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DESIGNING A DIGITAL EMPLOYEE EXPERIENCE FOR RESEARCH

ADMINISTRATION USING A SEQUENTIAL MIXED-METHODS APPROACH

By

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A dissertation proposal submitted in partial fulfillment of the requirements for the degree of

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<u>at</u>

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ABSTRACT

Title: Designing a Digital Employee Experience for Research Administration Using a Sequential Mixed-Methods Approach

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This dissertation examines the concept of digital employee experience in the research administration industry. Using a digital employee experience framework, the study examined how the pandemic impacted the research administration work environment. This dissertation presents perceptions and draws insights from research administration leaders, management, and staff on digital work and digital employee experiences through the pandemic. The dissertation was motivated by three research questions: (1) What challenges did research administrators encounter during the Pandemic? (2) What were the research administrators' perceptions of digital transformation during their employee journey? and (3) What is the future of research administration as the industry moves forward post-pandemic? Previous literature indicated that the digital employee experience framework was comprised of eight essential components: technology, physical environment, culture, business strategy, leadership, career, brand, and personal. Since the 2020 pandemic began, various studies of digital work environments, digital employee experiences, and remote work have been conducted. However, there have been limited studies of the research administration industry. This dissertation will advance the work of Gheidar and Zanjani (2021) and provide an understanding of the digital employee experience in

the research administration community. To study research administration's perceptions of digital work environments and digital employee experiences from a holistic perspective, a sequential mixed methods approach utilizing quantitative and qualitative research methods was selected. During the first phase of the research, the objective was to obtain top-down digital transformation and digital workplace insights by interviewing 11 United States Research Administration leaders. The second phase of the research included surveying 548 research administrators who provided their insights on the digital work environment, digital employee experiences and the future of research administration. The key findings from the research revealed that maintaining team culture in a digital environment is challenging and that leaders must be creative and innovative to maintain the culture of their teams. The Pandemic transformed the landscape of research administration at the team and organizational levels by changing from fully in-person office models to remote and hybrid models. This transformation created challenges and obstacles for management and staff, prompting them to rethink how to perform research administration business in different environments. The study indicated that leadership should invest in Digital Employee Experience tools and practices as we enter this new research administration world. These tools and practices can provide positive employee experiences in a digital environment. In conclusion, RA work must continue to adapt to an ever more digitalized world. Future research should focus on finding ways to maintain culture and gather ongoing faculty research perspectives on the evolution of the digital work environment in research administration.

Keywords: [Digital Employee Experience, Remote Work, Research Administration, Digital Transformation]

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INTRODUCTION

In 2020, the world faced a dramatic shift in work schedules due to the responses to the COVID-19 Pandemic. According to PEW research (December 2020), 20% of workers indicated they worked from home either all the time or most of the time before the Pandemic. Additionally, 18% confirmed that they had some work-from-home model before the Pandemic. On the other hand, more than 50% of the workforce needed more experience working from home or needed a proper environment to work from home. When the Pandemic began, many industries were forced to convert their in-office environment to an at-home office environment where meetings and collaborations were no longer in person. Instead, they used platforms like Zoom, Microsoft Teams, and Skype to work together. Research Administration experienced this disruptive, dramatic change wherein they were forced to transform their operations to a remote format.

Research administration is a university function that assists researchers with grant applications and grant management. Grants are essential for faculty tenure and universities to produce cutting-edge research. From a university administration perspective, grants are significant because they help support research, services, or programs without using university funding. Grants can also bring collaborators and universities together through consortium methods. Federal and non-federal grant funding can keep a lab financially supported and ease strategic decisions for the university. Federal funding refers to government agencies with stricter guidelines and policies that universities need to ensure faculty and departments comply with government regulations. Non-federal funding includes industry collaborations and non-profit foundations that can help bridge a lab to win a much larger federal grant. In comparison, non-federal agencies have softer guidelines to follow but with lower funding limits. To manage grant funding, universities must have a department that administers the research faculty grants to ensure they comply with and follow university processes and policies. The primary function of research administration is one-on-one interaction with the faculty to review grant proposals, grant financial management, and grant processes and closeouts. In research administration, the in-office environment was the norm for working with researchers and department personnel in person. This changed when the Pandemic hit universities, and a new model had to be implemented as the Administrators, and many researchers had to work from home.

Pilot Study

The Pandemic created challenges among university faculty, but it also created challenges among research administration teams and colleagues by inserting distance into their tasks and responsibilities. A pilot study, the Jefferson Office of Research Support Services Survey, was conducted with 47 Jefferson research administrators who completed a written survey to obtain early perspectives on their digital transformation experiences. Challenges that were reported included the following: (1) lack of training and organizational development, (2) at-home work environment inconsistencies, (3) inadequate Leadership communication, (4) mental well-being challenges, and (5) transition from teams to silos (Jones, 2020).

The respondents reported no focus on training and onboarding during the remote work change. As a result, new employees need help with individual and organizational development. Additionally, respondents indicated that at-home work created productivity challenges because each home environment was different, and colleagues required the same resources. Leadership communication was also a challenge for the respondents because communication through a digital platform was difficult, and sometimes there needed to be more communication from leadership (Jones, 2020).

Being at home also led to mental health challenges for some. The survey indicated that each person had a different home environment, and balancing work and home-related tasks were sometimes challenging. This, at times, created additional stress levels for employees when the Pandemic and work had already created a high level of stress and anxiety. Finally, respondents who worked in teams were forced to be physically separated from their teams. This meant that each member had to work independently without the flexibility to ask colleagues for just-in-time assistance as they could in the office. Though these were challenges presented in a survey nine months into the Pandemic, these challenges were still occurring at the time of this study, and RA leadership continues to think about adequate responses and how to manage these challenges (Jones, 2020). As we look forward beyond 2022, organizations are thinking about bringing their employees back into the office by guaranteeing a solid employee experience while maintaining a high level of productivity.

The remaining sections of the introduction chapter will address the problem's significance and present a purpose statement, conceptual framework, research questions, delimitations, and assumptions. The problem significance section will discuss the importance of planning and developing a model that works for research administration. The purpose statement will address the research objectives and the potential outcomes of the study. The conceptual framework introduces Digital Employee Experience (DEX) and a framework for developing a DEX model for research administration. The research questions will identify the subjects that the research will center around. The delimitations and limitations section will address this study's potential weaknesses and boundaries.

Significance of the Problem

As employers return their employees to the office, leaders develop hybrid and remote models that align with their strategic plans. Corporate industries across America are handling returns in various ways. Some are going fully remote, while others are testing a hybrid model. For example, Pricewaterhouse Coopers LLP (PWC) announced in October 2021 that their employees could choose full-time remote work for their careers (Person, & DiNapoli, 2021). Companies like Facebook, Zillow, Spotify, Slack, and Twitter announced in 2021 that their employees never need to return to work (Build Remote, 2022). Alternatively, companies like Apple, Google, Amazon, and Scotiabank have announced that their employees can work remotely until 2022 (Build Remote, 2022). In other words, when and how to bring employees back is significant because organizations are trying to figure out the correct approach.

Three perspectives that should be considered in determining the return to the office include employee morale, employee experience, and flexibility concerns. For the research administration industry, specifically research institutions, the timing of returning to the office determines what is suitable for the business. Based on the researcher's experiences, Leadership also must consider external environmental challenges such as viruses, vaccines, and employees' home situations. At the same time, leadership should avoid being too aggressive to get employees back into the office as employees are concerned about their individual needs and requirements. If an organization is not considerate of its employees, employees may find an opportunity elsewhere that works better for their situation. The term "Great Resignation" was coined in 2021 when employees voluntarily resigned from their jobs. PWC (2022) survey shows that low pay, no opportunities for advancement, and feeling disrespected are the top reasons employees leave their organization.

As an employee progresses through an organization, their employment journey comprised of various experiences regarding how they feel about their position and organization. Due to the Pandemic, employees now additionally experience digital transformation, so leaders need to become aware of the digital employee experiences within their organization. Digital employee experience, one piece of an employee experience, refers to how the employee interacts with the digital environment, either in-office or remotely, and how they feel about those experiences (VMWare, 2022)). Thus, organizations must realize that productivity and digital employee experience concerns are essential when bringing their employees back into the office.

When organizations planned to bring back their employees, research administration leaders thought about return-to-work plans. The slower, phased-back return approach has been popular, but some organizations are considering returning their workforce full-time with no remote work option. Some leaders may not know how the employees feel about returning to work, and when they do return, leaders will need to be ready for their return to the office. In any case, creating and implementing a plan is crucial.

General Problem of the Dissertation

This dissertation examines research administration perceptions to understand how leaders can build and develop positive, digital employee experiences. A positive employee experience should assist leaders with a seamless return-to-office transition. The dissertation will also evaluate how research administrators perceived their digital employee experience during the Pandemic and their feelings about returning to the office post-Pandemic. The study aims to evaluate the research administration community's digital employee experiences to design a digital employee experience framework.

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Problem Statement

While the literature states that a hybrid work model can increase productivity and improve employee experience, this research still needs to explain how stakeholders cope with this forced daily routine change. Additionally, digital employee experience has yet to be studied in the research administration field, which can provide a foundation for further research on employee experience of digital work after the Pandemic.

The proposed study is timely because leaders want to know how their staff feel about the transition back into the office after the worldwide digital transformation of 2020. This research can also provide a framework for institutions exploring how their community perceives the return to office work and for learning employee preferences for how their hybrid model should work. This study is timely because digital employee experience is a trending topic that needs to be adequately addressed in the research administration industry. It is crucial for leadership in any sector to consider employees' feelings about the organization in which they work. Since the research administration profession includes remote responsibilities, organizational leadership must now understand its digital employee experiences and mindsets.

Purpose Statement

To address the research questions on digital employee experience in research administration, this study uses interviews and surveys in a two-phase sequential explanatory mixed-methods design. Chapter Three will describe this methodology in detail, including how it was chosen. The interviews were used in Phase 1 to gain insight into the perspectives of the research administration leaders. This data was used along with existing digital employee experience surveys to design the questionnaire for phase 2. The population in this study included university research administrators in the United States that were members of the administrator community networks such as NCURA and SRA. The study addressed how consideration of digital employee experience is crucial for leaders to design a contingency plan for a post-pandemic work model.

Conceptual Framework

A conceptual framework explains the key concepts and relationships between them that need to be studied. In this study, digital employee experience (DEX) and employee experience concepts are structured to explain the key concepts and their relationships. The digital employee experience framework is a set of conceptual ideas regarding an employee's workplace journey components, such as individual physical and digital components. A workplace journey includes stages from recruitment through termination. One definition of employee experience is the following (HireVue, 2010): "Your last best experience as a consumer becomes the minimum expectation for the experiences you want in the workplace." This experience can be dissected into three sections: procedural, textual, and emotional (HireVue, 2020).

The procedural domain refers to the employee's tasks and processes or how well an employee performs. Organizations typically conduct an employee performance evaluation to measure this domain, in which managers have one-on-one meetings to discuss work performance. The textual domain focuses on the employee's working environment. This domain examines tools, resources, and space to determine how the environment supports the work requirements. The third domain is an emotional one that describes the employee's feelings, perceptions, and interactions throughout their employee experience journey.

As depicted in Table 1.1, each employee goes through an employee experience lifecycle that consists of seven stages: (1) recruitment, (2) hiring, (3) onboarding, (4) engagement, (5) performance, (6) development, and (7) separation (HireVue, 2020).

Table 0.1

Employee Experience LifeCycle

Lifecycle Stage	Description of Activities
1) Recruitment	The first interaction the employee has with the organization as a potential employee. Examples include job posting, networking event, advertisement, or colleague exposure.
2) Hiring	Contract negotiations and salary offers set the stage for employee experience.
3) Onboarding	Formal and informal interactions and communications that begin immediately after hiring to orient and engage new employees in their new roles and make them feel part of the organization.
4) Engagement	Fulfillment of the unique emotional and social needs of the employee
5) Performance	Review and evaluation of an employee's work through formal scheduled process and regular meetings that contribute to an employee's productivity and satisfaction
6) Development	Support of professional growth through the provision of learning opportunities and access to career development intended to show the organization's commitment to investing in the employee's future
7) Separation	Once the employee resigns and leaves the organization, exit interviews are an opportunity to gather feedback and maintain a relationship for future referrals

During each phase, the employee will encounter different experiences that create a career journey log. As employees go through their journey, they face many growth experiences, such as improved business performance, increased productivity, high employee retention, better quality employees, enhanced competitive advantage, amplified employment engagement, and increased return on investment (ROI). On the other hand, providing a positive experience also comes with challenges:

- (1) The organization needs an employee experience framework. In other words, the employee needs to learn how the organization processes each journey phase.
- (2) The organization does not consider employee experience a priority. Organizations may need a department or unit specializing in employee experience, especially large ones.
- (3) Employee experience initiatives indicate a need for more responsibility. Leaders want to avoid taking ownership of who is responsible for employee experience, and there may not be a designated role for employee experience.
- (4) A siloed human resource organization needs to know that the employees experience challenges in departments or units throughout the organization. This is a challenge because HR is centralized and may require a personable relationship with employees. In contrast, a decentralized HR unit could improve employee experiences in their specific department or unit.
- (5) Technology solutions need to be updated, so monitoring employee experience for all employees may be challenging. Without digital processes or enhanced technology, it may be difficult for a larger organization to measure the employee experience.
- (6) Lack of employee experience programs or tools impacts the customer's experience. If an organization has a strong employee experience program, the customer's experience can benefit from having happy and satisfied employees.
- (7) Employees are part of a distributed workforce that includes some remote workers. It may be difficult for an organization to have a consistent employee experience if they have inoffice, hybrid, and remote workers.

For leaders, employee experience is essential because organizations require feedback on employees' feelings and perceptions of their organization. Since 2020, employee experience has become part of the digital transformation lexicon because employees have felt disconnected from their organizations and lack empowerment or engagement. Organizations and leaders are trying to determine how to manage employee experiences best when employees are working remotely and are away from the office to communicate their perceptions directly with management.

Gheridar and Anjani (2021) conducted a Digital Employee Experience (DEX) research study to determine the components and sub-components that should be considered as organizations move to digital environments for employees. As detailed in Figure 1.1, these DEX components include the following: (1) Business Strategy, (2) Leadership, (3) Career, (4) Brand, (5) Cultural, (6) Technology, and (7) Physical Environment. This study was critical because it provides a framework for employees going through their journey in a remote or hybrid environment.

The business strategy component addresses: 1) Having a clear and coherent vision, mission, and critical values focusing on DEX, 2) Making digital strategy core to the business, 3) effectively communicating digital strategy to employees, 4) supporting all aspects of DEX, and 5) continuous investment in employees.

The leadership component focuses on 1) inspiration, 2) expectation alignment, 3) supporting employees to think differently, 4) Deciding in uncertainty, and 5) enabling collaboration across boundaries.

The career component addresses 1) workload, 2) attractive career path, 3) flexibility and work-life balance, 4) professional development, and 5) alignment with personal values and interests.

The brand component addresses 1) reputation and organizational pride, 2) amount of work experience, 3) previous experiences, 4) Brand identity and 5) Organization reputation.

The personal component addresses 1) Personal vision, culture, and values, 2) fair treatment of employees, 3) high-impact learning culture, 4) Personal habits and moods, and 5) Education, skills, and previous training.

The cultural component addresses 1) belief in organizational goals, 2) a collaborative work environment, 3) having digital values, 4) a Digital mindset, and 5) Being agile, flexible, and responsive.

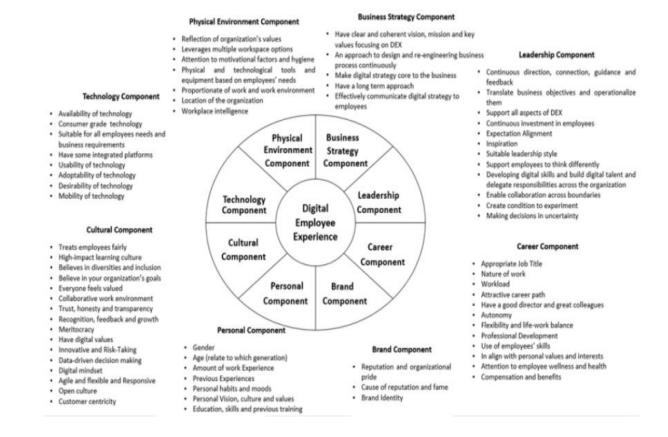
The technology component addresses 1) the availability of technology, 2) consumergrade technology, 3) having some integrated platforms, 4) being suitable for all employee needs and business requirements, and 5) the Usability, Adaptability, and Desirability of technology.

