



Changes in Organizational Routines of the Libraries at the Universidade Federal do Paraná Due to the Covid-19 Pandemic

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ABSTRACT

This article examines how remote work, introduced in response to the Covid-19 pandemic, reshaped organizational routines in user services within the library system of the Universidade Federal do Paraná (UFPR). Employing a qualitative, descriptive methodology, the study was based on an empirical case analysis conducted between 2021 and 2022. Data collection involved semi-structured interviews and document analysis, while data were processed using content analysis and triangulation. Seven librarians were interviewed between November and December 2021, and 92 documents were reviewed. The findings indicate that, prior to the shift to remote work, routines were clearly defined and widely understood. Once remote work was implemented, a strong organizational culture—centered on support for teaching, research, and outreach—drove the rapid development of online services. The study concludes that individual agency played a central role in maintaining service continuity during the transition. Technological tools enabled user engagement and supported the restructuring of services. The interaction between human structures, technological resources, and individual initiative proved essential in adapting to an unprecedented context.

Keywords: organizational routines; university library; Covid-19 pandemic; remote work.

INTRODUCTION

According to Feldman (2000), organizational routines entail individuals engaging in activities, reflecting on their actions, and subsequently modifying them. Routines are evidently enacted and established by agents within organizations. Feldman (2000) posits that organizational routines foster change and introduces the ostensive and performative aspects as sources of adjustment between the ideal and the feasible, based on individual practices.

Organizational routines are susceptible to change due to external pressures (Feldman; Pentland, 2003), such as those precipitated by the Covid-19 pandemic, which resulted in widespread fatalities and global socioeconomic disruption. Feldman (2003) contends that alterations in routines stem from external shocks that reshape the organizational environment, thereby necessitating adaptation to novel or evolving circumstances. The pandemic significantly impacted the labor market, demanding a rapid shift of in-person activities to remote modalities, which, in turn, triggered structural, procedural, and relational changes in the workplace. The concept of routine is therefore essential for comprehending both stability and transformation within social environments (Koumakhov; Marengo, 2023).

This study examines the adjustments made to organizational routines within the Library System of the Universidade Federal do Paraná (SiBi/UFPR) during the accelerated transition from in-person to remote work necessitated by the coronavirus pandemic. It seeks to understand how organizational routines functioned prior to the pandemic—when services were predominantly in-person—and how they were adapted in practice to facilitate remote user support, with nearly all staff members unexpectedly working from home without the guidance of pre-established institutional directives.

The overarching objective of this study is to analyze how remote work, necessitated by the Covid-19 pandemic, transformed the organizational routines pertaining to user service delivery within the UFPR Library System (SiBi/UFPR). The specific objectives are: to delineate the organizational routines of the primary services provided by the SiBi/UFPR libraries in addressing user needs both prior to and during the remote service period prompted by the pandemic; to evaluate the ostensive and performative aspects, as well as the artifacts, involved in the modifications implemented for remote service delivery; to comprehend the process of defining and enacting changes in remote user service delivery; and to identify remote work practices that are likely to endure or coexist upon the resumption of in-person services.

The SiBi/UFPR encompasses the Central Library, which serves as the administrative headquarters, and 19 university libraries, organized within a management structure defined by designated roles and responsibilities. These units are classified as university libraries and are responsible for delivering information services. The choice of this research setting is informed by the recognition that libraries play a critical informational role in society, both in public and private institutions, contributing to cultural, educational, political, social, and economic development (Andrade, 2002).

In this sense, the theoretical contribution to the study of organizational routines is to understand the transformations imposed during times of urgent external demands, for which the ostensive aspect had not even been formed.

Organizational Routines

Routines are organizational mechanisms that energize established conditions and behavioral patterns within a structured group of individuals, involving sequential responses to specific signals (Hodgson, 2008). Routines transcend the mere sharing of habits among individuals; they function as organizational metadata that manifest within the context of individuals accustomed to a social structure (Hodgson, 2008). Although routines are generally stable and repetitive mechanisms requiring minimal individual cognitive effort, they preserve organizational memory and embody organizational knowledge (Melo, 2024).

Feldman and Pentland (2003) define organizational routines as repetitive patterns of interdependent actions involving multiple agents, with outcomes contingent on individual effort. Routines are not static; they are continuously emergent systems with internal structures and dynamics (Pentland ; Feldman, 2005). In this regard, routines are central to sustaining process continuity and shaping organizational behavior.

Routines support both organizational stability and change (Pentland; Feldman, 2005). Understanding their dynamics allows for the examination of how everyday actions reinforce, modify, or transform the social structures that individuals continually produce and reproduce (Feldman; Pentland, 2022). The interdependence inherent to routines promotes both consistency and adaptability (Feldman; Rafaeli, 2002). As individuals and groups interact, routines evolve, highlighting the role of individuals as active agents of change.

