.	Required time for employees to become project-ready gets extended.
5.	Daily operations	Expressing thoughts exclusively over calls become difficult. More time and effort are spent on communication; blurred lines between work and home; limited access to required infrastructure.	Declined productivity due to distractions at home, employee distress due to workload and poor work-life balance, reduced networking and learning from colleagues.
6.	Engagement	Apart from tangible challenges such as unavailability or inaccessibility of adequate resources, employees face intangible challenges which reduce the capacity to work such as emotional and cognitive fatigue, compassion fatigue, and physical fatigue.	Employees expect an increase in trust, transparency, empathy, and humane support. Organizations need to build a high level of motivation and discipline in employees for managing personal schedules and work prioritization.
7.	Retention	Poor engagement leads to employee resignation. High attrition due to feelings of stagnancy and lucrative offers from competitor business organizations.	Expectation mismatch between an employee and the organization. Demotivating effect on team productivity and organizational culture.

Table 2. Employee journey and service experience disruptions

### 3. Define: Speculate future service experience scenarios

We leveraged design fiction to create future service experience scenarios along the employee journey phases. We created a mapping template (**Table 3**) to record the current context of two primary stakeholders: (1) service user: employees, and (2) service provider: IT organizations. For each employee journey phase, we listed the



various challenges, expectations, trends, constraints, and concerns for both stakeholders. In groups of 2 or 3, we used the 'think-aloud' technique to speculate future experience scenarios with a time horizon of three years from the current time. This scenario-building exercise was intended to redesign existing services or introduce new services that solve the current employee experience gaps created by the service disruptions discussed in **Table 2**. The challenge was to be empathetic to the needs and concerns of both the service user and the service provider. **Table 3** highlights an example mapping for the employee journey phase "*Daily operations*".

Challenges, expectations, trends, constraints,					
and concerns:		Speculative future scenarios of			
Service User:	Service Provider:	service experience			
Employee	IT Organization				
<ul> <li>Blurred lines between work and home— difficulty focusing</li> <li>Lack of "me" time</li> <li>Change in fitness routine—from office gym to exercise at home</li> </ul>	<ul> <li>Anytime, anywhere seamless support for infrastructure becomes essential</li> <li>Need to diligently track associate's work, productivity remotely</li> <li>New ways of measuring the work— focus on outputs and outcomes than hours spent</li> </ul>	<ul> <li>Scenario 1: All employees work from their location of choice but maintain standard work timings for all office work instead of having flexible timings for each employee.</li> <li>Scenario 2: Productivity of employees is analyzed and monitored based on their project outputs and individual outcomes (such as learnings, experiences, value impact) instead of work hours spent on the project.</li> </ul>			

User journey phase: Daily Operations

Table 3. Example mapping of current challenges and speculated future scenarios

We also created future employee personas that represent our users in the speculated future service scenarios. **Figure 2** is one example of the different futuristic personas created by the service designers based on current challenges and future expectations.





Figure 2. Example of future employee persona

## 4. Ideate and validate: Probing for continuous research, ideation, and validation

Using the future scenarios and personas discussed in the previous section and exemplified in **Table 3** and **Figure 1**, we created prototypical narratives to ideate and articulate future user-service interactions. Each of the speculated future scenarios was articulated as a narrative through the storytelling method. We created two story characters: employee scenario (**Figure 3**) and organization (**Figure 4**) to articulate the speculated future world and highlight the key service experiences in it. The intent was to create speculative service ecosystems and highlight future employee experiences.





### Figure 3. Example scenario map of future employee services



Figure 4. Example scenario map of future services from an organizational perspective

For each future persona, we re-articulated the speculative scenarios into multiple scenes and ideated fictional process changes, digital and human interactions, and touchpoints involved in the service experience. These narratives helped us create future service experience journeys for each persona. **Figure 5** exemplifies and illustrates narrative scenes to highlight a futuristic "*Day in a Life*" illustrating the future persona's interactions with the fictional service ecosystem.