The physical component addresses 1) Attention to motivational factors and hygiene, 2) Workplace intelligence, 3) location of organization offices, 4) balance of work locations, and 5) physical and technological tools and equipment based on employee's needs.

Additionally, Figure 1.1 illustrates a systems perspective of an organization with all the DEX components that a leader considers when implementing a digital employee experience model.

Figure 0.1

Digital Employee Framework



Note: From Gheidar, Y., & Zanjani, M. (2021, p.675). Designing a Conceptual Framework for Digital Employee Experience

Research Questions

The research aims to determine how research leaders can build a DEX design for their research administration offices to achieve a positive experience for their employees during a

digital transformation shift due to the Pandemic. To achieve this transformation, research administration leaders will need to address three questions:

- (1) What challenges did research administrators encounter during the Pandemic?
- (2) What are the research administrators' perceptions of digital transformation during their employee journey?
- (3) What is the future of research administration as the industry moves forward?

Delimitations and Assumption

Research administration was chosen because the researcher has worked in the industry for over ten years and knows the field's systematic structure. The findings include research administrators' survey results and insights regarding the hybrid model's impact on research administration.

Assumptions underlying this study include the following: (1) Survey respondents are working in the research administration field; (2) Research administrators worked remotely in some form during the Pandemic; and (3) Research universities have returned to a hybrid model.

Organization of Study

Chapter Two provides the reader with an understanding of the literature in the following areas: (1) Research Administration, (2) Employee Experience, (3) Digital Employee Experience, and (4) Remote work platforms. In Chapter Three, the reader will be introduced to the research methodology for interviews and surveys for this study. The reader will also be provided with ethical and readability considerations for the study. Chapter Four will provide the research analysis and results. In Chapter Five, the author will introduce interpretations of the findings, limitations, conclusions, and further research recommendations.

LITERATURE REVIEW

Overview of Literature Review

To understand a research administration work model, the literature review will provide a thorough understanding of the following; 1) the essential research administration models and responsibilities, 2) research administration approaches during the Pandemic, 3) and the work-from-home literature to understand a return-to-work model for research administration. Therefore, This chapter will cover the existing literature for research administration, COVID, work-from-home theories and practices, and future work theories and practices as outlined in Figure 2.1.

Figure 0.1

Literature Map

Research Administrator Perspective on Digital Employee Experience Future of Work for Research Administration Work from Home Models and Practicies Research Administration "Work During the Pandemic" Research Administration Work Models and Theories This chapter overview of the relevant literature provides background on research administration and its pre-pandemic evolution. This chapter will also introduce the literature on digital transformation and the importance of academic departments such as research administration. The last section will provide existing work on hybrid models for academic departments.

Historical Background of Research Administration

Research Administration dates to the 1950s, as noted by Kaplan (1959), who defines a research administrator as a "business manager" or "man in the middle" that is responsible for administrating the research duties of the researcher. These duties can include but are not limited to purchasing, personnel, operations, and payroll responsibilities.

Figure 0.2

Role of Research Administrator as the Mediator-Expeditor



(Source: "Research Administration and Management" by Kulakowski (2006) - p. 18)

Kulakowski (2006) described a research administrator's role as the mediator-expeditor. In this role, the research administrator provides services for the researchers, administers the institute's research mission, and collaborates with sponsors to help achieve its goals and follow its regulatory guidelines. Figure 2.2 illustrates this relationship as a mediator and expeditor in a triangle relationship between the sponsor, institution, and researcher. Landen and McCallister (2007) identified research administrator (RA) skills, including the following: (1) analysis, (2) communication, and (3) problem-solving. Specifically, an RA should generate or interpret information while analyzing qualitative and numeric data. They should also share information across many face-to-face and digital channels and communicate with faculty, departments, sponsors, and leadership about their grant workflow. Lastly, the RAs are problem solvers who must maintain a high level of honesty, integrity, and ethics.

In addition to these skills, RA's have responsibilities such as: (1) understanding the nature of the principal investigator's (PI) research; (2) identifying funding opportunity information for the PI; (3) communicating with the funding agency (sponsor) for the PI; (4) helping the PI with preparing the grant application, budget, forms, approvals, and signatures; (5) assisting the PI with any reporting deadlines; (6) ensuring the PI complies with the organizational and sponsors guidelines, policies, and requirements; (7) assisting the PI with financial and management aspects of the awards; and (8) ensuring the integrity of both financial and non-financial processes related to the research functions.

Principles of Research Management

The essential principles below define research administration after World War II. These were dominant until the 1980s, before an increase in complexity¹, changing economic powers, and the strong influence of politics came into play. Eurich's (1967) first principle maintained that research administrators must serve as a kind of oil in a complex mechanism, especially during a conflict between faculty, university, or sponsors. RA must reduce friction and keep the process moving forward. Beasley (1970) formulated the second principle, which asserted that

¹ Research Administration Complexity includes working in a highly regulated industry while learning the different parts of a university system, such as Procurement, Finance, HR, Accounting, and Research Operations. Additionally, Research administrators must ensure the faculty, department, and compliance offices are on the same page.

administrators should serve as 'mediators-expeditors.' This principle placed RA's in the middle man's role between the researchers' interest and the grant agency's demands.

Woodrow (1978) identified research administration's purpose as "management for research, not of research." Woodrow explained that research administrators need to make it possible for faculty to conduct research by managing the grant process, including regulatory and fiscal matters. However, he noted that research administrators should refrain from interfering with the research direction. Rodman and Dingerson (1979) identified the fourth principle: research administrators should establish trust with the faculty and represent the faculty's voice when mediating the sponsor and the university's interests.

Models of Research Administration

As institutional management complexity grew, institutions developed institutional models to improve research administration. Hansen and Moreland's (2004) publication in the National Council of University Research Administrators (NCURA) suggested four institutional management models.

The Stanford University Model made RA(s) more responsive, timely, and accountable, introducing a 'portfolio' approach for the research administrator to apply to individual researchers. This approach provides service, expertise, innovative leadership, and a collaborative stewardship model between the faculty and staff. The Dana-Farber Cancer Institute Model eliminated old divisions, decentralized grants management, and redefined administrative roles. This model's goal was to create a seamless process for investigators by making the department research administrator the 'facilitator' for the researcher and the central administrator the 'mediator.' The Washington University Model developed the 'centralized' model, where a single office would administer the grants process. Each staff member has a defined set of responsibilities; this model describes the research administration as a "One-Stop-Shop" model. The Centre for Technology in Government at SUNY Albany Model focuses on managing research to identify emerging issues, develop human capital, and take investment risks (Hansen & Moreland, 2004).

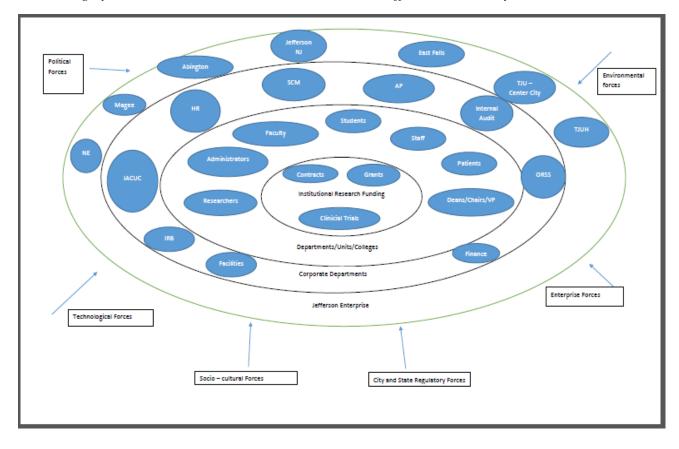
In sum, the supporting cast of research has come to play a vital role in the success of research for academic institutions. Each model's development changed the research administration landscape. However, institutions need to remain conscious and mindful of management principles. These principles facilitate research, activity, mediation, supporting the research faculty, and administering the research (Hansen & Moreland, 2004).

In the research administration field, the landscape has changed over time. For example, universities choose between a decentralized and a centralized model. A decentralized model is a standard model for universities where the research administrators reside in the department where the faculty are. This model's advantage is that the faculty are close and can build a relationship with their research administrator. A centralized model is a shared resource model in that the research administrators serve multiple departments, and the faculty may not have a 1:1 relationship. In this model, faculty-staff relationships may be less intense, and faculty can sometimes feel confused about whom they should reach out to for support.

Systems Thinking and Research Administration Containing System

We should consider the system to conceptualize digital change in today's environment. Ackoff (1994) described a system, or a whole consisting of two or more parts, in the following way: (1) Each part can affect the performance or properties of a whole; (2) None of the parts can have an independent effect on the whole; (3) No subgroup of parts can have an independent effect on the whole. Understanding a system helps to visualize it. Using this model, Figure 2.3 illustrates the research administration system at Thomas Jefferson University.

Figure 0.3



Containing System: Research Administration at Thomas Jefferson University

 2 Figure is created based on the researcher's perception of the Thomas Jefferson University Research Administration System

Research administrators interact with many parts of the institution, including faculty, departments, legal, accounts payable, supply chain management, human resources, finance, and many more departments. Additionally, external forces like government policies, political changes, and social environment play a role in research administrators.

² The figure provides a systemic view of the organizational internal and external forces that impact research administration at Thomas Jefferson University

Ackoff (1994) defines this concept as "the enterprise as a social system" and addresses three significant concepts. Managers and leaders should: First, be made aware of the system parts that they manage; Second, understand and consider the larger systems that contain them; Third, the organizational leadership should be concerned about the system as a whole in which they are managing. While there has not been much research on Research Administration as a system, Cole (2007) and Boyer and Cockriel (1998) offer some thoughts on how they view the industry as a system and lead through challenges.

In her article, Research administration as a living system, Cole (2007) describes how changes in research administration bring growth and collaboration. She offers three perspectives on the university, faculty, and research administrator. The three faculty motivators described by Cole include tenure or promotion, reputation, and commitment to federal funding for leadership. The barriers include a need for more training, knowledge about budget development, and funding sources. Cole illustrates that institutions invested in start-up packages, university pilot grants, and institutional support for travel, sabbaticals, and publication support to overcome these barriers further. Cole claims that the focus of research administration has been observing laws, rules, and regulations imposed by funding agencies. In many institutions, this has become a barrier and slowed the administrative flow of grant work. Faculty seem to have no interest in learning or acknowledging these policies, which frustrates research administrators in many institutions.

As Cole describes in her articles, research administration has many perspectives. Ackoff's methodology is most helpful in linking the parts of an institutional system. As leaders, we must design all the parts and build their interconnectedness. Based on the researcher's experiences, we

have a system that struggles with collaboration and growth, but we are also dealing with a pandemic and change management and digital transformation techniques.

Boyer and Cockriel (1998) found that research universities were judged based on the institution's grant dollars and research productivity. As universities encountered the financial crisis in the late 1990s, pressure was placed on university budgets to find additional resources to keep their basic research operations afloat. As a result, grant applications rapidly increased while success ratios declined, and good research went unfunded. These environmental conditions affected the researchers and led to labs shutting down young faculty and changing careers. Even the best researchers became frustrated. Boyer and Cockriel (1998) documented the faculty perspective by studying motivational factors and barriers to applying for federal funding.

These findings, however, were based on research administration work being physically located at universities, research institutions, or hospitals. Organizations have had to develop disruption plans to allow employees to work from home.

Work from Home (WFH) Literature

The concept of Work from Home (WFH) entails individuals doing their job responsibilities from home through digital platforms. COVID-19 abruptly upended regular work routines, causing a disruption in standard business work practices and environments that eventually led to organizations mandating a full-time work-from-home environment. Most individuals refer to WFH as remote work or telecommuting. Devandar and Kulkarni (2019) describe WFH as a work methodology that enables employees to perform their organizational duties outside a conventional brick-and-mortar office.

In March 2020, when the Pandemic disrupted the United States, organizational leaders were forced to mandate WFH for all their employees. To illustrate this concept, Kniffin (2020) coined the COVID-19-related practice as "Mandated Work from Home" (MWFH). As a result, leadership and HR executives had to develop and implement more vigorous remote job stratification training, address work/life balance challenges, explore employee identities, and provide motivation benefits. In many instances, there were no best practices, so leadership learned and developed best practices on the fly. Additionally, a research gap appeared on these topics because many organizations needed a remote work policy or enforce it for their employees.

Even though remote work sounds intriguing to most employees, it comes with several challenges from a leadership perspective. Ramarajan and Reid (2013) described the main challenge of remote work as setting boundaries between work and non-work activities offsite. COVID-19 made this area more difficult because there was no separation between work and home. An example of this perspective from Ramarajan and Reid (2013) is an employee needing to set a schedule or work through nights and weekends. Based on the researcher's experiences, balancing work and home responsibilities for research administrators can be challenging. If one cannot meet their deadlines during business hours, they must work extra hours to complete the tasks.

While employees work more or with no schedule, they may be more productive due to a lack of interactions or interruptions. Kniffin's (2020) literature, a preview of relevant literature, explains that accountable professionals preferred remote work and agreed to be more productive. Allen, Cho, and Meier (2014) found that professionals were responsible for complex work, required little interaction from their colleagues, preferred working remotely, and found it more productive (as cited in Kniffin, 2020).

The following describes WFH thoughts as communicated with research administration colleagues through conversations. WFH has brought both positives and negatives for organizational leaders during the Pandemic. A primary positive is that life has been more balanced while working from home. A related challenge is leaders' fear that performance and productivity may be diminished when working distantly. Kniffin (2020)'s literature review describes WFH as having many pros for employees, such as the mandate to set up an office in their home environment. These include home-work life balance, time savings on commute travel, technology advancements, restricting and redefining work roles, decreased exposure to air pollution, improved employee morale, and productivity gains with reducing micromanagement of staff.

By contrast, WFH presents some negatives or challenges, such as disengagement between employees and managers, interruptions, and loss of attachment from the company. Selfmotivation issues for employees who lack this skill, differences in culture between in-office work and at-home work, low retention of employees, poor communication between employees and the company, and challenges with managing accountability (Kniffin, 2020). Nell, Foss, Klein, and Schmitt (2020) note that remote and automated monitoring can centralize decisionmaking and contribute to low creativity among employees working at lower organizational levels (as cited in Kniffin, 2020).

While it appears WFH is here to stay in some format, Kniffin (2020) argued that further research should address the following: (1) How did the Pandemic affect work productivity, innovation, and creativity? (2) The implications for WFH for topics such as motivation and authenticity at work, and (3) When it will be normal to work in collocated workplace settings again. In research administration, as employees continue to work from home, our leaders must

address employee experience and the digital components of employee experience. As leaders adapt to their staff working from home, leadership is now becoming aware of the concept of DEX.

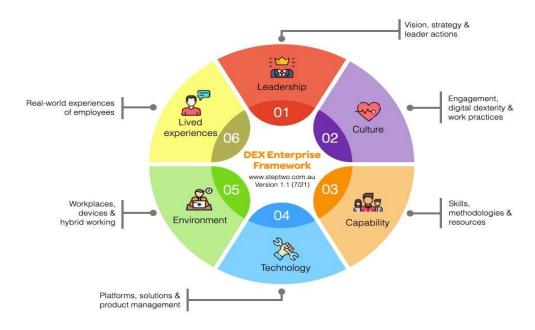
Digital Employee Experience

As organizations continue to allow employees to work from home, leadership has to begin to acknowledge the DEX impact on their employees and the organization. Gheidar and Zanjani (2021) identified the concept of DEX. They provided a conceptual framework for using a systematic literature review and interviews with experts in digital transformation and human resource industries to study DEX. To understand the literature on DEX, it is vital to understand the concept of employee experience to determine the differences between employee experience and DEX. Gallup (2018) defines employee experience as an employee journey or the sum of interactions with the employer from pre-hire to post-termination. These activities include personal relationships, a physical work environment, and technology resources. Plaskoff (2017) introduces an employee's holistic perceptions of their relationship with their employer that touches all encounters during their journey. Dery (2017) explains that collaborating with others and encountering workplace complexity brings positive and negative effects. A positive employee experience can introduce innovation and make the employee feel important. The negative employee experience refers to employee perceptions that they are not innovative and do not contribute to the organization's goals and strategy (Dery, 2017).