Eldman (2000) emphasized this transformative potential by distinguishing between the *ostensive* and *performative* dimensions of routines. The ostensive aspect refers to the abstract, structural representation that guides actions, often without requiring conscious reflection. As Spuldaro (2016, p. 32)¹ puts it, the ostensive form is “a configuração ostensiva é utilizada pelos participantes para compor e executar a rotina de um modo situado em um contexto e momento”.

In contrast, the performative aspect consists of the actual practices—actions, behaviors, thoughts, and emotions—through which routines are enacted (Feldman, 2000). Performative elements both replicate and transform routines, as each enactment inevitably introduces variation, making routines a site of both continuity and change (Feldman; Pentland, 2022). The ostensive provides structure; the performative generates action. Their recursive interaction is what enables routines to evolve within a framework of stability.

¹ Translation: “used by participants to compose and carry out the routine in a way that is situated in a specific context and moment” (Spuldarom 2016, p. 32, editorial translation).

Artifacts play a critical role in sustaining and shaping the enactment of routines. They can influence performance (D’Adderio, 2011) and act as representations of routine actions (Pentland; Feldman, 2005).

Os artefatos são as ferramentas/instrumentos físicos, signos e símbolos que medeiam as ações dos seres humanos em suas diferentes formas, constituindo a cultura (Moraes; Lima, 2019, p. 246)².

Within organizations, artifacts commonly take the form of shared written rules and procedures. Although managers may design artifacts to shape work practices, the practical application of a rule or procedure often diverges from its intended purpose (Pentland; Feldman, 2005).

Accordingly, Wegener and Glaser (2021) argue that managers design artifacts, not routines. Intentional efforts to change routines typically involve organizational actors seeking to influence future practices by creating artifacts that guide ongoing enactments (Glaser, 2018). This reflects a broader relationship between routines and organizational processes: artifacts serve as tools for modeling behavior and standardizing procedures that ensure continuity, even though contextual variation precludes full prediction or control. In this sense, formal rules, operational standards, and procedures become key resources for action, though they do not determine performance outright, as real-world variability always influences outcomes (D’Adderio, 2021).

Routines emerge and persist through the dynamic interplay between individuals and artifacts. This interaction introduces inherent dynamism into routine formation (Feldman *et al.*, 2021). Understanding organizational routines thus requires recognizing individuals as agents capable of adapting and refining their work practices while preserving what continues to function effectively.

This perspective reframes routine theory by positioning individuals as agents of both change and continuity. Routines are perpetually emergent systems, shaped by internal dynamics and structural elements (Pentland; Feldman, 2005). In this model, agency, whether exercised individually or collectively, modulates routines by enabling their adaptation, standardization, and control.

Organizational routines are dynamic because they evolve through ongoing processes of production and reproduction, across both time and space, shaped by the sustained actions of the individuals involved. Performance depends not only on agency but also on a shared understanding of organizational relationships. Zahra and George (2002) describe routines as mechanisms through which organizations acquire, assimilate, transform, and apply knowledge to build dynamic capabilities. As Sachetto and Bataglia (2016, p. 256)³ explain, “os processos

2 Translation: “Artifacts are the physical tools/instruments, signs, and symbols that mediate human actions in various forms, constituting culture” (Moraes; Lima, 2019, p. 246, editorial translation).

3 Translation: “processes are responsible for the work structure, and routines are part of the execution of that structure”. (Sachetto; Bataglia, 2016, p. 256, editorial translation).

são responsáveis pela estrutura de trabalho e as rotinas fazem parte da execução dessa estrutura”. This correlation illustrates how routines are fundamental to organizational processes and, depending on their configuration, may themselves constitute the process—that is, the formalization of routines.

University Libraries

University libraries serve the teaching, research, and outreach community within the purview of higher education. Similarly, Cunha and Cavalcanti (2008, p. 53)⁴ emphasize that libraries “atende às necessidades de informação do corpo docente, discente e administrativo, para apoiar tanto as atividades de ensino quanto as de pesquisa e extensão”. The mission of the university library is to support universities’ technical and scientific endeavors and broaden their societal impact through service innovation—offering training in information literacy, intellectual property, and cultural initiatives (Nascimento; Cruz, 2024).

University libraries evolve in tandem with changes in social structures. In this regard, França and Carvalho (2015) underscore that university libraries are essential and strategic elements for the development of organizational activities. They act as agents of social transformation by facilitating open access to information, thus contributing to the advancement of science in its broadest form. According to Dib and Silva (2009, p. 21)⁵, university libraries “têm papel preponderante no desenvolvimento da sociedade, pois são mediadoras no processo de geração e produção do conhecimento”. Dado que as bibliotecas universitárias apoiam o ciclo da vida acadêmica, é fundamental que elas estejam alinhadas nos processos de desenvolvimento tecnológico e científicos das universidades, promovendo aperfeiçoamento dos seus produtos e serviços a fim de manter a socialização do conhecimento.