#### SCENARIO CONTEXT: Anwag works remotely from home and fives in a twin bedroom house at Kharagour with his wife and two kids. Note, his wife, also works remotely from home for a n Day in Anurag's Life me is smartly managed by **VINCI the digital assistant** who manages all of Anwag's office and home schedule d seamlessly works with Amazan Alexa<sup>®</sup>. 7:00 AM: Among wakes up and gets his usual day schedule from the smart assistant VINCL Anurag starts his day with Yoga, VINCI assists by arranging a live video session for him. VINCI further n mitters and calculates his fitness counts and adds to his well-being

10:00 AM: Anuragend Nite work from the same room but often have problems if their calls are scheduled at the same time. Anurag

recalls of a need to send a meeting request. VINCI suggests that both are free at 1:00PM and teks Anutag to confirm. VINCI also send Nita a notification that Amerag would be buny on office work from 1:00 to 1:30 PM. Nita realizes that her team is requesting a meet at 1 and upon learning that Anurag would need the room, delays her call by half an hour

Images: Microsoft Stock Image Library

1:00 PM: It becomes a tensed environment in the team room as Anutag unfortunately seems to have a and day as the mis-managed a doubline. VINCI recognizes that Anuragi is ad on the video and orders a coffice pack. It is delivered to Anurag as a warm gesture realizing the meeting minutes. VINCI also uggists Anurag's supervisor Mr. 32 to lighten up the earn mood by playing games and performing quick activities.

ional ahe



Figure 5. Example fictional narrative of future service user experience

In subsequent exercises, we used these narratives as probes to discover new challenges as they might have unfolded with time. We used the collected information to enrich the speculated narratives further. These narratives were also used as triggers to generate service design ideas and critique their value impact in the speculated world. Clustering the new service ideas, we observed four emerging design themes:

- (1) Expand workplace virtualization and borderless interaction as the 'new normal'
- (2) Support employees to sustain well-being behavior
- (3) Enable higher workforce flexibility within the constraints of information security
- (4) Enable work ecosystem for decentralized decision-making

For each of the above themes, service designers articulated design questions such as "How do we enable effective remote working?". Catering to the design question, service ideas were re-articulated, refined, and enriched. The fictional narratives were refined again and enriched with new service ideas for the next cycle of challenge probing, service-idea ideation, and user validation. With each iterative cycle, the future narratives and the service ideas were challenged and refined by analysing them against the dimensions of employee engagement (Bedarkar & Pandita, 2014; Kahn, 2010): physical engagement, cognitive engagement, and emotional engagement. We used this as a proxy method for guick idea validation and selection. Select service ideas were further detailed into service-system designs which included artifacts such as user journeys, human touchpoint journeys, designs of digital



touchpoints, and recommendations for policy and process changes. We presented the service concepts to senior leadership to validate and discuss future business impact. The concepts were further prioritized for piloting based on their implementation feasibility and the immediate business requirements of the organization. Further study on these service design pilots is not within the scope of this paper.

### Discussion

The RSD approach highlighted in this paper leverages speculative design approaches to focus on three primary objectives for mitigating disruptions in employee service experiences: (1) Creating future scenarios and speculation of preemptive strategies, measures, and actions; (2) Strategizing technology development to mitigate pandemic and other emergencies; and (3) Creating holistic value and experience involving all stakeholders: customer, employees, organization, environment, and society. To realize these goals, we speculated the future working scenarios along the employee lifecycle starting from hiring till retirement. Using these speculative scenarios as probes and triggers for further design inquiry and ideation respectively, we detailed the challenges in current employee experiences and ideated new services to mitigate the challenges. Since the challenges were unfolding gradually with time and new constraints were being either introduced or removed by law, we undertook repetitive cycles of probing for researching and triggering new ideas.

### Impact on the service design approach

We observed that service disruptions in employee services could be primarily categorized into (1) predictable disruptions invoking planned service recovery scenarios (For example, short-time unavailability of service touchpoint), and (2) unpredictable disruptions due to unplanned service environment changes (For example, the transition of service delivery to digital mediums when physical accessibility is barred). Whereas the service experience disruptions emerging due to the former disruption category are often planned to be mitigated through service recovery plans as part of the initial service design, service disruptions of the latter category need a complete redesign of the service in the new emerging environment. The COVID-19 pandemic was one such unpredictable situation where service disruptions, challenges in employee experiences, and changes in service environments gradually unfolded with time and there was no previous knowledge available for the situation. The service design approach is critical in this scenario where new services must be put in place quickly so that the employee services and



intended user experiences do not cease to exist. This demands a rapid service design approach with shorter design process cycles and flexibility to adapt to unforeseen circumstances. Further, in such a desperate and urgent situation, service designers cannot afford to lose being empathetic to all the primary stakeholders: employees, the organization, human touchpoint, and society and environment (Mahamuni, Meroni, Khambete, & Punekar, 2019). Any undertaken service design exercise must be creative and innovative to empathize and solve employee and organizational challenges quickly, efficiently, and effectively.