Hamerman and Schooley (2017) explain that DEX is a personalized set of interactions, processes, and content resources that enable every employee to succeed and enjoy a positive work experience. CGI (2015) developed a DEX model that lays out three layers of value, insight, and experience, and each layer contains five components. These components include culture and work practices, knowledge and process design, technology enablers, infrastructure, operating model, and organization design. Likewise, Robertson (2018) defines DEX as the amount of digital interaction in the employment atmosphere. DEX was defined by Gheidar and Zanjani (2021) as "an employee's comprehensive and holistic perception derived from his/her understanding of direct and indirect interactions with the organizations' digital touchpoints, which begins before the employee enters the organization and lasts for life."

Like Gheidar and Zanjani (2021), Step Two (2021) provided a DEX enterprise framework to help organizations strategize for DEX. This framework (See Figure 2.4) includes six elements: Leadership, Culture, Capability, Technology, Environment, and Lived experiences.

Figure 0.4



Step Two's Digital Employee Experience Framework

Future of Work (Post COVID-19) Literature

The future of work state is still being determined for some organizations. Through 2021 and 2022, various research administration organizations are still deciding if the current work state will continue or if organizations will change to a hybrid or a full-time back-in-the-office model. Through the lens of the researcher's experiences, as we deal with the post-Covid environment and get our organizations back together, leaders ask staff about their working environment preferences while making plans to bring workforces back into their offices. Leaders raise questions about implementing a return-to-work transition with their leadership committee teams. These questions include office productivity, in-office work responsibilities versus athome office responsibilities, and staffing requirements for a hybrid model. The literature shows many studies on work in 2021 and beyond; Mercer Research and McKinsey performed two studies on WFH during the Pandemic. Mercer's study was conducted in April 2020, while McKinsey's study was conducted in February 2021. Mercer indicated that 67% of companies implemented mandatory WFH policies companywide or in locations or departments most affected by COVID-19 infections in March and April (Mercer COVID-19 survey, April 2020).

Mercer's research predicted in April 2020 that 20-30% of WFH workers would have a desire and proficiency to work from home after the Pandemic. Companies began to reconsider the necessity of expansive corporate square footage with fewer people in the office (Mercer, 2020). McKinsey (Feb 2021) reported that 20-25% of workers in advanced economies could work remotely 3+ days a week on a long-term basis. According to Global Workplace Analytics, an average employer can reduce 11K in costs per employee per year per person who works remotely half the time and 10K per year in real estate costs alone. Mercer (2020) also predicted a staggering returning phase that would stagger hours, shifts, workspaces, lunchtimes, cleaning

shifts, elevator usage, new hire interviews, start dates, and onboarding. Digitalization grew 2-5X to ensure organizational platforms were suitable for a remote work environment (McKinsey 2021).

McKinsey (2021) anticipates three trends once the Pandemic recedes: Remote work and virtual meetings are likely to continue, COVID-19 may propel faster adaption of automation and AI, especially in work areas with high physical proximity, and a mix of occupations within economies may shift, with little or no job growth in low-wage occupations. Gartner's 2022 article "9 Future of Work Trends Post Covid -19" provides nine trends that can provide organizations with ways to differentiate themselves. The significant trends related to this study include the following: 1) Hybrid work becomes mainstream, 2) Shortage of Critical talent, 3) Manager roles are changing, and 4) Shorter work weeks are a new Employee Value Proposition (EVP)

COVID-19: The Pandemic Literature

In March 2020, the World Health Organization (WHO) declared a Public Health Emergency of International Concern. At the end of March 2020, over 720,000 confirmed cases and 33,000 deaths were documented due to this disease (Adhikari et al., 2020). Covid is still raising havoc worldwide two years later, even though the FDA has approved vaccines and treatments (newer reference). As citizens remain unvaccinated, disease variants create reoccurrences among the unvaccinated population. As of March 30, 2021, the world has encountered over 128 million cases and 2.8 million deaths related to COVID-19 (Lutton, 2021). During the past two years, the Pandemic has brought social, economic, and healthcare impacts to the surface, but this paper will focus on Research Administration during the Pandemic (March 2020- March 2022).

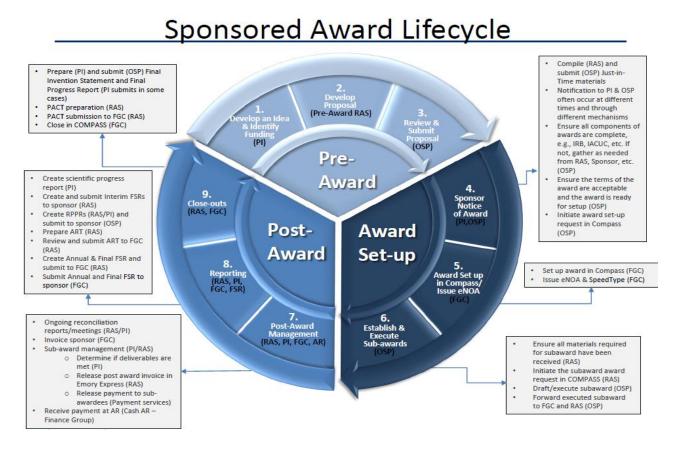
Research Administration – Pandemic Literature

Historically, Research Administration faced incidents that caused disruption, such as natural disasters, suspensions, and a government shutdown in December 2018 that impacted the routine management of sponsor award operations. The Pandemic has caused a new kind of disruption, in which institutions are idiosyncratic in their experiences through the Pandemic. For instance, some institutions had the technology infrastructure to work from home from Day 1, whereas others had to adjust and make quick decisions to ensure their employees were ready to work from Day 1.

The website Grants.Gov divides an award life cycle into three phases: Pre-Award, and Post award. In the pre-award phase, the researcher identifies the grant opportunity and then submits the grant application to the sponsor. The application is reviewed in the award phase, and an award decision is made to fund or not fund the grant proposal. The post-award phase includes providing administration support, reporting the project's progress, and closing the award per the grant agreement.

Universities typically mirror these three phases when constructing their offices and process maps. For example, Emory University breaks out its systems and processes between Preaward, Award Set-Up, and Post-award phases (See Figure 2.5). This Figure helps to understand the research administration structure at a high-profile university. It is essential to see that divisions need to interact during a hybrid model to manage a grant from the proposal phase to the award phase.

Emory University Sponsored Award Lifecycle



Note: Adapted from Emory University. (n.d.). *Research Administration Home*. Overview. Retrieved January 26, 2022, from http://www.or.emory.edu/tools_pi_researcher/index.html

Other universities, such as Duke University and Thomas Jefferson University, split the life cycle award between pre-award and post-award. For pre-award, the offices are responsible for all tasks leading up to the award, including identifying the opportunity, application preparation, submitting any post-application materials such as other support documents, budget revisions, compliance approvals, and executing the award for the post-award office. The post-award offices are responsible for setting the cost center for the grant, managing the budget and expenses, ensuring the reports are submitted on time, managing personnel and effort reports, and working with PI on all post-award tasks, including closing out the award.

When employees work in person, these tasks seem manageable because collaboration and meetings are easy to establish between administrators and faculty. Grant administrators could easily communicate with colleagues or walk to the PI office or lab to ask questions about an application or grant expense. Since there are times when external forces can disrupt this workflow, such as a government shutdown, natural disasters, or a pandemic, universities must develop contingency plans to prevent uncertainty from disrupting or delaying research. The following section will address how federal agencies such as the National Institute of Health (NIH), Center for Disease Control (CDC), Department of Defense (DOD), and National Science Foundation (NSF) responded to some historical disruptions.

A government shutdown, one of the things that can impact research institutions, occurs when legislation to allocate the money needed for the operations of government agencies fails to be enacted. Government agencies must furlough their nonessential employees and stop or limit activities during a government shutdown. There have been seven shutdowns since 1990; the most significant shutdown in the last twenty years was the 2013 shutdown. As one can expect, when the government shuts down, research can also be impacted since millions of dollars of funding come directly from the National Health Institute (NIH).

On October 1, 2013, a government shutdown began for 16 days and caused chaos among researchers funded by multiple federal agencies. An agency's task is to respond quickly so research institutions can determine contingency plans for the shutdown. Among various federal agencies, there were different responses; the following sections were obtained through the University of California – Berkley's Federal Shutdown page.

The Center for Disease Control's (CDC) response was to inform researchers of relevant grant activities and the impact of these activities. However, grant-administration functions and

tasks were suspended or modified due to federal furloughs. Additionally, research institutions needed help to submit progress reports and no-cost extensions and communicate with their grants officers since the CDC needed to communicate (Berkley, UC, 2022).

The National Institute of Health's (NIH) response included operations, non-operations, and information on the eRA portal that enabled research institutions to build contingency plans around their NIH applications and awards. The NIH encouraged faculty to refrain from submitting applications to the NIH during the shutdown period. This created some havoc because October 5 is a major NIH deadline, so applications had to wait for the NIH to respond to this shutdown. Additionally, the NIH was not awarding any applications during the lapse period (Berkley, UC, 2022).

The Department of Defense's (DOD) response indicated that applications could still be submitted, but the DOD would have limited support staff to field any questions. Unlike CDC and NIH, DOD uses the CDMRP application system, which was not impacted significantly by the shutdown. The DOD did indicate that any administrative functions related to active funding could experience some delays (Berkley, UC, 2022).

The National Science Foundation (NSF) responded by stating that work could continue under project awards during the shutdown if funds were available and the grant did not expire. The NSF could not authorize costs exceeding available award amounts or obligate additional funds to cover the expenses like other agencies. There were no accepted applications through their proposal portal, Fast Lane, and no newly awarded grants for applications. Delayed payments during the shutdown and the inability of PI to submit their annual and final reports through Research.Gov were a couple of additional challenges for institutions (Berkley, UC, 2022). Natural Disasters have also occurred unexpectedly or with little warning, so federal agencies have needed to develop plans for grant deadlines for institutions that may be impacted either short-term or long-term by natural disasters. When natural disasters occur, the NIH coordinates with Federal Agencies such as HHS, FEMA, OMB, and State and local representatives to develop additional responses; the NIH considers the length of time an institution may be closed or the time it takes for recovery; the impact on the investigators, human research subjects, and animal subjects; and the community impact. The NIH may issue the following actions, but the actions are announced per each natural disaster response (U.S. Department of Human and Health Services, 2022):

- Permitting the limited expenditure of award funds to continue paying salaries and fringe benefits to researchers under unexpected or extraordinary circumstances
- (2) Assisting with animal welfare issues
- (3) Waiving certain prior approval circumstances
- (4) Providing extensions of time for financial and other reporting
- (5) Publishing opportunities for funded extensions and one-time administrative supplements to current awards targeted at institutions in particularly impacted areas.

In the past five years, the NIH has issued Natural Disaster Guidance for Hurricanes, Winter Snowstorms, and COVID-19. The National Science Foundation (NSF) states that the NSF will be flexible regarding meeting stated deadlines on its Natural Disaster website. If a disaster occurs, the institution should contact the cognizant program office to discuss the issue so that the NSF can consider extending the submission deadline on a case-by-case basis. The PI should contact their program officers to discuss feasible options for how the impacted project can support the research (NSF, 2022). As with the government shutdown and natural disasters, the federal agencies also needed guidance from research institutions on handling the Pandemic. On March 9, 2020, the NIH issued its first policy, COVID-19, for late application (US Department of Health and Human Services, 2020). In this notice, the NIH expected an emergency declaration to be published, which would affect NIH applications and encourage researchers to apply promptly. Less than five days later, on March 10, 2020, the NIH followed with FAQ on proposal submission and award management. These FAQs addressed research projects during COVID-19, travel awards during COVID-19, no-cost extensions, and traveling for conferences and peer review panels. On March 12, 2020, NIH announced flexibility to applicants and recipients of funds, including application deadlines, cost expenditure flexibility, and reporting extensions (US Department of Health and Human Services, 2020).

While this was just the beginning of how federal agencies would handle the Pandemic, the research institutions had a more significant challenge. How were they going to take their staff and labs? How would operations continue with no disruptions? Leadership had to act fast to make their institution continue to operate effectively and efficiently while not being allowed in the office. Through dialogues with the researcher's colleagues, Many institutions needed a pandemic policy or procedure, so they had to make significant decisions quickly without a contingency plan.

A contingency plan is a strategy that occurs before the unpredicted event, where the organization plans for possible actions. In Belford's (2020) paper titled "Contingency Planning Amidst a Pandemic," she explains that steps include identifying and prioritizing resources, determining the key risks, drafting the contingency plan, sharing the plan, and revising the plan for any necessary adjustments. In the case of the Covid 19 Pandemic, some organizations did not

have a plan, whereas others had a plan that required revisiting since this was an event without precedent.

Villanova University, Hawaii University, Yale University, and Duke University guided their websites to alert faculty and staff to their contingency plans. Villanova University addresses how a university uses a scenario model to communicate its response plan (Villanova University, 2020). Hawaii University, Yale University, and Duke University introduced various committees, operational planning, and communication methods.

Like many organizations, research institutions had to develop a contingency plan for the Pandemic. Most of them had to do this on the fly, whereas others adapted their natural disaster plan. Institutions like Villanova University developed a scenario model as they did not know what would happen during the summer of 2020, so they planned for three possible scenarios. Scenario 1 was based on the idea, with certainty, that campus access would be restricted, knowing when the restrictions are lifted. In this scenario, critical work would be allowable with Villanova following the guidance of the federal, state, and local orders. Scenario 2 illustrated the idea of some normal return by allowing campus access but following the social distancing and stagger of staff guidance. In this scenario, the university would follow a phase-in approach. Finally, scenario 3 was a back-to-normal return in which the campus would be back to 100%, but the university thought this was not a likely scenario (Villanova University, 2020).

Hawaii University, Yale University, and Duke University used other methods to establish a Pandemic Committee for Research and urge departments to think about a long-term plan. To address operational planning, the University of Hawaii issued the following statement:

Principal Investigators and Research Managers should begin scenario planning for the potential for research and campus operations to continue with reduced or remote staffing

or if significant numbers of research or research support personnel become ill or largescale self-isolation is required. Any research support unit operations changes will be posted on this page and communicated to the campus (Hawaii University, 2020).

Yale University used committees to draw expertise and feedback from their stakeholders and community. The Academic Continuity Committee includes in-person education planning, online education planning, and residential and extracurricular planning. The Research Continuity Committee focuses on the following subcommittees: Clinical Practice and Clinical Research, Natural Sciences Research, and Humanities and Social Science Research. An additional two committees were formed to discuss issues and planning related to Operation and Creative Practice. In May 2020, Yale announced a 3-phase approach by identifying: Research limited to on-campus activities, activities of all types, and continued health monitoring (Yale University, 2020).

Duke University addressed their community with a contingency plan on March 14, 2020, with a memo from the provost's office addressing actions in the event of research activity suspensions. A request was made to each PI and their lab to develop a detailed plan that would allow suspension of a minimum of two months. The techniques needed to include remote communication methods, testing remote communication, and all research meetings held remotely. Duke intended to develop plans ahead of time, hoping not required plans but for worstcase scenarios (Duke University, 2020).

Huron, a research administration consulting firm, illustrated a "road to recovery" for research and suggested that institutions should begin planning for post-crisis stabilization and some form of transformation. As research ramped up, labs needed to discuss their resource, compliance, and financial needs with their institutional leadership. A road map to recovery should include a plan of allocation that shows the required resources and minimize the disruption risk. The recovery process should determine which research will receive the highest priority for access to limited resources, establish institutional guidance, and communicate. The recovery process should also develop a dedicated research review committee to evaluate the studies' scientific merit and access to limited resources (Huron, 2020).

As universities continue to think and adjust their return to the office plans, research administration is considering how a service industry for faculty in the post-pandemic phase. The following section will address the Future of Work state for higher education and research administration.

Future of Work in Higher Education and Research Administration Literature

As universities and institutions did during pre-pandemic and the first three months of the Pandemic, organizations need to continue to develop roadmaps, contingency plans, and predictive models as research organizations begin to phase their research administration support teams back into the office.