University libraries structure their activities around their central tenet: information. Maciel and Mendonça (2006) outline four primary functions: collection development, organization of collections, promotion of collections, and managerial functions. By including managerial functions, the authors incorporate administrative management activities as components of what they characterize as macroprocesses, thereby offering a perspective more closely aligned with the operational reality of university libraries. The organizational structure “orientada pela responsabilidade é onde ocorrerá a coordenação da regulação do fluxo temporal e físico do processo” (Paim; Cardoso; Caulliroux; Clemente, 2011, p. 65)⁶. Within this structure, the managerial function facilitates the coordination of workflows associated with information services and products, such as material selection and acquisition, cataloging, lending, and user support.

4 Translation: “meet the information needs of faculty, students, and administrative staff, supporting both teaching activities and research and outreach” (Cunha; Cavalcanti, 2008, p. 53, editorial translation).

5 Translation: “play a leading role in societal development, as they mediate the processes of knowledge generation and production” (Dib; Silva, 2009, p. 21, editorial translation).

6 Translation: “guided by responsibility is where the coordination of the regulation of the temporal and physical flow of the process will occur” (Paim; Cardoso; Caulliroux; Clemente, 2011, p. 65, editorial translation).

The library's operations are organized around the provision of information services and products, including bibliographic materials, library management systems, selective dissemination of information, and associated material and financial resources. University library activities are carried out through structured processes, subdivided into macroprocesses and subprocesses. The macroprocesses include administration, development and formation of informational resources, information processing, and user services. These categories align with the framework proposed by Maciel and Mendonça (2006): managerial functions correspond to administration; collection development aligns with the development and formation of informational resources; organization of collections maps onto information processing; and promotion of collections corresponds to user services.

In this way, the dynamics of routines play a central role in strengthening library processes and services. Identifying and analyzing existing processes—breaking them down into specific levels of processes, subprocesses, and activities—is therefore essential for designing workflows that enhance the quality of services offered to users.

Remote work in the context of the covid-19 pandemic

Remote work refers to the performance of professional duties outside the physical premises of an organization. The literature encompasses a variety of related terms, including *telework*, *teleactivity*, and *home office*. According to Article 75-B of Law No. 13.467 (2017, online)⁷,

considera-se teletrabalho a prestação de serviços preponderantemente fora das dependências do empregador, com a utilização de tecnologias de informação e de comunicação que, por sua natureza, não se constituam como trabalho externo.

The Sociedade Brasileira de Teletrabalho e Teleatividades (2020) classifies *home office* as a modality of telework, characterizing it as work carried out from home through the use of technological tools. Nogueira and Patini (2012, p. 125)⁸, similarly define it as “pode ser definido como o trabalho realizado à distância e por meio do uso das novas tecnologias de comunicação”.

Telework is a specific form of work organization. In telework, employees are not physically present at the company's headquarters but participate virtually in work activities through communication technologies (Almeida, 2017). Thus, remote work refers to employment

7 Translation: “Telework is defined as the provision of services primarily outside the employer's premises, utilizing information and communication technologies, which, by their nature, do not constitute external work” (Art. 75-B da Lei 13.467, 2017, *online*, editorial translation).

8 Translation: “work performed remotely and through the use of new communication technologies” (Nogueira; Patini, 2012, p. 125, editorial translation).

executed away from the organization's physical space under a contractual work relationship, using technology for service delivery and communication tools to maintain connection with the workplace and colleagues.

The Covid-19 pandemic disrupted the economy and impacted various labor markets, organizations, and both small and large businesses. Social distancing and lockdown measures aimed at curbing the virus's spread—such as the closure of schools, universities, daycares, shops, and companies—necessitated an immediate organizational response and adaptation (Losekann; Mourão, 2020).

Remote work became a strategy to ensure the continuity of services and work relationships—it was not a choice but the sole available solution. For managers, leading a team remotely presents significant complexities.

A gestão de equipes remotas envolve complexidades adicionais comparadas à gestão tradicional, incluindo a necessidade de comunicação eficaz, manutenção da coesão da equipe, e monitoramento do bem-estar dos trabalhadores (Franqueira *et al.*, 2024, p. 4)⁹.

The pandemic experience underscored the need for flexible team management, monitoring of employee well-being, and the continuous adaptation of organizational practices (Franqueira *et al.*, 2024). For workers, it demanded the rapid acquisition of new technological skills and the establishment of novel forms of interaction and communication among teams (Losekann; Mourão, 2020). In this context, interpersonal relationships became crucial for clear communication, mutual understanding of the challenges at hand, and the achievement of goals.

Education was among the sectors most severely affected. The closure of all basic, elementary, secondary, technical, and higher education institutions left students without in-person classes. Education necessitated rapid adaptation, shifting to virtual instruction. In Higher Education Institutions (HEIs), faculty were required to revise syllabi and replan their classes. Alongside them, administrative and technical staff had to adapt to new technologies to work remotely, balance family and domestic responsibilities with work, and cope with the psychological toll of the pandemic.