### Use of speculative design

The incorporation of speculative design approaches in the service design process has immense opportunities. It helps service designers quickly assess the current context of services and service experiences, predict the future service environment diligently, and facilitate innovators to curate new services creatively. Although technological solutions need several months to be developed and implemented, human touchpoint solutions are relatively easier to pilot, validate, and implement.

The speculative design approach helps service designers work with less information (both quantity or quality of user context data) and leverage speculative design methods such as design fiction to ideate future scenarios, curate new services for future scenarios, and probe user views and future-experience validation. This offers opportunities to observe failure points of service design faster and reduce the overall service design process cycle time.

### **Rapid Service Design Approach**

In service design practice, projects roughly undergo the design process illustrated in **Figure 6**. The service design cycle comprises various phases of domain familiarization, in-depth user studies, creative ideations, service detailing, and prototyping and validation. The design outcome of such iterative processes is service specifications consisting of service policies, business processes and models, service touchpoint ecosystems, service interactions, and servicescapes. However, such rigorous design exercises require adequate time and resources, and may not be viable for situations when service providers have an urgency to respond and expect service designers to conceptualize solutions faster so that they can be quickly validated, enriched, and made ready for implementation.







Figure 6. In-practice service design process challenges due to disruptive scenarios

Reflecting on our service design journey, we see opportunities for the service design journey discussed in this paper to be adopted and utilized in other problem domains and user contexts in service design. We propose a Rapid Service Design (RSD) approach (**Figure 7**) to inquire and build solutions for unforeseen service disruptions with gradually unfolding service challenges and user experience problems.



Figure 7. Proposed rapid service design approach for mitigating disruptions

Designers and non-designers alike can utilize the proposed RSD approach, especially in situations with time constraints for planning and responding to disruptive



scenarios. The next section exemplifies how innovators can leverage the proposed approach for different use cases.

### **Example Case**

Europe's vegetable farmers have predicted food shortages due to an energy crisis. With deteriorating climate conditions, energy prices have increased from the pandemic recovery coupled with the war between Russia and Ukraine (Rao, 2022). We choose this disruptive scenario to exemplify, based on two criteria: (1) the extent of the impact of service disruption is unpredictable and could last for 3 years or more; (2) user experience and service delivery challenges that have not been foreseen or known are unfolding with time. For this given problem, a group of innovators can use the RSD approach (**Figure 7**) to undergo quick service design journeys to mitigate the food shortage scenarios.

Given the initial problem brief, innovators collect information about current challenges of food shortages and related user challenges from newspapers and journalist reports, company press releases, and other secondary sources. These reported or observed service disruptions (For example, restaurants are not able to meet user demand on online delivery platforms) are mapped and discussed. Further, the innovators engage in unstructured and informal interviews or discussions with service users to understand the primary perspectives. With adequate information on current disruptions and user challenges, innovators leverage group discussions and 'thinkaloud' brainstorming techniques to collectively speculate future personas and create fictional service-experience narratives. These narratives describe future services, user experiences, and service interactions (human-human or humanmachine). Since food service disruptions are expected to last for at least 3 years, future scenarios are speculated with a time horizon of 3 years or more. Based on compiled service challenges (For example, restaurants operating customer services with limited raw vegetables availability and high food prices) and speculated fictional future narratives (For example, ease of procuring food dishes of choice), new service requirements are identified, and fictional service concepts are ideated (For example, bid pricing system for food dishes).

With new information being revealed over time about problems and the impact of current service disruptions, the ideated future service concepts and their service experience narratives are further validated and enriched. This iterative cycle is repeated till the service concepts are detailed for stakeholder buy-in and ready for design presentation or piloting, to begin the implementation journey. The level of detailing or the number of iterative cycles required in the service concepts is decided by the innovators in consultation with implementation teams.