In Huron's article "Strategic Planning beyond the Pandemic," the authors address a 3-step approach. Leaders should first develop a small working group of creative and innovative academic and administrative leaders to think beyond the current Pandemic, align on market trends and consider scenarios regarding the future of research administration. Once the scenarios are designed, the group should translate anticipated market needs into transformative initiatives, identifying resources and operations considerations for each. The last step is to update the organization's strategic plan to reposition the core operations for sustainability and exponential growth (Huron, 2021).

2021 and beyond will have a landscape change for research administration – questions include whether it will be back to normal, fully remote, or some form of hybrid. Other industries have begun saying that remote work is the new norm but is this the same for research administration? In 2021, leaders determined what fit their organizations, teams, and staff to maintain their competitive advantage among peer institutions. Working from home produced many benefits, including job satisfaction, productivity, commute time savings, flexibility, and work-life balance. However, as research institutions have begun to phase staff back into the office, questions remain to ponder. Leadership must strategically decide the correct balance for the organization's and the employee's mindset. The Pandemic has taught organizational leadership that staff does not need to be physically present to be productive, but a piece of connectivity and team building disappears with virtual work. Remote work also changes the recruitment of talent. HR and hiring managers do not need to focus on their geographical location to hire research administrators. Hiring remote workers reduce overhead and maintain employee satisfaction if remote work is successful and productive. Additionally, an organization could have a team working 14-16 hours daily if the staff is on the East Coast and West Coast.

As organizations plan to return to the workplace, organizations should begin to think about a framework such as the one identified in Baker's and Abbo's (2020) paper titled "Working Post-Pandemic: What Campus Employees Need (Now)" which focuses on three concepts: collaboration, communication, and transparency. The partnership includes childcare, personal grooming, anxiety, supporting time off, and staggered returns. Communication focuses on return-to-work requirements, social distancing guidelines, privacy concerns, wellness, and burnout recognition. The concept of transparency addresses equity and fairness, remote work tools, relationships, and responsiveness (Baker and Abbo, 2020). In Capgemini Research Institute's study (Capgemini,2020), "The Future of Work: From Remote to Hybrid," the authors emphasized how remote work was here to stay while the shift has boosted productivity and cost-saving. However, remote work has caused burnout, and new employees have struggled and appeared to need to be more engaged in remote work. This study also notes that beyond remote work, there will be a shift from remote to hybrid, so leadership should consider the following actions to ensure a smooth transition.

The Capgemini study illustrates a new hybrid working paradigm (Figure 2.6) based on the seven factors listed below.

(1) The "Deliver where you are" model

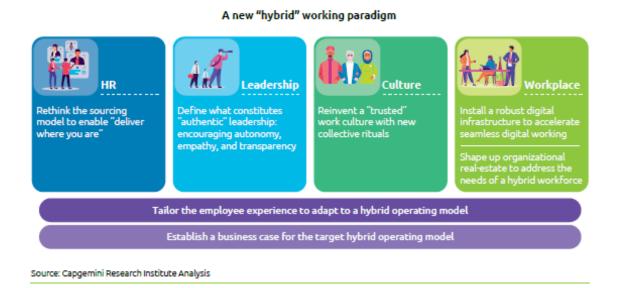
(2) Leadership will need to be more "Authentic" than before

(3) Reinvent the culture so it is "trusted" with a new collection of rituals

(4) A requirement for a robust digital infrastructure to accelerate seamless digital working

- (5) Redesign and reshape the organizational real estate to address the hybrid workplace
- (6) The employee experience should be adjusted to meet the hybrid working model
- (7) Develop a new business model for the target hybrid working model (Capgemini, 2020)

Capgemini's New Hybrid Working Paradigm



Note: Adapted from Dority Baker, M., & Abbo, T. (2020). Working post-pandemic: What campus employees need (Now). (US, Capgemini, 2021)

Conclusion Remarks

There is a burgeoning literature that includes: white papers, studies, and ongoing research on the future of the research administration workplace. The topics addressed include productivity, satisfaction, work models, and leadership styles. With a change from current pandemic models of remote work back to some form of in-person work, these topic areas will impact how an organization will view the future of their employees and the organization's work.

As defined above, Research Administration is a service-oriented field that assists faculty and researchers with grant proposals and manages grant funding to meet all compliance requirements. Research Administration Leadership oversees the organization's operations to ensure that policies and processes are in place to support work and minimize institutional risk. When the Covid 19 Pandemic occurred, it disrupted research, significantly impacting research administration. Delays in research had a significant impact on enterprise research systems. Research could only be conducted briefly, leading to layoffs and furloughs at some institutions.

On the one hand, research administrators lost the office teaming aspects during the forced remote work period and became more isolated. On the other hand, remote work brought benefits and satisfaction to some individuals, such as the improved ability to balance home duties and work duties, flexibility, health benefits, and commute savings. As organizations monitor the lifted restrictions, they anticipate returning their employees to the office. Most institutions are looking towards a hybrid approach where work time is divided between office and home. Unfortunately, as described in the literature review, there are different perspectives on the best approaches since leaders want more face-to-face collaboration while employees want more flexibility at home. So, where is the middle ground for research administration?

The literature focuses on what many perceive as the new normal, not knowing where the future could lead, and variations across different industries. Some industries are designing fulltime work-from-home models, while others may need a mix of at-home and in-office work. Service industries like research administration may require some time in the office, but a remaining question is whether employee perspectives vary among employees, teams, and locations. Other unanswered questions include whether the variability of these perceptions is related to productivity and satisfaction. For example, whether employees feel more productive at home because they sit in comfortable surroundings? Do employees feel more satisfied at home because they are more effective due to fewer disruptions and interruptions than in the office?

The next chapter will provide the reader with the research methodology and design to illustrate how this study will be conducted.

RESEARCH METHODOLOGY

This dissertation investigates research administration industry perspectives on the digital employee experience. As noted in Chapter 1, a pilot study was conducted in the Fall of 2020 to explore how a single institution's research administrators perceived their profession's transformation to remote work. That study was used as preliminary data to provide the researcher with the perception of one institution's challenges and concerns in the pre-pandemic and postpandemic phases. With the insights derived from the study, the researcher decided to evaluate whether these challenges arose in other academic environments and, if so, their impact on employee experience.

This chapter will address the research design, including participant selection, instruments, procedures, ethical considerations, and limitations of this study.

Research Design and Strategy

Exploratory research design is used when there are too few previous studies for a researcher to derive and test hypotheses. In this research, the goal is to identify avenues for further investigation. Exploratory analyses typically offer background understanding. Research can answer various questions, define new terms or concepts, develop more problems, and assist with research priorities to determine the best use of resources (USC Libraries, 2021).

Creswell and Plano Clark (2018) explain that an exploratory sequential mixed method design combines qualitative and quantitative data collection and analysis in a sequence of phases. In the first phase, this study used interviews to collect qualitative data about how research administration leaders perceived digital employee experience in their organizations. The interviews focused on four areas: (1) Work Experiences, (2) Digital Environment, (3) Digital Employee Experiences, and (4) The Future of Research Administration. Each section contained a series of questions about interviewee perspectives on how the pandemic impacted their department and organization. These interviews, provided in Appendix IV, were used to design the second quantitative phase of the study: the surveys. The surveys, provided in Appendix V, were used to collect qualitative data about how a national group of research administrators perceived their experiences of shifting from an in-office environment to a remote or hybrid one. Additionally, the surveys collected data about their work experiences, pandemic experiences, and their organization's digital employee experience investment.

Participants

The interviews and survey participants were all members of the National Council of University Research Administrators (NCURA), the Society of Research Administrators International (SRA), and the Research Administration List Serve. The NCURA database holds over 7,000 members, the SRA database has over 4,000 members, and the Research Administration List Serve contains thousands of research administrators.

Interview Participants

The NCURA database was chosen because it holds over 7,500 research administration members. The interviewee candidates were selected through a random sample from the NCURA database. Since the database was available to export the member's demographics, the sample selection process was easy to randomize. The researcher exported all NCURA members to an Excel workbook and then filtered out the position by leadership positions, such as director, Vice President, Assistant Vice President, and Dean. These new selections were then converted to a new excel worksheet that used the randomize function. The first 35 selections were used to recruit potential interviewee subjects. Figure 3.1 below is a summary of each chosen interviewee.

Table 0.1

Interview Demographics

Subject #	Location Code	Organization Type	Position Title	Organization Structure
1	South Atlantic	University	Associate Director	Centralized
2	East South	University	Assistant Vice	Centralized with some
	Central		President	decentralization
3	Middle Atlantic	University	CFO	Centralized with some decentralization
4	Middle Atlantic	University	Director	Centralized with decentralization for bigger units
5	South Atlantic	University	Assistant Vice President	Centralized
6	Pacific	Research Institute	Vice President	Centralized
7	South Atlantic	University	Director	Centralized
8	New England	University	Director	Centralized with some decentralization
9	South Atlantic	University	Director	Centralized with some decentralization
10	West North Central	University	Director	Centralized
11	Pacific	University	Director	Centralized with some decentralization

*Location code is based on United States Census Bureau.

** Organization type is if their organization is a university, hospital, research institute, or other entity

*** Position title is the interviewee's organization job title

**** Organizational structure is the interviewee's organizational structure for research administration.

Survey Participants

The survey target was 500 responses from the NCURA and SRA platforms. These platforms were chosen because they are the two major research administration communities. Both communities have message boards and platforms where members can communicate with each other. The survey target of 500 was chosen to obtain a response rate of about 10-20% of the participant sample size. The survey recruitment methods included the following: (1) Provision of a Survey on the NCURA Collaborate Communities, (2) Provision of a Survey on the SRA Community Message Board, and (3) Recruitment email to a random sample of 2,000 NCURA members. The NCURA Collaborate platforms selected were the following:

(1) COVID-19 Response Community which contains 360 members

(2) Departmental Research Administration Community comprised 649 members

The SRA Community platforms selected were the SRAI Open Forum and the Research Leadership Alumni Community. The SRAI Open Forum community contains over 4,300 community members. The Research Leadership Alumni Community includes 127 members. The survey was open from July 2022 through September 2022. Due to the need for initial responses on the NCURA and SRA community platforms during the summer holiday season, additional recruitment methods were needed. In August 2022, the IRB protocol was revised to add email recruitment. The survey link was emailed to a random sample of NCURA members in August.

A total of 548 survey responses were received, and the survey was closed on October 1st, 2022. 41 surveys that were less than 40% complete were scrubbed. Forty percent completion was used because the demographics and working environment sections took up the first 40% of

the survey questions. Next, the researcher provides visual displays of the survey respondents' demographics.

Tables 3.2 and 3.3 and Figures 3.1 and 3.2 provide respondent demographics. The tables present Gender, Age, Ethnicity, Organization Type, Organization Location, Organization Model, Position Type, Role, and Experience.

Table 0.2

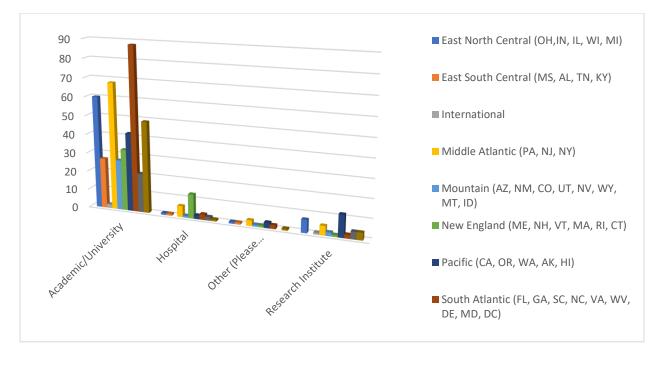
Survey Respondents' Race and Ethnicity

	American Indian or Alaska Native		Asian		Black or African American		Hispanic/Latino		Native Hawaiian or Pacific Islander		White/Non- Hispanic		Other		Total
Female	0.24%	1	1.93%	8	8.67%	36	5.30%	22	0.48%	2	80.00%	332	3.37%	14	415
Male	0.00%	0	1.33%	1	10.67%	8	0.00%	0	1.33%	1	85.33%	64	1.33%	1	75
Non- binary / third gender	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	100.00%	3	0.00%	0	3
Prefer not to say	0.00%	0	25.00%	1	0.00%	0	0.00%	0	0.00%	0	25.00%	1	50.00%	2	4

Table 0.3

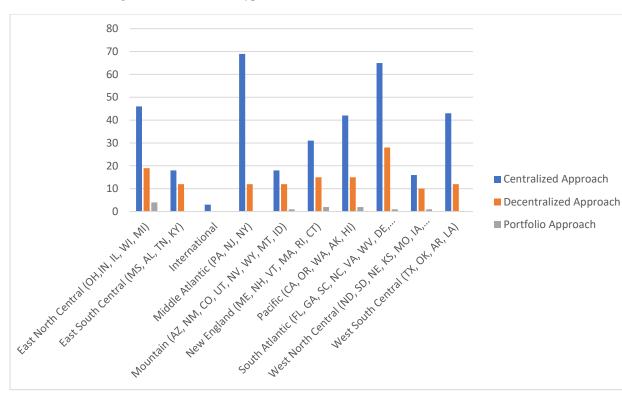
Survey Respondents' Gender and Age

	18 - 24		25 – 34		35 - 44		45 - 54		55 - 64		65 or older		Total
Female	0.00%	0	8.92%	37	28.19%	117	27.95%	116	26.75%	111	8.19%	34	415
Male	0.00%	0	12.00%	9	25.33%	19	37.33%	28	18.67%	14	6.67%	5	75
Non-binary / third gender	0.00%	0	66.67%	2	0.00%	0	33.33%	1	0.00%	0	0.00%	0	3
Prefer not to say	20.00%	1	20.00%	1	0.00%	0	60.00%	3	0.00%	0	0.00%	0	5



Organization Type and Location

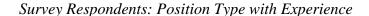
* 13 responses were 'Other' that included Clinic Practice, Non-Profit, Academic Medical Center, Academic Health Center, Health System, Self Employed, For Profit, Consulting, Academic and Hospital, and a lab under contract with the Department of Defense and a University.

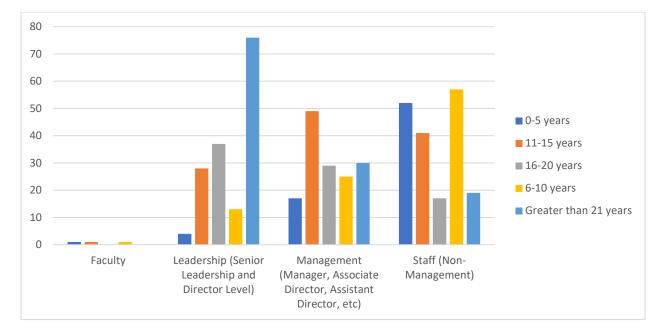


Location with Organization Model Type

Research Administration approaches are centralized, decentralized, and Portfolio.³

³ A centralized approach is when all business operations are located centrally or outside the department. For example, a shared service model would be a centralized approach in which the research administration unit serves multiple research departments. A decentralized approach is when the business operations are located within the department. The research administration teams only serve their individual faculty. A portfolio approach is the business operations located within the lab or research unit. The faculty's lab has its own grant team embedded within the lab and they are only responsible for their grant proposals and award management.





Research Instruments

The research instruments used in this study were traditional one-to-one interviews and online surveys.

Interview Instrument

Traditional semi-standardized one-on-one interviews were used in this study. According to Berg (2009), Semi standardized interviews are interviews that have the following characteristics: more or less structured, questions may be reordered during the interview, the wording of questions is flexible, the level of language may be adjusted, the interviewer may answer questions and make clarifications, and the interviewer may add or delete probes to interview between subsequent subjects. The interviews in this study were structured but allowed the interviewer to reorder the questions based on the responses from the interviewee. Additionally, the interviewer could ask additional questions based on the responses from each interviewee. These interviews aimed to understand how leaders perceived the pandemic and how the pandemic affected the research administration industry. Questions specifically focused on the digital environments and the digital employee experiences of their staff. The researcher used Zoom to record the interviews and shared a PowerPoint presentation that displayed each section of questions as we went through the interview. We only moved on to the next section once all the questions were answered for the previous one.

Survey Instrument

A survey was administered to research administrators and administration leaders to explore how their organizations handled the pandemic work transformation and how they viewed the digital employee experience. The surveys addressed how individuals felt about the digital employee experience in a hybrid model and how their experience impacted productivity.