University libraries also had to adapt to the pandemic context. As Wurm, Grisold, Mendling, and Vom Brocke (2021, p. 3) note, routines emerge solely through specific performances. Libraries were therefore compelled to innovate.

A inovação na biblioteca universitária pode ser a alteração de processos técnicos ou a implementação de um serviço completamente inovador; pode ser planejada ou às pressas (Nascimento; Cruz, 2024, p. 410)¹⁰.

9 Translation: "Managing remote teams involves additional complexities compared to traditional management, including the need for effective communication, team cohesion, and monitoring employee well-being" (Franqueira *et al.*, 2024, p. 4, editorial translation).

10 Translation: "Innovation in the university library can mean modifying technical processes or implementing entirely new services; it may be either planned or improvised" (Nascimento; Cruz, 2024, p. 410, editorial translation).

University libraries reinvented themselves by personalizing communication, enhancing remote assistance, and expanding access to scientific information (Gasparini; Casoni; Alcará, 2021). Their strategies included the creation and reconfiguration of services, the development of previously established activities, and the adaptation of services to the evolving situation (Beglou; Akhshik, 2023).

Fonseca (2021, p. 17)¹¹ explains:

O cenário de pandemia de Covid-19 trouxe uma nova realidade para as instituições de fomento à educação e de desenvolvimento social-científico, cuja necessidade de adaptabilidade precisou ser alinhada estrategicamente com as ferramentas digitais.

De acordo com Cultri, Bazilio e Gomes (2020, p. 103)¹², “faz parte da nova rotina, o uso de ferramentas colaborativas e o crescimento da produção de materiais instrucionais para divulgação em mídias sociais (*Instagram, Facebook, Twitter, WhatsApp, blogs*, entre outras)”. Thus, the actions undertaken by library staff during the pandemic were vital to the continuity of services. A crisis of this nature and scale spurs progress, accelerates change, and transforms behavior, these are the dynamics this study seeks to explore in greater depth.

METHODOLOGY

This study employed a qualitative approach, chosen due to the necessity for an in-depth understanding of the changes in organizational routines in user service operations within the SiBi/UFPR libraries resulting from the transition from in-person to remote activities during the Covid-19 pandemic.

According to Cultri, Bazilio, and Gomes (2020, p. 103)¹³ qualitative research “procura especificar as propriedades, as características e os perfis de pessoas, grupos, comunidades, processos, objetos ou qualquer outro fenômeno que possa ser submetido a uma análise”. This research falls within the field of applied social sciences, utilizing the empirical case study method, aimed at analyzing the impact of the pandemic on organizational routines within the UFPR Library System. Drawing on the theoretical contributions of Feldman (2000; 2003), Feldman and Pentland (2003), and Pentland and Feldman (2005), the study considers organizational routines as sources of both stability and change.ça.

The research was conducted within the libraries of the Universidade Federal do Paraná Library System (SiBi/UFPR). The Universidade Federal do Paraná is a public federal institution of higher education under the Ministry of Education, structured across multiple

11 Translation: “The Covid-19 pandemic introduced a new reality for institutions promoting education and socio-scientific development, requiring adaptability to be strategically aligned with digital tools” (Fonseca, 2021, p. 17, editorial translation).

12 Translation: “the new routine includes the use of collaborative tools and the growth in the production of instructional materials disseminated through social media platforms such as Instagram, Facebook, Twitter, WhatsApp, blogs, among others” (Cultri; Bazilio; Gomes 2020, p. 103, editorial translation).

13 Translation: “seeks to specify the properties, characteristics, and profiles of individuals, groups, communities, processes, objects, or any other phenomenon that can be subjected to analysis” (Sampieri; Collado; Lucio, 2013, p. 107).

campuses and dedicated to teaching, research, and outreach. SiBi/UFPR is an integrated library system comprising the Central Library – its administrative headquarters – and 19 university libraries, functioning as a supplementary unit linked to the Rector’s Office. The system includes a relatively small staff of 188 employees with diverse expertise, roles, and responsibilities, of whom 79 are librarians, including 1 general director, 11 section heads, and 17 library heads.

These libraries operate as organizational units within the broader administrative structure, each with its own defined roles and responsibilities. Their management is interdependent, designed to serve faculty, students, and administrative staff (Universidade Federal do Paraná, 2021).

For data collection, the research followed a two-stage procedure: first, document analysis was conducted; second, semi-structured interviews were held with seven librarians who held managerial roles in seven different libraries within the system. A purposive convenience sample was used, selecting libraries that had provided some form of user support during the period of remote work. To preserve anonymity, the librarians were assigned pseudonyms inspired by famous libraries around the world: Alexandria, Papiros, Pergamon, Nalanda, Constantinople, Vasconcelos, and Joanina.