### Reflections

Service design aims to facilitate creative service ideas as interventions to improve the experiences of involved stakeholders. It is critical to meet the stated and latent intents, concerns, and constraints of the various users in the service system. The objective of the research discussed in this paper was to solve employee experience disruptions using service design principles and methodologies. Due to the urgency of service design outcome delivery, we approached the problem by critically extracting quality data from limited primary user communications and secondary resources, and reducing the time required in each service design process phase.

We utilized speculative design methods in our service design journey and conducted iterative exercises of collecting problem information, designing fictional narratives of the future, and using the narratives to ideate services. These narratives, enriched with service ideas were then used as probes again to detail the challenges and services, leading to the enrichment of the narrative itself. We observed that such an approach could reduce the overall time in the service design process cycle for outcomes. Future service scenarios and employee service designs could be shared with the service providers in the organization in a short time from a few weeks to a month excluding the pilot of the designs. The RSD approach intends to equip innovators with a method to quicken their service design journey so that they do not struggle when engaging with unforeseen service disruption problems. Some key takeaways from our RtD journey are:

- (1) The use of speculative methods in design research and ideation act as triggers for innovators to discover new user challenge areas and understand the experience gaps in current services. Innovators can leverage the evolving fictional narratives of a future state to detail the experience requirements and fine-tune the service ideas to realize future service scenarios.
- (2) Innovators can leverage the idea of disruption and gradual development of events to inform future scenarios and gradually add details to challenges and ideas iteratively instead of finding detailed challenges first and then getting into detailed ideation. The latter has been reflected to be time-intensive in organizational service design practice (Lobo, Das, & Mahamuni, 2020).
- (3) Service designers were the primary actors in the service innovation journey discussed in this paper, where the intent was to solve employee experience and service problems as part of the project brief received from third-party (service providers in this case). However, service providers of employee services in the organization such as Human Resources, Organizational



Leadership, and others can leverage the RSD approach and undergo the process themselves to manage their future innovations.

(4) Although the approach discussed in this paper highlights the case of responding to internal service disruptions in the organization, the same could be extended to customer-related service design projects where the challenge areas are not clear, problems unfold with time, and there is limited time and a greater urgency to execute design interventions.

### Conclusion

The design case discussed in this paper highlights the experimental nature of our work. We primarily aimed our research on investigating the use of speculative design in service design research. We intended to explore service design approach conceptualization, without the restriction of participant studies. The approach is developed by studying the case of redesigning current employee services to mitigate internal organizational service disruptions that have impacted employee experiences in an IT organization. However, we believe our approach can be used and examined for service design projects in other domains and problem contexts where there is an urgency for service design outcomes. The process of iterative research and design discussed is based on a well-known design-thinking approach. Thus, the RSD approach can be integrated with existing knowledge of design processes and methods for the design of new services. Through this work, we hope to expand the research on the usage of speculative design to inform service design approaches. We also highlight the need and opportunities for research on rapid service design including strategies and methods to drive service design project outcomes faster in organizations.

### References

- Auger, J. (2013). Speculative design: crafting the speculation. *Digital Creativity*. Retrieved from http://dx.doi.org/10.1080/14626268.2013.767276
- Bailey, J. R., & Rehman, S. (2022, 02 14). How to Overcome Return-to-Office Resistance. Retrieved from Havard Business Review: https://hbr.org/2022/02/how-to-overcome-return-to-office-resistance



- Bedarkar, M., & Pandita, D. (2014). A study on the drivers of employee engagement impacting employee performance. *Procedia-Social and Behavioral Sciences 133*, 106-115.
- Bleecker, J. (2009, March). *Design Fiction.* Retrieved from https://drbfw5wfjlxon.cloudfront.net/writing/DesignFiction\_WebEdition.pdf
- Blythe, M. (2014). Research Through Design Fiction: Narrative in Real and Imaginary Abstracts. *CHI 2014 One of a CHInd.*
- Bosch, T. (2012). *Sci-Fi Writer Bruce Sterling Explains the Intriguing New Concept of Design Fiction*. Retrieved from SLATE: https://slate.com/technology/2012/03/bruce-sterling-on-design-fictions.html
- Daly, M., & Robinson, E. (2020). Psychological distress and adaptation to the COVID-19 crisis in the United States. *Journal of Psychiatric Research,*, 1-7.
- Deloitte. (2020). COVID-19 Orchestrating the recovery of organizations and supply chains. Deloitte Design Studio, Canada.
- Dunne, A., & Raby, F. (2013). Speculative everything: design, fiction, and social dreaming. MIT press.
- Durance, P., & Godet, M. (2010). Scenario building: Uses and abuses. *Technological Forecasting & Social Change 77*, (pp. 1488-1492).
- Fadilpašić, S. (2021, 10 06). *Most workers still don't want to return to the office*. Retrieved from TechRadar: https://www.techradar.com/news/most-workersstilldont-want-to-return-to-the-office
- Galloway, A., & Caudwell, C. (2018). Speculative design as research method: From answers to questions and "staying with the trouble". *Undesign*, 85-96.
- Kahn, W. A. (2010). The essence of engagement: Lessons from the field. In *Handbook of employee engagement.* Edward Elgar Publishing.
- Lobo, S., Das, B., & Mahamuni, R. (2020). Transforming organisational Services through Service Design. 22nd DMI: Academic Design Management Conference.