The survey questions were segmented into the following five sections: Demographics, Pandemic Experience, Digital Employee Experience, Digital Employee Experience Framework, and The Future of Research Administration. The demographic area focused on the respondents' characteristics, organization details, and work experiences. The Pandemic Experience addressed their perceptions of remote work over the last 24 months. The Digital Employee Experience Section was designed to determine if the respondent's organization had any DEX focus and/or Digital Strategy. The Digital Employee Experience Framework presented questions based on the DEX framework components discussed in Chapter 2: Technology, Digital Culture, Leadership, Physical Environment, Business Strategy, Career, Brand, and Personal (correctly reference page). The final section, The Future of Research Administration, focused on questions regarding how research administration moves forward in this new world of work.

Data Collection Procedures

As described above, the purpose of the interviews was to use them to build the surveys that were distributed to a bigger audience. The interviews were conducted using the Zoom platform so the interviewer could easily record them. Once the interviews were completed, the recordings were transcribed using Otter software and manually checked for correct transcription. (Otter.ai., 2019). This allowed the researcher to code the transcripts using NVivo (QSRInternational, 2020). The interview responses were coded based on each question and common themes presented in response to each question. Table 3.4 shows the coding labels used for each interview.

Table 0.4

NVIVO Coding Labels

Main Code Label	Coding Buckets
Work Experience	Current Role
Work Experience	Institutional Structure
Work Experience	Pandemic Remote Work Challenges
Work Experience	Remote work models
Digital Environment	Digital Workplace
Digital Environment	Employee Experience
Digital Employee Experience (DEX)	Changes with DEX due to Pandemic
Digital Employee Experience (DEX)	What is DEX?
Digital Employee Experience (DEX)	Digital Transformation and DEX
Digital Employee Experience (DEX)	DEX Organizational Investment
Digital Employee Experience (DEX)	DEX Tools and Practices
Building a DEX Model for Research Administration	DEX,
Building a DEX Model for Research Administration	Digital Workplace Leadership
Building a DEX Model for Research Administration	Employee Experience
Building a DEX Model for Research Administration	Remote work models

Future of Research Administration	Maintaining Culture
Future of Research Administration	Pandemic's Impact on Research Administration
Future of Research Administration	Strategic Priorities
Future of Research Administration	Teams adjusting to remote work
Future of Research Administration	Team future work perspectives

The surveys were designed using Qualtrics software with data analysis, reporting, and summarization features that help one see the data visually. After the surveys were completed, the researcher used the results feature in Qualtrics to analyze the quantitative data using graphs, tables, and charts to visualize the data. In some instances, the researcher used the data analysis stats IQ feature to provide an Analysis of Variance (ANOVA) data and figures for additional statistical analysis. ANOVA is a statistical formula that compares variances across average of different groups. ANOVA tests whether two variables are statistically related, which means at least one group tends to have higher values than at least one other group. In the research result section, the research used ANOVA tests to determine the relationship between the importance of DEX and organizational location and structure. The qualitative data was manually transcribed by reviewing each response and coding it to a particular category. Each question was downloaded into its image or data file so it could be reviewed individually for the Chapter 4 results section. These results will be described in more detail in Chapter 4.

Interviews: Data Collection Administration

As noted above, the interview candidates were selected through a random sample population from the NCURA database. The researcher exported all NCURA members to an excel workbook and then filtered them by leadership positions including, Director, Vice President, Assistant Vice President, and Dean. These new categories of participants were then converted into a new table and randomized to select the first 35 selections. The researcher then emailed each person chosen to request an interview for the study. Once the participant agreed to the study and completed the consent form to participate in the study, the interviews were scheduled via Outlook meeting invitations. The interviews were conducted using the Zoom platform and were recorded to obtain an audio and a video file of the recording. After the interviews were completed, the researcher uploaded the audio file to the Otter transcription platform to get a Word document of the transcription. Each transcription was reviewed three times to ensure accuracy and then uploaded to the NVIVO platform to begin the interview coding process.

Surveys: Data Collection Administration

As noted above, due to a need for more sufficient survey responses for the first two recruitment efforts, an additional recruitment method was proposed through IRB in August 2022. The researcher added direct email as a third participant recruitment method. Once this was approved, the researcher selected a random sample of 2,000 NCURA members from the 7,500 NCURA member database. This was done by downloading all the member profiles from the online database and randomizing them in Excel to select the first 2,000 members. Profiles did not include their email addresses, so the researcher had to manually go into each profile, obtain their email address and then add them to the Excel file. After each email address was obtained, an email was sent directly to the selected subject. The researcher also sent reminder emails to the participants in September on a bi-weekly basis to remind the potential participants about the survey. A final reminder email was offered to all participants in the last week of September to obtain additional responses before the survey closed on September 30, 2022. With the additional recruitment method of email recruitment, the researcher was able to obtain an additional 350 survey responses.

Ethical Considerations, Reliability, Limitations & Generalizability

The research methods and design were submitted to Jefferson's IRB office for review in April 2022. The IRB review requested that modification be completed in May 2022, which was then submitted for final IRB approval in June 2022. As noted earlier in this chapter, an IRB amendment was requested in August 2022 to add additional recruitment methods to the IRB protocol, which IRB approved on August 24th, 2022.

The research limitations included: (1) Interview research was only conducted at U.S. research institutions, so findings are limited to this population; (2) Many institutions had already returned to some model of post-pandemic work, so the timing of this study did not benefit some of the participants; (3) The timing of the research recruitment was not ideal since it occurred in the summer, subject to summer vacations and holiday weeks.

The interview research was limited to 11 participants, so not all US locations were represented in the responses. For example, no interviews were conducted in the US's Mountain, East South Central, and East North Central regions. An ideal study would have included at least two interviews in each organization's location. Additionally, most interviews were done with university personnel, so another limitation is that hospitals and medical centers need to be represented in the interview data.

Some survey feedback participants noted that their organizations had already returned to work in some form of post-pandemic work model. Other organizations might have returned to work in 2021 with a full-time in-office model, making the survey inapplicable to their situation.

The timing of the survey release was a challenge since most of the respondents were on vacation, had left their institution, or had retired. During the recruitment method phase of direct emails, 95 bounce-back emails were received, or 5% of the 2,000-sample size. So, another limitation of the survey was that survey needed to address employee job changes during the pandemic great resignation, which left those participants unsure of how to answer the survey questions that covered the 2020-2022 timeframe.

The next chapter will provide the reader with the research results from the interview and survey research methods on designing a digital employee experience for research administration. The results will illustrate how a sample of leaders perceived the digital environment and digital employee experiences for research administration. In contrast, the surveys will provide additional results from a more extensive selection of how staff, managers, and leaders perceived the pandemic and digital remote work and their insights on digital employee experiences.

Research Results

Introduction

As discussed in Chapter 1, this study examined the challenges and concerns encountered by research administration stakeholders during the pandemic. The study provides insights about moving digital environment models forward. This chapter is organized in terms of the three research questions proposed in Chapter 1: Problems organizations encountered during the pandemic and benefits and lessons learned from shifting to a digital work environment; perceptions of digital employee experiences during their employee journey, and the future of research administration as we move forward in this new world of work.

As reported in Chapter 3, Phase 1 of this study commenced with interviews of research administration leaders to determine their perspectives and insights on their digital work environments, digital employee experiences, and the future of research administration. In Table 4.1 below, a matrix presents each interview question and how it relates to the proposed research questions. Column 1 in the matrix represents the research questions, and Column 2 shows the related interview questions used to explore that research question.

Table 0.1

Interview Question Matrix

Research Question	Corresponding Interview Question						
Background	Please describe your current role						
Background	Please describe the structure of research administration at your current institution.						
Background	Please describe your organization's remote work model (pre and post Pandemic)						
Research Question 1	What are your company's most significant remote work challenges regarding the pandemic?						
Research Question 1	What challenges have you found with remote and hybrid models during the pandemic?						
Research Question 1	What benefits have you found with a digital workplace environment						
Research Question 1	How do you think your teams have adjusted to working remotely?						
Research Question 1	Do you think your teams want to go back to pre-pandemic ways of working?						
Research Question 2	How do you define a digital workplace?						
Research Question 2	How does your organization address employee experiences in a digital context?						
Research Question 2	What is a Digital Employee Experience in Research Administration?						
Research Question 2	Do you believe there has been a change in Digital Employee Experience during the past couple of years?						
Research Question 2	How important is digital transformation for an employee during their employee experience journey?						
Research Question 2	Should an organization invest in Digital Employee Experience? Why or why not?						
Research Question 2	What tools and practices are required to improve the digital employee experience?						
Research Question 3	What have you learned about the importance of leadership in a digital workplace?						
Research Question 3	How did the pandemic affect the future of research administration?						
Research Question 3	How do you ensure culture is maintained when working in a hybrid or remote model?						
Research Question 3	What are the strategic priorities of the organization? Have these changed due to the pandemic?						

** See Appendix 3 for the Interview Guide that provides the questions.

Background Demographics

This section will present the demographics of the interviewees and survey respondents.

Interview Results

Table 4.2 below presents the interviewees' department names, roles, and institutional structure. As noted in the research methods section, 11 interviews were designed to obtain leadership perspectives on the digital work environments and digital employee experience insights for the research administration community. The 11 interviewees provided the department names and role titles during the interviews.

Table 0.2

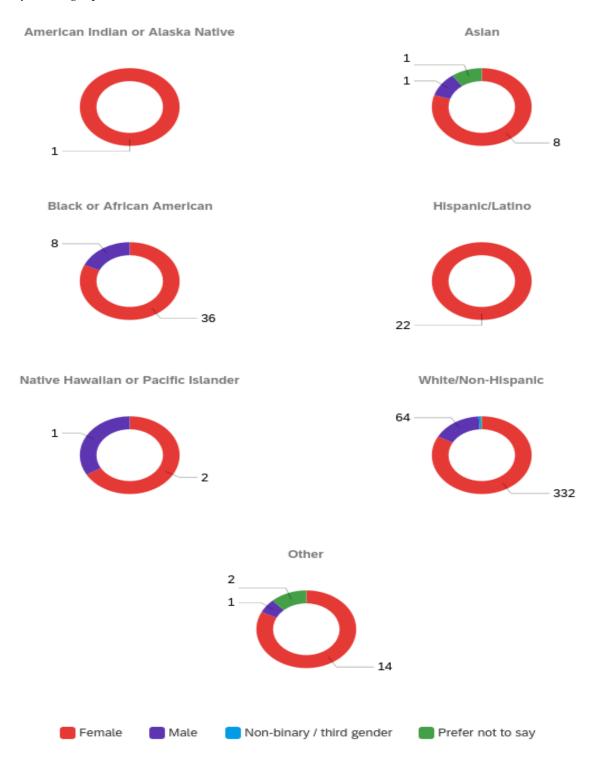
Department Names	Office of Research
	Sponsored Financial Reporting
	Office of Sponsored Projects
	Research Analytics
	Research Administration Operations
	Sponsored Programs
Role Titles	• Director
	Vice President
	Chief Financial Officer
	Assistant Vice President
Institutional Structure	Centralized
	Decentralized
	• Hybrid – a mix of functions are centralized, and others are
	decentralized

Interviewee Organizational Data

Survey Results

Figure 4.1 shows the number of respondents by ethnicity and gender. The research administration community is predominantly female, illustrated by the survey data. 414 Female and 74 male respondents participated in this study. An additional eight respondents were non-binary or preferred not to indicate their gender in the survey.

Survey Demographics



In Figure 4.2, the bar chart displays the relationship between gender and age for the survey participants. Many of the respondents were between the ages of 35-64. This chart also shows a very minimal number of respondents under 35. This shows that the research administration field has many workers in the middle of their careers.

Figure 0.2

Survey Respondents: Gender and Age Demographics Survey Respondents: Gender and Age

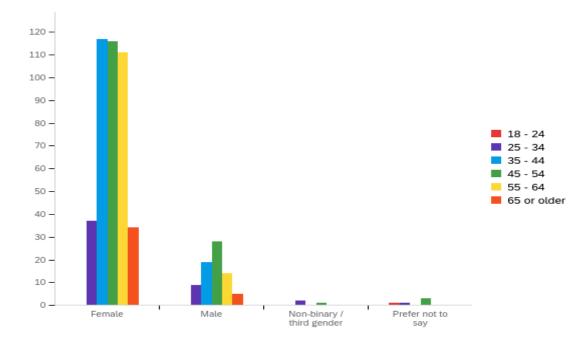
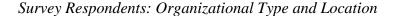
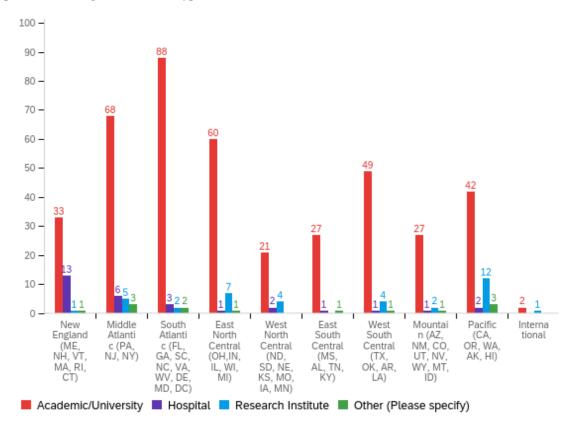


Figure 4.3 displays the organizational type within each location. The Census Map determined the locations of New England, Middle Atlantic, South Atlantic, East North Central, East North Central, West North Central, East South Central, West South Central, Mountain, Pacific, and International. The organizational type choices were Academic/University, Hospital, Research Institute, or other organization. These organization types have been used in previous research administration surveys.



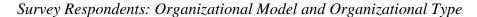


As illustrated in Figure 4.3, Over 80% of the survey responses came from Academic or University organizations, mainly from the Middle Atlantic, South Atlantic, East North Central, and West South Central locations. The 508 survey responses only had 3 responses from international locations.

The following figure (Figure 4.4) breaks down each organization's organizational structure. The respondents had to choose between centralized, decentralized, or portfolio models. The data showed that organizations could have a centralized approach in which their research administration operations were not embedded in the faculty's department. The research administration office is a centralized office where all departments go for research administration

operations. The data also showed that research institutes had more decentralized and portfolio approaches than hospitals and universities. Portfolio models comprise less than 4% in academic and hospital settings, 10.5% in Research institutes, and 15% in other models. Overall, the data confirmed that universities and hospitals had research administration business offices in a central location. Some smaller organizations had their research administration business offices in a decentralized model.

Figure 0.4



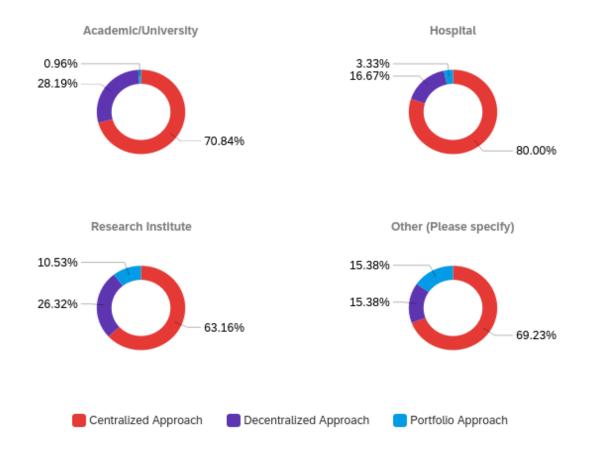


Figure 4.5 shows the respondents for each research administration role based on their position. The position categories were leadership, management, faculty, and staff.

Figure 0.5

Survey Respondents: Position and Role Data

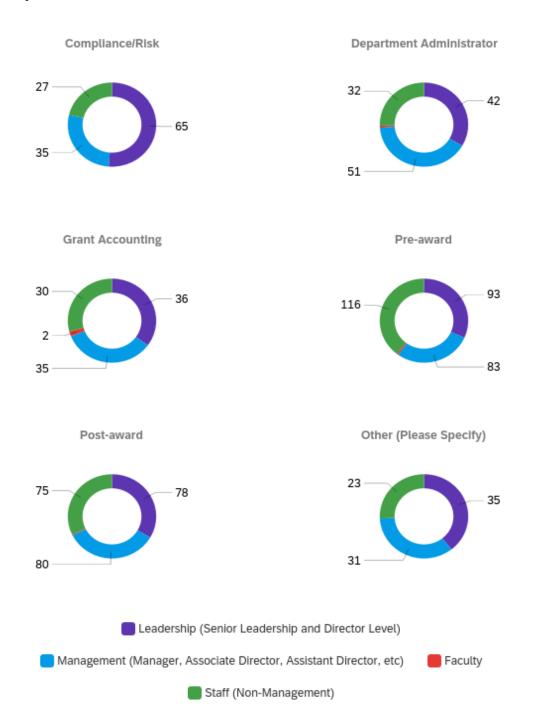


Figure 4.5 illustrates that the survey respondents mainly had leadership roles in compliance and risk, pre-award and post-award. The Management role was evenly distributed through all the position types, with the department administrator receiving the highest count. The staff role indicated that they were in either pre-award or post-award positions. Faculty were either department administrators, grant accounting pre-award, or post-award functions. The next section of the results chapter will provide the three research questions and the results from the interviews and surveys for each research question.