The seven interviews took place between November and December 2021, generating a total of 5 hours and 8 minutes of recorded content, which was transcribed into 62 pages of text. As Sampieri, Collado, and Lucio (2013, p. 485)¹⁴, explain, this type of interview “baseia-se em um roteiro de assuntos ou perguntas e o entrevistador tem a liberdade de incluir outras perguntas para tornar os conceitos mais precisos ou obter mais informação sobre os temas desejados”. The semi-structured format allows for in-depth responses and greater flexibility in exploring the research themes.

In total, 92 documents were analyzed – 76 institutional and 16 normative – comprising internal regulations, user education programs, lending policies from 2017 and 2020, ordinances, policy documents, circulars, web content, forms, and other materials related to user services.

For data analysis and interpretation, the study applied content analysis, based on Bardin’s (2016) methodology, combined with data triangulation to ensure the validation of results as proposed by Yin (2016). Content analysis is defined as “um conjunto de técnicas de análise das comunicações, que utiliza procedimentos sistemáticos e objetivos de descrição do conteúdo das mensagens” (Bardin, 2016, p. 48)¹⁵. The analysis was structured around pre-established categories and subcategories. According to Yin, triangulation:

em pesquisa, o princípio refere-se ao objetivo de buscar ao menos três modos de verificar ou corroborar um determinado evento, descrição ou fato que está sendo relatado por um estudo (Yin, 2016, p. 96)¹⁶.

14 Translation: “is based on a script of topics or questions, and the interviewer has the freedom to include additional questions to clarify concepts or obtain more information on desired topics” (Sampieri; Collado; Lucio, 2013, p. 485, editorial translation).

15 Translation: “a set of techniques for analyzing communications, using systematic and objective procedures to describe message content” (Bardin, 2016, p. 48, editorial translation).

16 Translation: “in reasearch refers to the objective of using at least three different sources or methods to verify or corroborate a specific event, description, or reported fact” (Yin, 2016, p. 96, editorial translation).

For this study, triangulation was based on the comparison and cross-analysis of theoretical references, collected documents, and verbatim interview transcripts to enhance the reliability of the findings.

ANALYSIS AND DISCUSSION OF RESULTS

The libraries of UFPR serve both the academic and external communities. SiBi/UFPR, a supplementary unit directly linked to the Rector's Office, is composed of organizational units that function within the broader administrative and pedagogical structure. These libraries implement diverse processes and procedures to address the academic and scientific demands related to research, teaching, and outreach.

Circulation and reference services are the sectors responsible for direct, personalized user support and are tasked with sustaining the informational quality of university libraries. When investigating library user services, it is essential to highlight organizational routines to better comprehend their components. Circulation services manage collection flow, encompassing materials, spaces, equipment, and user reception. As Maciel and Mendonça (2006, p. 37)¹⁷ state, "é a função responsável pelo controle da movimentação das coleções dentro (consultas) e fora da biblioteca (empréstimo domiciliar, circulação restrita ou dirigida, empréstimo entre bibliotecas)". The reference service addresses users' informational needs. According to Maciel and Mendonça (2006, p. 33)¹⁸, reference "promove o uso do sistema e de seus recursos e, para isso, desenvolve atividade de treinamento pessoal da clientela na utilização do acervo, catálogos, bases e o acesso às virtuais". In this context, the librarian plays a central role in supporting teaching and learning processes.

In the first phase of the analysis, ten user service routines were selected to assess how they were delivered prior to the pandemic and how they were adapted during remote work. Circulation services included: general guidance; use of library spaces and equipment; loans and returns; renewals and reservations; and clearance certificates. Reference services included: user training and capacity building; bibliographic research; guidance on database access; support for academic writing and formatting; and guided tours.

Based on the methodological procedures and process descriptions, significant changes were identified in the routines of both circulation and reference services. The effort to maintain user services during social isolation became a valuable learning experience for SiBi/UFPR staff, particularly in terms of developing online services, an initiative that could have been implemented earlier but was hindered by a lack of strategic alignment between virtual and in-person service models, with a general preference for the latter among staff and users.

The findings suggest that, prior to the pandemic, user service routines at SiBi/UFPR were well regulated and widely understood, with clearly established ostensive aspects.

17 Translation: "it is the function responsible for managing collection circulation inside the library (on-site consultations) and outside (home loans, restricted or directed circulation, interlibrary loans)" (Maciel; Mendonça, 2006, p. 37, editorial translation).

18 Translation: "promotes use of the system and its resources, including training users to navigate the collection, catalogs, databases, and virtual access" (Maciel; Mendonça, 2006, p. 33, editorial translation).

However, this familiarity also led to a degree of complacency, especially concerning the adoption of available technological tools. Interviewees were asked to describe how service routines were conducted before and after the onset of remote work. This data supported the creation of comparative tables for each of the ten routines, integrating excerpts from interviews and institutional documents.

The descriptive analysis revealed several key insights: most services had been delivered in person, despite the existence of some underutilized online options; routines with existing digital components remained largely stable; services dependent on physical space were suspended; physical and technological artifacts were reconfigured; reference services were significantly restructured; a new service helpdesk was implemented to manage user requests; and numerous routines were transformed. Microsoft Teams emerged as the central platform for virtual collaboration and workflow coordination.