- Mahamuni, R., Meroni, A., Khambete, P., & Punekar, R. M. (2019). Empathy square: an aid for service design for behaviour change to support sustainability. *3rd LeNS world distributed conference (Vol. 3)* (pp. 759-763). Milano, Mexico City, Beijing, Bangalore, Curitiba, Cape Town: Edizioni POLI.design.
- Marchand, A., Demers, A., & Durand, P. (2005). Do occupation and work conditions really matter? A longitudinal analysis of psychological distress experiences among Canadian workers. *Sociology of Health & Illness, 27*, 602-627.
- Mint. (2022, July 7). Work from home in India: 73% firms plan hybrid working model post Covid-19 pandemic. Retrieved from Livemint: https://www.livemint.com/news/india/work-from-home-in-india-73-firmsplanhybrid-working-model-post-covid-19-pandemic-11657152411882.html
- Moorthy, S. (2020, May 27). TCS will have 75% of its employees WFH by 2025, but not many are convinced. Retrieved from Money Control: https://www.moneycontrol.com/news/business/tcs-will-have-75-of-itsemployeewfh-by-2025-but-not-many-are-convinced-5317181.html
- Nayal, P., Pandey, N., & Paul, J. (2022). Covid-19 pandemic and consumeremployee-organization wellbeing: A dynamic capability theory approach. J Consum Aff., 359–390.
- Pasman, G. (2016). Design Fiction as a service design approach. ServDes2016 *Fifth Service Design and Innovation conference*, (pp. 511-515).
- Rao, D. (2022, September 25). Europe's energy crisis, explained Europe is enduring one of the worst energy crises of our time. How did it get here, and what can we expect? Retrieved from The Week: https://theweek.com/climatechange/1016912/climate-changes-role-in-europesenergy-crisis
- Rosson, M. B., & Carroll, J. M. (2002). Usability engineering: scenario-based development of human-computer interaction. Morgan Kaufmann.
- Somekh, B. (2005). Action research. McGraw-Hill Education (UK).
- Spurk, D., & Straub, C. (2020). Flexible employment relationships and careers in times of the COVID-19 pandemic. *Journal of Vocational Behavior*. doi: https://doi.org/10.1016/j.jvb.2020.103435



- Strack, R., Baier, J., Dyrchs, S., Kotsis, Á., Ruan, F., & Radice, M. (2020, March 26). *People Priorities in Response to COVID-19.* Retrieved from https://www.bcg.com/publications/2020/people-solutions-response-covid
- Swann, C. (2002). Action research and the practice of design. *Design issues 18.1*, 49-61.
- Tharp, B. M., & Tharp, S. M. (2009). The 4 Fields of Industrial Design: (No, not furniture, trans, consumer electronics, & toys). Retrieved from Core77: https://www.core77.com/posts/12232/the-4-fields-of-industrial-design-no-notfurniture-trans-consumer-electronics-toys-by-bruce-m-tharp-and-stephanie-mtharp-12232
- Zimmerman, J., Forlizzi, J., & Evenson, S. (2007). Research through design as a method for interaction design research in HCI. *Proceedings of the SIGCHI conference on Human factors in computing systems.*
- Zoonen, W. v., & Hoeven, C. t. (2022). Disruptions and General Distress for Essential and Nonessential Employees During the COVID-19 Pandemic. *J Bus Psychol* 37, 443–458.