Research Question 1: What Challenges did research administrators encounter during the Pandemic?

This section will provide the results of the interviews and surveys for research question #1.

Interview Results

The following section will present the reported remote work models, challenges and benefits of remote working, and how research administration teams adjusted to the shift in their work environments.

Remote Work Models.

The interviews discussed remote work models that existed pre-pandemic and the current work models. Table 4.3 below provides the models and their respective designs for pre-pandemic and current work models. Column 1 shows the work environment name, such as in-office environment, work-from-home environment (WFH), and hybrid work models. Column 2 shows the interview results for pre-pandemic work models for each work environment. Column 3 shows the current work model interview results for each work environment.

Table 0.3

Pre-Pandemic vs Current Work Models

	Pre-Pandemic work models	Current work models
In-office environment	 → WFH could be granted during bad weather situations → Limited remote work policies → Norm was to be in office for work shift hours 	→ Based on employee's preference in some instances
WFH environment	 → Flexible schedule programs → Remote work policies 	 Dependent on Roles and Responsibilities Piloting and implementing a new model
Hybrid work models	 → Case by case situations → Flex work programs 	 → 50/50 model → 40/60 model

WFH = Work from Home

The in-office environments were the industry norm before the pandemic. In some cases, remote work, such as in bad weather situations or a flex work program, would be allowed. In locations prone to hurricanes, tornadoes, and blizzards, institutions had remote programs because they could deal with periods of disruption. Flex work programs tended to have scheduled one day remote and the other four days in the office if the home office was suitable to work from home with employees' equipment and security in place.

Forced work-from-home models became more prominent after March 2020 due to the pandemic's mass shift in work environments. As noted above, before the pandemic, some organizations had flexible work programs and a remote work policy. Those organizations had more limited issues transferring to a full-time remote work model. In comparison, other organizations had much more transitional work to do in a minimal time. These organizations had to develop remote work policies and infrastructure and review equipment for each employee.

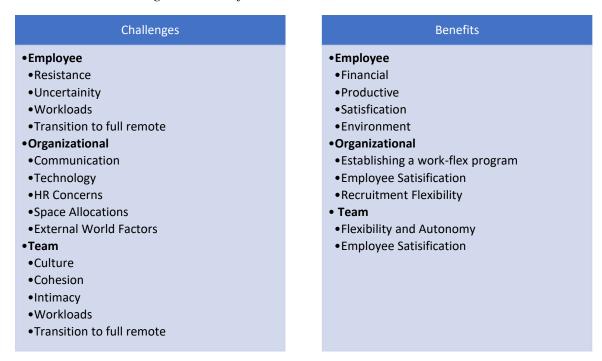
Hybrid models became more prominent during 2021 and 2022 once organizations began to lift some of their restrictions based on their state's guidance. Before 2020, hybrid models operated more on a case-by-case situation if an organization had a flex work program. After the pandemic, organizations began creating various versions of this model. For example, some organizations created a 50/50 model in which employees were in-office for half their workweek hours. A 40/60 model permitted two days in the office and three days working remotely. Hybrid and remote models had unique challenges and benefits, making managing staff a bit more complex.

Challenges and Benefits.

Table 4.4 shows that employees became very comfortable with new work environments and wanted to stay in full-time office environments. When employees were asked to come back to the office, they resisted. For example, when leadership requested that employees return to the office, they said they preferred to continue working from home. Forced returns could result in employees needing more satisfaction and therefore looking for another job in which they could have more flexibility to work from home.

Figure 0.6

Remote Work Challenges and Benefits



Team intimacy or social interaction was more difficult when team members worked from home. These obstacles included having children in the house during the pandemic and/or background distractions, such as pets, family members, and television. Team interactions via online platforms such as Zoom and Microsoft Teams were reported to be more difficult than inperson interactions.

Achieving team cohesion or closeness was challenging because it took more work to establish relationships and trust in a remote work environment. When new team members were added, typical pre-pandemic informal cubicle conversations for training or assistance became more challenging to accomplish. The uncertainty created during the pandemic when staff was told to go home and work from there until further notice produced anxiety. Staff needed to find out when they could return to the office, what leadership would do with their office space, or if there would be any downsizing.

Various challenges occurred when the staff transitioned to a remote work environment in March 2020. Departments within organizations needed a consistent infrastructure in place for remote work. Transitioning to remote work also required adjustments to policies, procedures, and processes. In some cases, new policies and processes must be established, developed, and implemented over time. At-home staff work included obstacles such as home teaching requirements for parents of children who required remote schooling during the pandemic. Since childcare options were unavailable to many, this left workers to attend to their children during work hours.

Office Culture was also a significant challenge as leaders lost the opportunity for inperson collaboration and events that were possible when everyone was in the office. New hires needed help fitting into their teams and finding ways to build team chemistry. Further, organizational leaders needed help communicating changes and updates to their staff.

One of the biggest challenges for any organization is incorporating new technology, but the pandemic raised these challenges to a higher level. The following is a list of the difficulties reported by employees:

- 1) Computer Equipment not working at home
- 2) The need to replace a computer when remote
- 3) Learning new platforms like Zoom, Teams, Slack, etc.
- 4) Inconsistent equipment (computers, printers, scanners, supplies) at home
- 5) Internet challenges not having a solid internet connection

- 6) Privacy concerns such as not knowing who is seeing confidential data
- 7) HR Systems are not up to date to support remote or hybrid working models

In 2020, the pandemic was the main storyline, but additional external world events impacted staff. The George Floyd events created concern, chaos, and safety challenges. Some of the protests in cities across America resulted in violence, fires, and looting that led to heightened state security for citizens in those areas. Additionally, there was an increase in gun violence after the pandemic, which created more significant worry among Americans.

The pandemic put Human Resources (HR) in the spotlight by creating other challenges for organizations, such as how to compensate and manage remote workers, their retirements, their workman's Compensation, and the Great Resignation. These concerns included the following:

- 1) Incentivizing Employees who were free to seek employment across state lines.
- Salaries in the research administration industry had not kept pace with other sectors so that employees could find fully remote higher-paying jobs
- How to handle workman compensation issues when an employee gets injured in their home

Remote workers hired in different States could potentially create the following challenges:

- 1) Whether to pay Big City Salaries versus the employees' new location salary
- Providing health insurance for employees living in other States that might not have access to the organization's local providers
- 3) Tax implications of the employee's State versus the organization's State

Challenges related to retirement include early retirement due to wanting to avoid the pandemic-related changes in work models. Alternatively, some employees delayed their

retirements because they could work from home full-time and not worry about going into the office. The other HR challenge was the "Great Resignation." Like other industries, the research administration industry lost many employees, especially when returning to the office was mandated. These employees left to find better opportunities to work full-time from home. Heavy workloads resulted from staff departures and the inability to fill those positions. As a result, employee burnout resulted from more hours worked, mainly during evenings and weekends. Burnout would occasionally decrease productivity and quality of work. Since employees were working from home, there was unused office space for which the organization continued to pay rent, water, heat, air conditioning, electricity, etc. Since organizations did not know when these spaces would be used again, they repurposed the office space or used it for Hoteling or shared office space.

There were also several benefits resulting from remote work. These benefits included recruitment flexibility, financial flexibility, greater productivity, autonomy, employee satisfaction, environmental benefits, and sustainable work-flex programs; remote work models gave organizations the ability to recruit and hire employees from other states, which resulted in a better talent pool outside of their local recruitment networks.

Financial savings to employees included: train passes, parking fees, city taxes for those who previously had worked in cities, and gas savings, especially after the 2022 gas prices increases. Employees who could work remotely encountered greater flexibility, which gave them work-life balance, and the ability to manage their schedules. For example, they could deal with home appointments such as contractors. Flexibility gave the employee power to work at night to fit in other priorities during the day. This autonomous schedule management gave remote employees the right to choose where and when they wanted to work.

Enhanced productivity was another benefit for employees since they had fewer interruptions at home, saving on commute times and creating better work outcomes. The transition to a hybrid model allowed organizations to implement work-flex programs that gave employees agreements regarding which days to work remotely and which to work from home. With flexibility, autonomy, and work-flex programs in place, employee empowerment led to increased satisfaction. Employees were happier knowing they did not have to come into the office and could balance their schedules to fit their home needs. As noted above, savings on gas not only help employees with their financial situation but also help the environment since having fewer cars on the road helps with air pollution.

Survey Results

This section will address respondents' organizational remote work policies, readiness, and remote work preferences. Question 11 of the survey focused on remote work policies before the pandemic. Before the pandemic (March 2022), 36%, 177 respondents, declared that their organization had a remote work policy. In contrast, 64%, 309 respondents indicated that their organization did not have a remote work policy.

For those who had a remote work policy in place, 134 respondents commented about their remote work policy. Comments indicated that although institutions had a remote work or telework policy, organizations were very restrictive in allowing remote work. Organizations would review case-by-case and usually require senior leadership approval to work remotely. In some cases, these policies would only come into play for snowstorms, hurricanes, tornadoes, or an emergency home situation. Table 4.4 shows the percentages of the respondents who indicated that their organization was not ready, partially ready, and fully ready for the work environment transition when they were told they had to work from home in March 2020.

Table 0.4

Remote Work Challenges and Benefits

Field	Choice Count		
Not Ready	13.90% 61		
Partly Ready	60.82% 267		
Completely Ready	25.28% 111		
	439		

To summarize, Figure 4.7 shows what the respondents liked most about working from home. Figures with word clouds have no numbers and need explanations. A word cloud is a map of the frequency at that a word appears within a selected text (Ramsden & Bate, 2008). Figure 4.7 summarizes the top 25 words in comments about the advantages of working from home.

Figure 0.7

Comments on the Advantages of Working from Home



The top words included time, commute, flexibility, life, balance, and work.

In comparison, working from home comments included some disadvantages in Figure 4.7 word cloud. These disadvantages include interactions with colleagues, zoom meetings, and work.

Figure 0.8

Comments on Disadvantages of Working from Home



Research Question 2: What are research administrators' perceptions of digital

transformation during their employee journey?

This section will provide the results from the interviews and surveys used to explore research question #2; the Digital Workplace environment, the impact of the pandemic on research administration, strategic priorities, employee experiences, and digital employee experiences.

Digital Workplace Environment.

The interviewee's responses defined a digital workplace as a virtual workplace providing access to tools, resources, and documents. The responses below best describe their interpretation of a digital work environment.

1) "A workplace that all of the business processes, tools [and] required things to complete work digitally; whether that be electronic forms, routing of forms [such as] Adobe Sign, to systems that are online and accessible, not just on campus, but wherever you are"

- 2) "A 360 view, having access to tools and resources while having the ability to communicate while being distant."
- 3) "Digital workplace is any sort of environment that individuals or stakeholders can communicate and engage with each other or with individual work."

The interviews presented some concerns about operating in a digital workplace, such as creating effective communication methods, maintaining employee well-being, consistency in valuing all employees, dealing with human elements, and maintaining staff connectedness and employee morale. Table 4.5 presents some of the critical challenges of a digital workplace environment.

Table 0.5

Challenge Area	Description			
Leadership Presence	➔ Lack of Communication			
	Support for significant problems			
	➔ Employee engagement			
Inconsistent Home	➔ Inconsistent Internet speeds			
Environments	→ Different Equipment setups			
	Home environment background obstacles			
HR Issues	→ Recruitment Problems			
	➔ Not able to retain well-trained employees			
	➔ Compensation (Market equity issues)			
	➔ Great Resignation			
Digital Literacy	➔ Each employee has a unique skillset for handling digital			
Skills	changes			

Digital Workplace Environment Challenges

Table 4.6 presents some of the critical benefits of a digital workplace environment.

The first column displays the benefits of a digital workplace environment. These benefits include recruitment flexibility, productivity, retirement delays, and work-life balance. The second column describes each digital workplace environment benefit.

Table 0.6:

<u>Benefits</u>	Description
Recruitment Flexibility	→ The ability to recruit anyone no matter their location
Productively	➔ More efficiency in completing work tasks
Retirement delays	 Employees who were planning on retiring can extend since they don't need to come into the office
Work-Life Balance	➔ Flexibility and control of personal scheduling

Digital Workplace Environment Benefits

The benefit of recruitment flexibility is that it allows an organization to recruit talent outside its local boundaries. For example, an organization in Chicago may only be able to recruit talent within so many miles within their organization. Since 2020, organizations are now posting remote jobs, which allows opportunities for prospective employees in other states.

Productivity refers to employees being more efficient in completing their work tasks. When employees were in the office, there were sometimes distractions and many phone calls that could distract them from achieving their daily responsibilities. With remote work, employees have more freedom to do their work with fewer distractions. Additionally, employees were saving time with commutes and lunch break meetings.

Retirement delay was another potential benefit of digital workplace environments. Employees thinking about retiring could reconsider extending their retirement because they could work from their homes or other locations, which may have been beneficial for employees closer to retirement. One of the enormous benefits reported was work-life balance, which allows employees to control their schedules more. Employees with daily needs, such as children and parents, take care of their requirements during the day while making up their work time either earlier or during the evening.

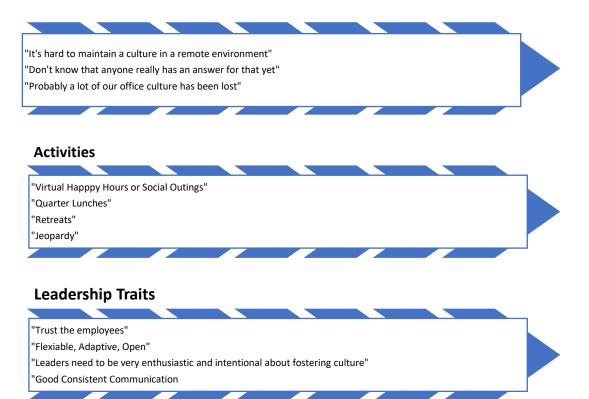
The interviewees categorized employee experiences into four buckets: Culture,

Onboarding, Training, and Other Areas. When asked about how to maintain a culture in a remote environment, Figure 4.9 displays the responses.

Figure 0.9

Maintaining Culture in a Remote Environment

Thoughts about Digital Culture



The following employee experience topic discussed was onboarding which can be done

in-person and remotely. A few respondents indicated that their onboarding was done through

Zoom or some other platform. Others stated that their onboarding was done in person to ensure that the person got the most from their training and experiences. Once onboarding was completed, the employee training was done through online modules with persistent meetings with the trainer or manager.

Other areas discussed in the interviews included productivity, connectedness, flexibility, hiring, and recruitment. The employees typically wanted to know how productively they were working and their progress through their initial training stages. They also wanted the ability to manage and navigate the technology and digital environment changes. Connectivity refers to the ability to collaborate and discuss work issues with colleagues and how to do that.

Digital Employee Experiences.

The interviewees were asked to define Digital Employee Experiences (see Table 4.7), discuss investment in DEX, the changes in DEX due to the pandemic, and the tools and practices used for DEX.

Table 0.7

DEX Definition

"Positive or negative hinges on your ability to interact with these different platforms, different employees, different modules by doing them in digital/virtual environment"

"Working remotely from your computer"

"Wherever an employee can go and continue to get their job done as the same way as they would be in the office"

"Digital employee experience for an employee is interviewing them through whatever program." "Savvy and comfortable enough to embrace not only the technology, the resources, but also to new technologies and resources"

"Digital employee experience and research administration is the ability to access information, forms, files, data electronically without having to handle paper in any way."