There was a notable increase in performative aspects, accompanied by initial resistance among staff to transitioning away from in-person work. Interviewee “Pergamon” described the early experience of remote work as a shock, expressing a strong preference for continuing duties within the library—even when it was closed to the public—rather than working from home. Over time, however, after bringing their work computer home, they gradually adapted to the new remote reality.

Resistance to change is often rooted in organizational politics and power dynamics. Individuals may adhere to established routines not merely to meet expectations but also to preserve familiar working conditions (Knights; McCabe, 1998; Feldman, 2004). Such resistance typically stems from institutional inertia and attachment to tradition.

The abrupt shift in SiBi/UFPR’s user service routines due to the pandemic necessitated immediate action. “Constantinople” shared that they initially used an ironing board as a makeshift desk. Transitioning from a structured workspace to an improvised home setup was both challenging and demanded resilience. “Vasconcelos” noted that despite initial stress and technical difficulties, the team gradually developed an effective remote work dynamic. The initial stage was marked by confusion, stemming from the lack of home technology and the prohibition of in-person service, which left users temporarily unsupported while technical staff sought operational solutions.

Long-established routines engendered initial resistance. However, the strong institutional culture of supporting teaching, research, and outreach rapidly drove change. Libraries individually began experimenting with new remote routines centered on performative practices. “Alexandria” reported that organizational communication was revised—emails and notices were reformulated, and new guidelines were issued to enhance user service. “Nalanda” highlighted that the remote period was utilized to update and produce regulatory documents. Familiarity with the ostensive aspects of routines helped guide remote actions: staff knew what to do, even if not precisely how to do it in a new setting. Over time, adaptation occurred—especially as material conditions like computers and internet access were adjusted

for home use. The pandemic accelerated the creation of normative documents; technological artifacts enabled user interaction and facilitated service restructuring; and communication improved within the remote work context.

As Feldman and Pentland (2003) noted, the performative aspect of routines emerges from specific actions undertaken by specific individuals at specific times. Feldman (2003) emphasized routines as a source of continuous change. Feldman and Orlikowski (2011) stated that agency both shapes and is shaped by structural conditions. D’Adderio (2011) affirmed that artifacts and agency influence routine dynamics. Thus, the adoption and effective utilization of existing or newly introduced technological tools (artifacts) enabled these changes.

Virtual interactions and the creation of workgroups fostered the sharing of best practices across the system. These adaptations not only encouraged the utilization of technological resources but also led to the creation of new services to meet evolving user needs. “Papiros” highlighted Microsoft Office 365 as a key tool, while “Alexandria” pointed to Teams as essential for communication and task organization despite physical distance. With the system adapted and most services restored, the process of documenting organizational routines resumed, reaffirming the role of ostensive aspects. These aspects allow routines to be named, patterns to be recognized and replicated, and processes to be critically assessed (Feldman; Pentland, 2003).

Every change brings disruption – between the “established” before and the “experienced” after – creating a tension between ostensive and performative aspects, mediated by artifacts, which played a pivotal role in this case. The previously established model could have already integrated technology and remote service to enhance collaboration across libraries. However, the prevailing culture prioritized in-person interactions among staff and users alike. “Vasconcelos” observed that the transition to online service expanded offerings—what was once merely an idea became a practical reality. Initially, they believed a live chat feature would be necessary but later realized multiple tools could provide effective service, which was seen as a significant gain.

Agents were compelled to adapt, shifting formerly physical services into the digital realm. As in-person services resume, the advances achieved through online experiences will be maintained.

The Covid-19 pandemic catalyzed both learning and change in services and organizational routines. This study found that specific technological artifacts were essential for enabling remote work and transforming routines. Ostensive aspects—particularly prior familiarity with tasks—helped guide initial actions in the new format. As Spuldaro (2016, p. 87)¹⁹ noted, “o aspecto ostensivo está ligado à capacidade e à disposição que a organização possui que podem ser postas em uso se necessário”. Stańczyk-Hugiet (2014) explained that routines are more than regular business behaviors—they are practical strategies that shape how an organization approaches non-routine problems. In this way, agency’s decision-

19 Translation: “the ostensive aspect is linked to the organization’s capacity and willingness that can be mobilized when needed” (Spuldaro, 2016, p. 87, editorial translation).

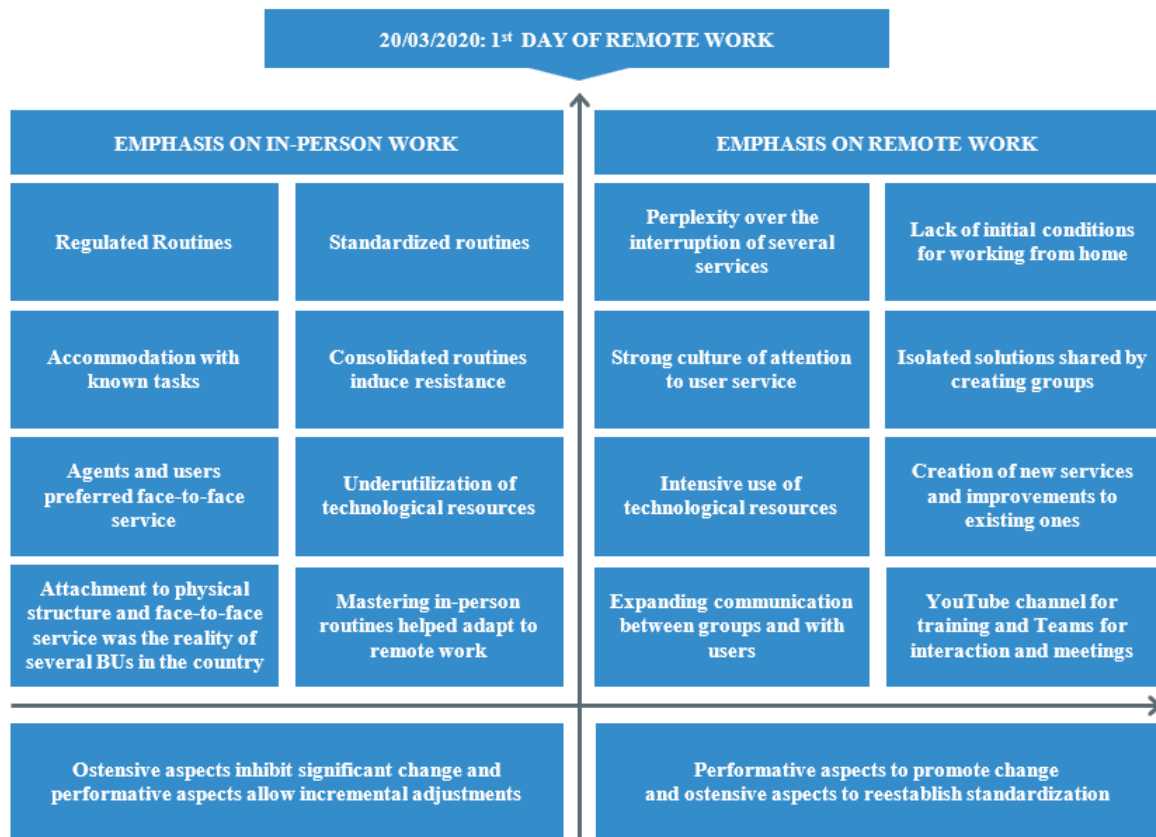
making process drove behavior and change in response to external pressures. Remote work required agents (teams, groups, collectives) to construct a new way of operating. According to the findings, task execution relied heavily on performance.

The implementation of changes revitalized services: digital engagement with users improved service quality; online service spaces – particularly via Teams – were established; hybrid service models emerged; application usage for staff-user interaction improved, including through social media; virtual meetings between libraries reduced travel, costs, and time loss; and user engagement expanded through YouTube-based training. In 2019, the SiBi/UFPR YouTube channel had 15 subscribers and 515 views. By 2021, it peaked at 2,491 subscribers and 27,512 views. Between 2020 and May 2022, the channel reached 3,660 subscribers and 42,053 views (Universidade Federal do Paraná, 2022), indicating outreach to a user profile previously underserved.

Although some services were temporarily impacted, overall service delivery improved. “Vasconcelos” emphasized the innovation of online support, with librarians available in eight-hour shifts to respond to user inquiries and offer guidance, ensuring consistent service. “Joanina” noted that reference services underwent a near-complete transformation, with little likelihood of returning to a solely in-person model. Technological tools enabled task execution and improved communication, resulting in services that were not only sustained but strengthened—many of which are expected to remain part of the library system’s operations moving forward.

FIGURE 1 below presents a synthesis of SiBi/UFPR’s organizational routines, comparing the state “prior to” and “following” the abrupt and necessary transition to remote work during the coronavirus pandemic.

FIGURE 1 - Summary of results comparing the “before” and “since” the implementation of remote work



Source: authors (2024).

An analysis of the role of physical presence in user service routines prior to social isolation, alongside the attachment to established and internalized norms, reveals a striking contrast with the changes driven by the use of technological resources during remote work. This dynamic aligns with the *configuration approach* proposed by Mintzberg, Ahlstrand, and Lampel (2010), which posits that organizations alternate between periods of relative stability, marked by adaptation to environmental demands, and revolutionary phases that necessitate substantial change to reestablish equilibrium in response to new competitive conditions.

This equilibrium is typically maintained through the effective execution of practices that meet user expectations, practices that are well-established and widely adopted across most university libraries in Brazil. While it was already understood that technological tools could enhance and diversify the delivery of user services, it took an unprecedented crisis to disrupt these consolidated routines and provoke deep, immediate change. The shift to remote work led to the intensive use of Information and Communication Technologies (ICT), driven by human agency. These changes were only formalized and documented once implemented

and tested, reflecting a reconfiguration aimed at achieving a new balance with the external environment. In contexts where ostensive structures inhibit innovation, a rupture in meaning can bring performative action to the forefront.