"Being able to have a place where you can work and can still be successful in your job and your responsibilities to create positive outcomes. To do this in any environment"

"Digital employee experience is multitasking, and literally doing more than one thing at a time. The quality might be impacted there for different things"

"Digital employee experience in research administration is being able to through the lifecycle of a particular award or contract from beginning to end, using as many virtual tools as possible to provide our faculty as well as our staff with an amount of flexibility"

As noted in the above table, the interviewees described DEX as the ability to perform the

job at any location using digital tools and resources. Compared to the DEX framework, these

definitions mostly covered the technology, physical environment, and leadership components.

When asked about their organization's investment in DEX, all the interviewees mostly

focused on the importance of technology investments. Table 4.8 illustrates their ideas on how to

invest in DEX.

Table 0.8

DEX Investment Ideas

- Provide employees with robust internet services when working from home
- Design a DEX Program
- Improve all hardware for staff
- Have an IT support team embedded under Research Administration
- Bridge IT and HR systems
- Develop a policy for hardware updates

In summary, the interviewees suggested that Information Technology (IT) has a more significant role in research administration's current work models. Staff needs top technology, access to IT support no matter where they are working, and collaboration between IT and HR.

DEX Changes with the Pandemic.

The pandemic brought significant changes to many research administration organizations and impacted how research administration is moving forward. The interviewees talked about their experiences at their organizations and the changes they saw because of the pandemic. The following list is DEX changes that were discussed in the interviews:

- 1) Change in systems, requirements, and platforms
- Learning to navigate and manage changes in technology and digital environments can impact an employee's experience
- 3) Increased interactions with colleagues using instant messaging and phone calls
- 4) Transitioning from in-office culture to digital work culture
- 5) Understanding that everyone's work environment is different
- 6) Understanding that each organization had a different pre-pandemic digital infrastructure
- 7) Transitioning from the 8-5 work model
- 8) Shifting training to a modular e-training system

9) Using improved research administration software and web systems

The list above provides that organizations had to adapt to technology, physical environment,

leadership, business strategy, culture, and personal shifts with the DEX framework.

Tools and Practices.

As organizations shifted their environments in 2020 and beyond, they had to invest and rethink their technology tools and practices in doing business; with these changes in tools and practices, the research administration operations would have been easier for management and staff. Table 4.9 provides a list of tools and practices from the interview discussions.

Table 0.9

Remote Environment Tools and Practices

Tools	Practices
Zoom, Microsoft Teams, Webex	Blocking time in Calendar
Slack, Google Hangouts	Over communicating
Adobe Sign	Reviewing technology to improve efficiencies
SharePoint, One Drive, Box	Accessing knowledgeable IT Support Staff

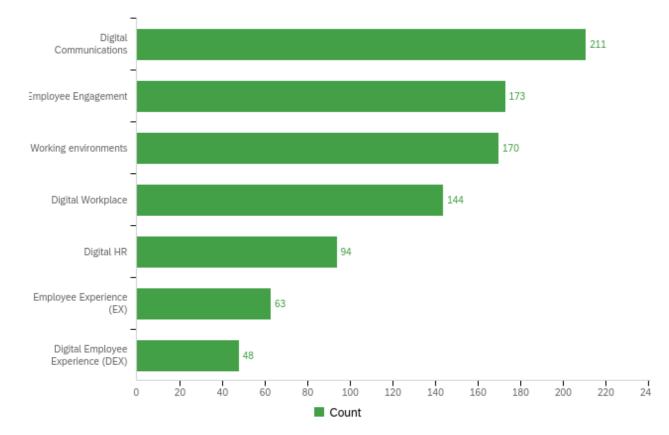
In March 2020, several tools were added to research administrators' toolkits so they could work remotely. The sharing platforms like Drive and Box in Table 6 had been used before the pandemic. Others were added to support remote meetings, communication, and online document signatures.

The best remote work practices mentioned include blocking off calendar time to focus on dedicated projects with no distractions. Technology reviews were instated to ensure that computers and software were updated so business efficiencies and productivity were recovered.

Survey Results

In this section, the survey research will address the organization's strategy, digital employee experiences, and digital employee experience framework—figure 4.10 shows which organizational strategies were most important to research administration organizations.

Figure 0.10



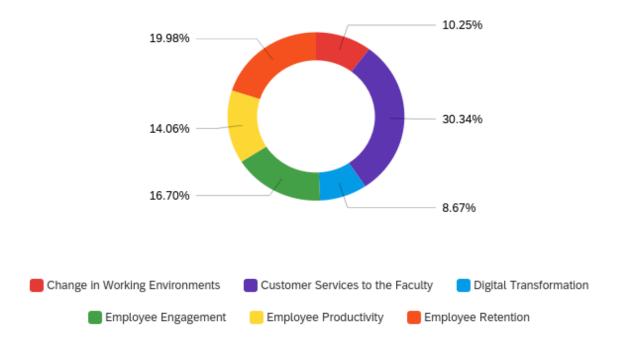
Survey Response: Organizational Strategies

The respondents were allowed to choose multiple strategies. Organizational responses showed that digital communication, employee engagement, and working environments were the most important for having a digital component in their organizational strategy. Digital HR, Employee Experience, and Digital Employee experiences were not strongly emphasized for research administration institutions. Respondents were asked about their organization's strategic drivers. They were allowed to select multiple options from the following: (1) Change in Working environments, (2) Customer Service to the Faculty, (3) Digital Transformation, (4) Employee Engagement, (5) Employee Productivity, and (6) Employee Retention.

Figure 4.11 below shows the respondent's organizational values. Customer Service for Faculty and Employee Retention was the highest strategic drivers for organizations. In comparison, Digital Transformation and Change in Working Environments were reported as the least valued strategic drivers in organizations.

Figure 0.11

Survey Responses: Strategic Drivers

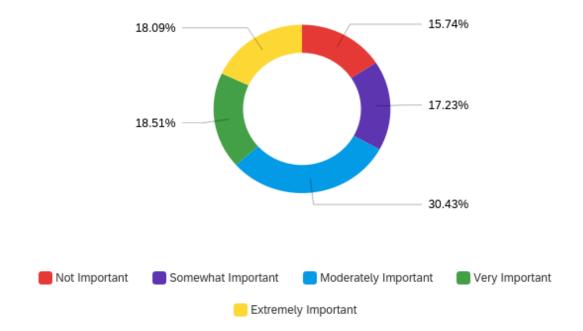


The survey results showed that about one-third of respondents believed that Customer Service for Faculty was a key strategic driver. Other key drivers included change in working environments, employee retention, and employee engagement. Less than 10% of the respondents felt that digital transformation was a key strategic driver for their organization.

The next section of results focuses on the Digital Employee Experience, specifically on how respondents perceived its importance at both an individual and an organizational level. Figure 4.12 shows that respondents viewed DEX as necessary for achieving its organizational strategic drivers, with over 2/3 considering its importance.

Figure 0.12

Survey Responses: Importance of Digital Employee Experience

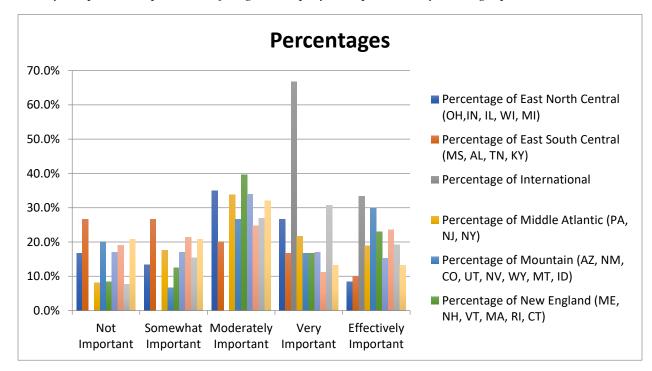


To illustrate the importance of DEX by demographic region, Figure 4.12 shows that the northeast of the country believes DEX is essential. In contrast, the southern and western parts of the country believe that DEX is unimportant. The statistical analysis provides a significant relationship between geographical location and DEX importance. The *p*-value, probability value,

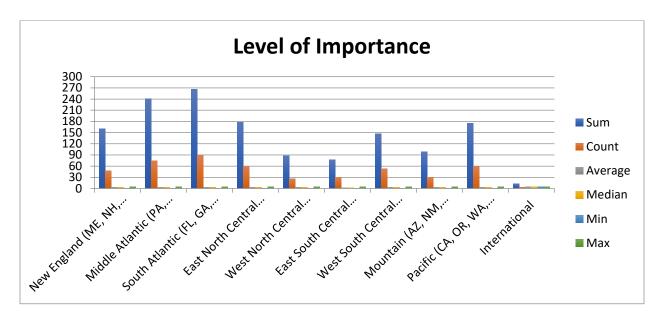
between these two variables is p <.001. In ANOVA testing, a p-value can determine the level of significance between the variables which is measured between 0 and 1. A low p-value determines a there is a level of significance; whereas a high p-value determines there is not a level of significance (McLeod, 2019).

The Level Importance Table in Figure 4.13 shows that the southern and western parts of the country view DEX not important with the averages below 3.0. The Eastern and Middle parts of the country viewed DEX importance with their average values above 3.0. In Chapter 5, the researcher will provide further analysis of why this could be.

Figure 0.13



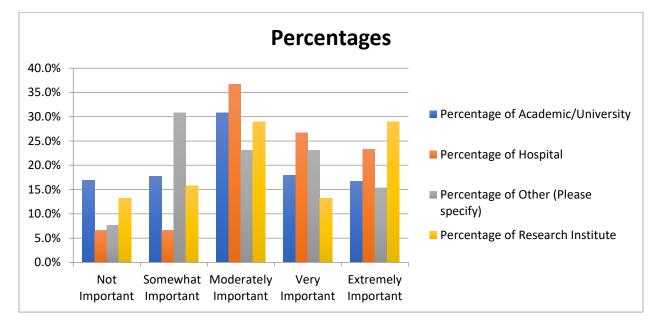
Survey Response: Importance of Digital Employee Experience by Demographic Location

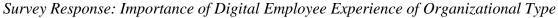


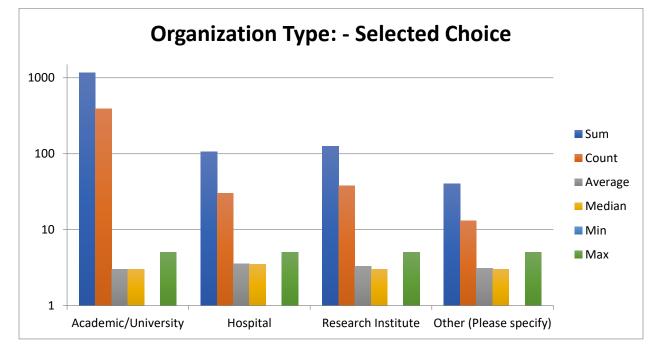
Level of Importance						
	Sum	Count	Average	Median	Min	Max
New England (ME, NH, VT, MA, RI, CT)	160	48	3.33	3.0	1.0	5.0
Middle Atlantic (PA, NJ, NY)	241	74	3.26	3.0	1.0	5.0
South Atlantic (FL, GA, SC, NC, VA, WV, DE, MD, DC)	266	89	2.99	3.0	1.0	5.0
East North Central (OH, IN, IL, WI, MI)	178	60	2.97	3.0	1.0	5.0
West North Central (ND, SD, NE, KS, MO, IA, MN)	88	26	3.38	3.5	1.0	5.0
East South Central (MS, AL, TN, KY)	77	30	2.57	2.0	1.0	5.0
West South Central (TX, OK, AR, LA)	147	53	2.77	3.0	1.0	5.0
Mountain (AZ, NM, CO, UT, NV, WY, MT, ID)	99	30	3.30	3.0	1.0	5.0
Pacific (CA, OR, WA, AK, HI)	175	59	2.97	3.0	1.0	5.0
International	13	3	4.33	4.0	4.0	5.0

Figure 4.14 illustrates the DEX importance by the organizational types. The organizations believe DEX is extremely important or very important by responding 1) Academic/University 35%, 2) Hospital 50%, 3) Research Institute 42%, and 4) Other 38%. However, there is no significant statistical relationship between organization type and DEX importance, with a *p*-value of 0.0932. *P*-values that are greater than 0.05 illustrate that there is not a significant relationship between the variables. This shows that the organizational type doesn't impact how one views their DEX importance. Hospitals (Average = 3.53) and Research Institutions (Average = 3.29) view DEX more important than Academic organizations (Average = 3.0).

Figure 0.14





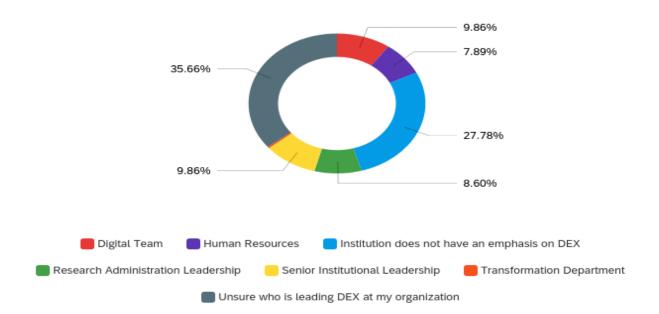


Organization Type: - Selected						
	Sum	Count	Average	Median	Min	Max
Academic/University	1169	390	3.00	3.0	1.0	5.0
Hospital	106	30	3.53	3.5	1.0	5.0
Research Institute	125	38	3.29	3.0	1.0	5.0
Other (Please specify)	40	13	3.08	3.0	1.0	5.0

Since respondents believed DEX was important, organizations need to determine who should lead DEX within their organization. Leading DEX in organizations can be led by various units such as Digital Teams, Human Resources, Research Administration Leadership, Transformation Teams, or Senior Institutional Leadership. Figure 4.15 shows what unit or division of an organization was responsible for leading DEX. 36% of the respondents were unsure who should be leading DEX at their organization; 28% felt that their organization did not have an emphasis on DEX, and the remaining 35% were split between the Digital Team, Human Resources, Research Administration, and Senior leadership as the ideal leaders of DEX.

Figure 0.15

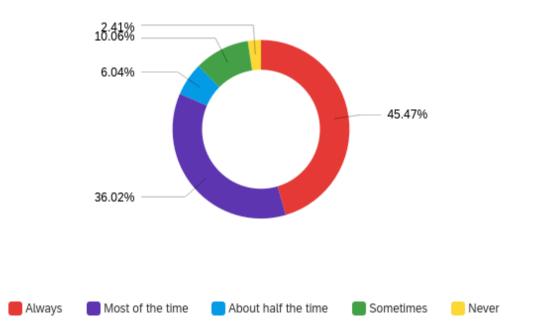
Survey Response: Digital Employee Experience Leadership



The following section will focus on the DEX framework described in Chapter 1, which includes technology, digital culture, leadership, physical environment, business strategy, career, brand, and personal components. In remote work environments, technology is crucial. Specifically, the hardware and software employees use to work remotely. Figure 4.16 showed that over 80% of the respondents believed they had technology support from their organization for remote work. Only a few respondents answered that there needed support from their organization for remote work.

Figure 0.16

Technology Support



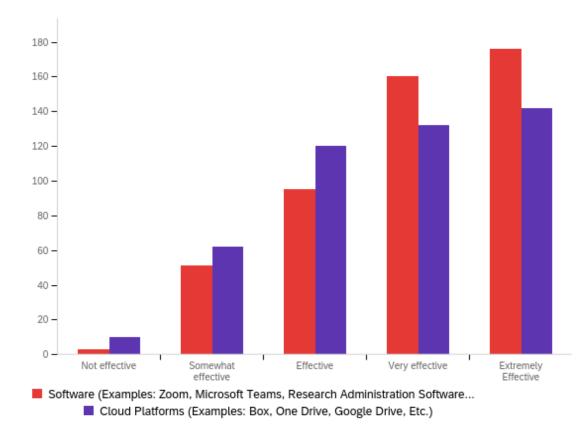
Organizations provided the following technology resources during the pandemic: home office setup, hotspots, printers, VPN, software platforms, monitors, cameras, and additional office supplies for remote work. Unfortunately, some respondents indicated that, even though there was institutional support for remote work, they had to purchase their home setup and office

supplies. Other organizations provided additional IT support to help with at-home issues such as VPN, software updates, hardware issues, and other technical issues.

Figure 4.17 outlines the perceived software and cloud technology effectiveness of organizations. Most respondents indicated that their organizations provided sufficient, effective software and cloud technology.