Following the pandemic, the central challenge is to sustain the most effective practices developed for digital services while reinstating in-person services. This dual model should ensure that users of diverse profiles have equitable access to both physical and digital collections for their academic and research needs. It is also crucial to monitor the distribution of workload to prevent excessive demands on individual staff members and departments. The reintroduction of in-person services, if not accompanied by a reevaluation of responsibilities, risks creating an unsustainable overlap with ongoing remote service provisions, potentially leading to work that exceeds the limits of regulated hours, particularly in the digital realm. This can result in staff fatigue and undermine the quality of user support.

It is therefore both necessary and feasible to evaluate the increased workload borne by the current team in managing hybrid service delivery. Adjustments may include expanding staffing or aligning service levels with the institution's available human resources. It must be recognized that the ability to work from home does not imply that employees' time is boundless or that remote work should extend beyond the hours stipulated for in-person service.

CONCLUSIONS

This study analyzed remote work in user services within a library system, aiming to comprehend the changes brought about by the repositioning of work during a historically fragile moment for humankind.

Based on the interviews and document analysis conducted to identify user service routines in both time periods, it was possible to observe the nuances between in-person and remote work, the latter resulting from the adaptation of services to online modalities. In this regard, the study reinforces the tenet that organizational routines are both sources of stability and change.

Regarding ostensive and performative aspects and artifacts, it was found that there was no—nor could there have been—prior planning for the implementation of remote work. Library staff were compelled to act, facing initial challenges and gradually adapting as they gained understanding of the new work context. In the absence of ostensive elements and guiding artifacts—particularly for the abrupt transition to remote work—library staff acted performatively, drawing on internalized ostensive aspects, especially the intrinsic sense of mission that characterizes the training and professional ethos of librarians.

Communication among staff and stakeholders was driven by technological resources, which facilitated work organization, user interaction, and the promotion of services. Additionally, technological artifacts were fundamental in executing tasks and introducing variations in routine. The adoption of these technologies had positive impacts and could influence how other institutions offer services using either existing tools or those to be implemented.

With regard to the process of defining and implementing changes, the research revealed that actions were taken to address user demands. The moment enabled significant gains, prompted by the need to adapt swiftly to a virtual environment, fostering a hybrid system and granting greater autonomy to users. Thus, remote work became a milestone for SiBi/UFPR, serving as a learning experience on how to deliver remote services.

Remote work represented a significant juncture for SiBi/UFPR, and the results show a restructuring of user services, involving hybrid service delivery and products, as well as the development of practices that will be maintained in in-person service. These services enhanced the utilization of online interaction tools, bringing users closer. Studying the library system during the pandemic through the lens of organizational routines contributes to a reinterpretation of the concept of remote work, considering the full scope of ostensive, performative aspects, and artifacts involved in the reorganization of routines. It also reveals that theory does not fully capture the model experienced during this period.

From a theoretical standpoint, ostensivity was expressed through the human structural dimension that informed performance. In this context, agency emerged as a catalyst for both routine stability and transformation. Through its actions, agency develops ostensive and performative aspects and mobilizes artifacts—thus generating and regenerating organizational structures.

A limitation of this study lies in the fact that the researcher began the study just as she started working as a Librarian in the researched environment, during remote work and amidst the turmoil of change. This may have interfered with the necessary distance from the research object. On the other hand, experiencing the phenomenon in real time allowed for a deeper understanding of the routines developed, within a participatory perspective of the change process. A second limitation was the infeasibility of using observation as a data collection method, which also prevented face-to-face interaction with interviewees—something that can affect the naturalness of recorded video calls. Again, on the other hand, it enabled full utilization of digital communication tools, both for interviews and meetings within the groups created to share experiences and solutions, and to plan the standardization of the re-created routines across UFPR libraries.

Building on the results of this study, future research could explore in further details the interaction between human agency and technological artifacts (sociomateriality) within the university library environment. Such research should consider that access to Information and Communication Technologies is only fully harnessed when individuals are prepared and motivated to drive change.

The Covid-19 pandemic was the catalyst for change, reaffirming the principle that crises generate threats that must be transformed into opportunities for meaningful improvement—in this case, involving the organizational routines of user services at SiBi/UFPR.

It also prompts reflection on why the available technological resources were not adopted prior to the pandemic through incremental changes, rather than through a quantum leap driven by a crisis that left no option but to change. Although not the main focus of this

study, the results align with the configuration approach proposed by Mintzberg, Ahlstrand, and Lampel (2010), in which organizations alternate between periods of stability—through adaptation to environmental demands—and revolutionary periods, during which they are compelled to make significant changes to restore balance with the new demands of the competitive environment.

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