Figure 0.17

Survey Response: Technology – Software and Cloud



As shown in Figure 4.18, the top software and cloud platforms used by research administrators were Zoom, Teams, SharePoint, Google, Box, and OneDrive.

Figure 0.18

Software Support Comments

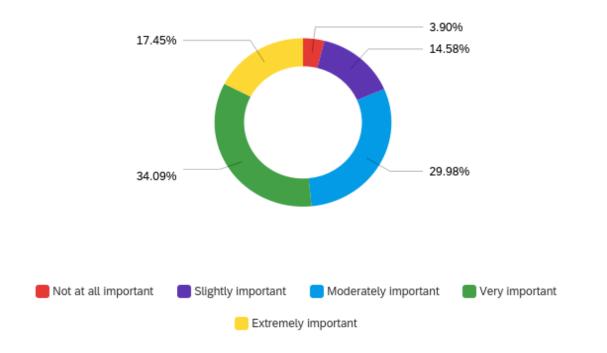
Technology Used



Employees need to obtain a deep level of digital literacy for technical support based on the DEX framework. Table 4.19 shows the survey responses for digital literacy. Over 80% of the respondents felt it was moderately crucial to imperative.

Figure 0.19

Survey Response: Digital Literacy

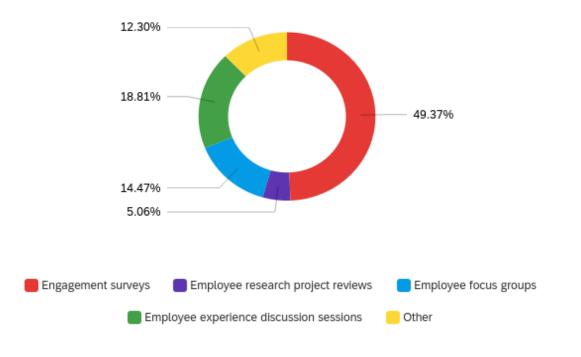


The following section will present significant leadership responses when leading organizations in a digital environment. To lead in a digital environment, leadership would use or invest in the following techniques: Engagement Surveys, Employee research project reviews, employee focus groups, and employee experience discussion sessions.

Figure 4.20 shows that 50% of the respondents believed that leadership should use engagement surveys to obtain information about an employee's experience. Employee focus groups and employee experience discussion session responses were included in about 33% of the responses. The 12% that answered 'other' had comments about using robust online training modules, surveys and polls, and an effective IT support team.

Figure 0.20

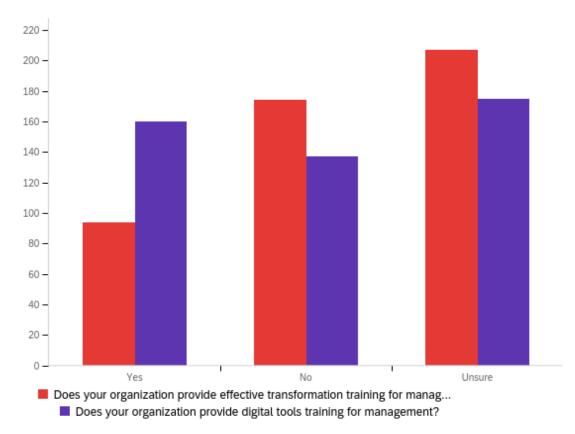
Survey Response: Understanding Employee Technology



As organizations moved into an entirely new remote operations environment, it was also crucial for leadership to provide teams with specific digital transformation training. Figure 4.21 presents RA leadership responses to digital transformation training.

Figure 0.21

Survey Response: Digital Transformation Training



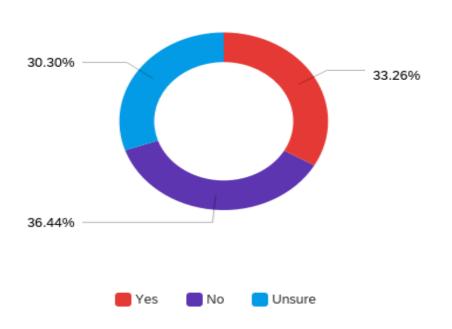
As shown in Figure 4.21, most research administrators who completed the survey reported that their organization needed to provide digital transformation training or were unsure if such training was available. However, 2/3 of the respondents said their organization should have offered digital tools training for their management teams.

The following section will provide the responses to the DEX survey questions. Figure 4.22 shows that the perceived value of DEX in organizations was split evenly between those who

valued DEX, those who did not value DEX, and those who were unsure of the importance of DEX because there was no attention to this concept in their organizations.

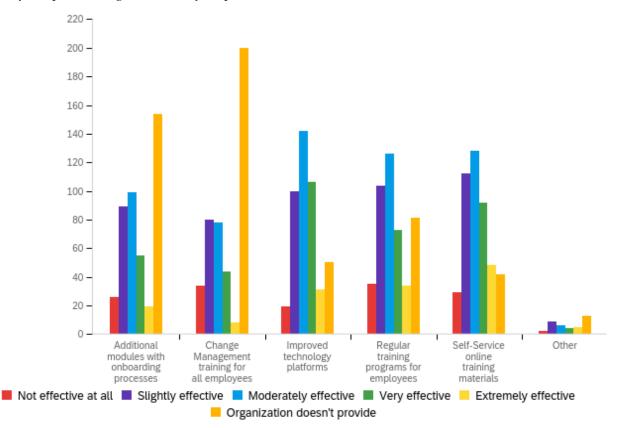
Figure 0.22

Digital Employee Experience Value



Digital Literacy is essential for all stakeholders when working in a remote or hybrid environment. Digital Literacy is necessary as it encompasses the skills required to use technology effectively and responsibly. As we continue moving in a remote and digital world, technology is a critical component of the DEX framework. Figure 4.22 illustrates how crucial digital literacy capability has become for organizations. Respondents rated the importance of building capability through the following methods: (1) Additional Modules for onboarding processes, (2) Change management training, (3) Improved technology platforms, (4) Regular training programs for employees, (5) Self Service online training materials, and (5) other. Figure 4.23 showed that most respondents desired that additional onboarding modules and change management training could help organizations develop digital literacy. Other respondents found that improved technology platforms, regular training programs, and selfservice online training could effectively build digital literacy.

Figure 0.23

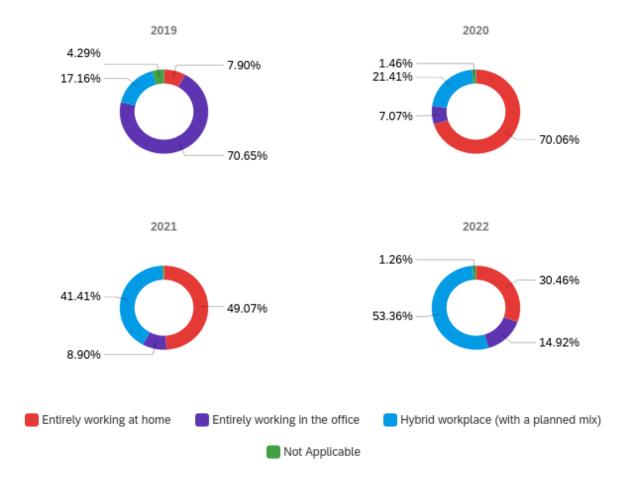


Survey Response: Digital Literacy Capabilities

In the DEX framework on which the survey was based, a working environment can either be in–office, fully remote, or hybrid. However, the survey results illustrated in Figure 4.24 indicate a significant shift in working environments due to the pandemic. In 2019, 70% of the respondents said they worked in the office full-time. In 2020, that shifted to 70% of the respondents working entirely at home. During 2021 and 2022, there was another major shift in operations from 100% remote to various hybrid models—less than 15% of employees in 2022 worked full-time in the office.

Figure 0.24

Survey Response: Working Environments (2019-2022)



The survey respondents were asked to describe their hybrid work model mix through comments (See Table 4.10). Many respondents indicated that they worked either 2 or 3 days in the office. In contrast, others noted that their organizations had not made it mandatory and were giving the employees flexibility to decide whether to come into the office. Based on the comments, other organizations assigned work environments based on whether roles and responsibilities permitted work to be completed remotely.

Table 0.10

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Comments for each	<u>2019</u>	2020	2021	2022 Comments
Year	Comments	Comments	<u>Comments</u>	
Comments provided in Survey by Respondents	2019 – working 1 day per week at home	Began 2020 in the office, sent home in March	Most of 2021 was at home	went back to the office in October2021
	2019, 4 days remote, one day in the office on a weekly basis.	First part of 2020 was entirely in the office but once the pandemic hit, we were fully remote.	2021- hybrid work 50% remote.	In 2022, I work from home 1 day a week and 4 days in the office.
	IN 2019. HYBRID: 3 DAYS AT THE OFFICE	2020 - the same until COVID hit, then entirely remote	2021 was mostly remote but limited in office	2022 is still hybrid but mostly in office.
	2019: 4/1 model: 4 days in-office, 1- day WFH	Prior to March 2020, we were allowed one work from home day per week.	In late 2020 through mid- 2021, remote 3-4 days/week	from mid-2021 to present, remote 2 days/week.
	In 2019 and before, I worked 3 days in the office 2 at home	In 2020 and 2021, depending on the COVID infection rate, we were always in the office or always at home. It varied each month	We worked from home due to COVID from March 2020 through June 2021	Since June 2021 we've been back in the office with no remote options, except when a person has COVID.
	In 2019 before pandemic hit, we were able to work remotely 1 day / week.	2020 - remote during the pandemic, 100% at work once quarantine was lifted	2021 - 2-3days WFH	2022- occasional WFH day per week
	Hybrid in 2019 was working from home once a week.	2020 was in office until spring break then remote rest of year	I was in the office for about 3 half- days each week for Spring 2021. I came back to the office full-time in the Summer of 2021 and have only worked from home occasionally as needed.	In 2022, less than a day a week
	In 2019 I worked two days a week from home.	2020-2021 100% home	In 2021, I would typically work remotely two days per week and would work	I have only been at this institution since January 2022. I work hybrid - 3 days in the office and 2 at home. I

Survey Response: Work Model Comments on Hybrid Mix

		in the office the other three.	have flexibility to change the at-home days to fit my needs and the needs of the team
in offi until t June v shifter week every and th time r my ho	d to one March 13, 2020, in office was fully remote 4-6 weeks at home. he rest of the emote from	2021: Remote through 8/2021, As of 9/2021: 3/2 model: 3 days in- office/2 days WFH	We were fully remote through August of 2021, then went back to full time in the office until December of 2021, before going fully remote again in January of 2022.
year in 2020 I consis	tently in or remote	Remote in 2021 until June 30, Returned July 1	In 2022, l've been on campus 1 day a week.

Figure 4.25 shows that 90% of the respondents believed they had the necessary digital devices to work remotely effectively. Digital tools include software, meeting tools, shared drive, and VPN abilities. Digital devices included printers, scanners, ipads, phones, and computer devices. Some of the digital tools mentioned in the comment section included the following: Zoom⁴, SharePoint⁵, HURON research suite⁶, and Kuali Coeus⁷. Some organizations needed the infrastructure to invest in these tools, so they continued to conduct business as usual even though they were operating at a distance from the office.

⁴ Zoom is a video conferencing platform that can be used through a computer desktop or mobile application and allows users to connect online for a virtual meeting.

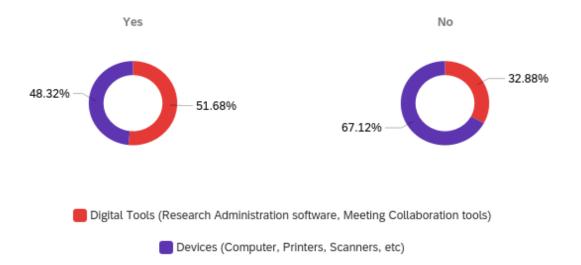
⁵ Microsoft Sharepoint is website-based collaboration system that uses workflow applications, "list" databases, and other web parts and security features to empower businesses teams to work together

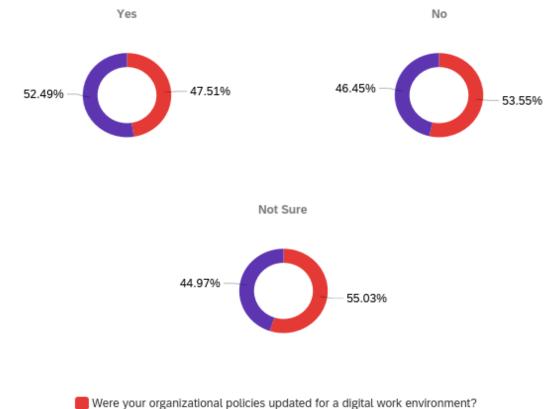
⁶ Huron research Suite is a proven and Comprehensive suite of software solutions tailor-made for managing the business of research

⁷ Kuali Coeus is a cradle-to-grave award management system, designed to assist the research community in proposal development, tracking submitted proposals, and award acquisition and management.

Figure 0.25

Survey Response: Digital Tools





Survey Response: Processes and Policies

Were your organizational processes updated for a digital work environment?

Figure 4.25 presents retrospective perceptions of whether organizational processes and policies were adequately updated when organizations were forced to adapt a remote work in March 2020.

Figure 4.25 shows that 65% of the respondents reported that processes had to be updated for the shift in the work environment; 16% reported that their processes were already suitable for remote work when the shift occurred. Another 16% noted that they needed clarification on whether their policies had been updated. Additional comments noted the following adaptations: (1) changes in signature processes, (2) shifting to a paperless environment, and (3) work-fromhome processes.

Figure 4.25 also shows that 59% of the respondents reported that policies needed to be updated due to a shift in the work environment, while 18% indicated that their policies were already updated for remote work environments. The remaining 23% of the respondents needed clarification about their policies and whether they needed to be updated. Additional comments for this question included: (1) Policies are still being updated, and (2) Policies are being evaluated with IT department leadership.

The following section (see Figure 4.27) will address if individual goals and priorities shifted during the pandemic. The responses to this question were split approximately evenly, with 54% indicating that their goals did change during the pandemic.

Figure 0.27

Survey Response: Goals

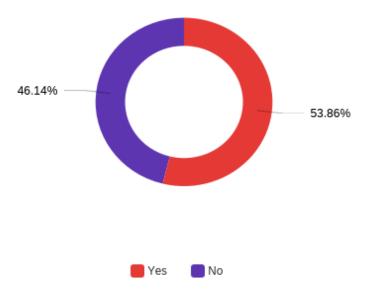
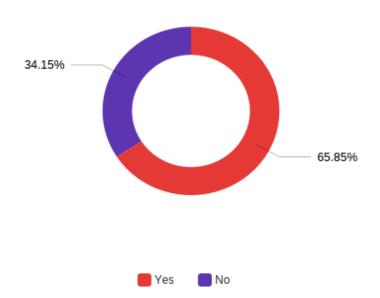


Figure 4.28 shows that 66% of respondents indicated that their priorities had shifted during the pandemic.

Figure 0.28

Survey Response: Priorities



In Chapter 1, Figure 1.2 illustrates the personal component of the DEX framework. The respondents were asked about their personal priorities changed because of the pandemic. This question was asked to get an overview of how their priorities shifted due to the pandemic. As shown in Figure 4.29, the respondents were asked to rank the importance of their personal goals for family, health, money, education, and lifestyle before and after the pandemic. Since 66% of the respondents had indicated that their priorities had changed during the pandemic, it was important to see which priorities changed.

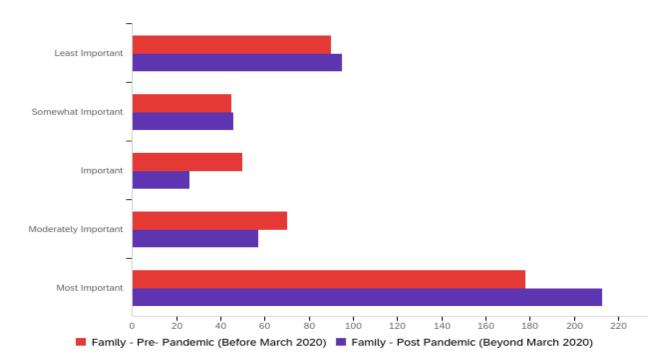
Family goals did not see a significant shift between the pre-pandemic and post-pandemic periods; However, an increase of 35 family goal responses between pre-pandemic and post-pandemic. Health and education goals remained constant between the responses for pre-

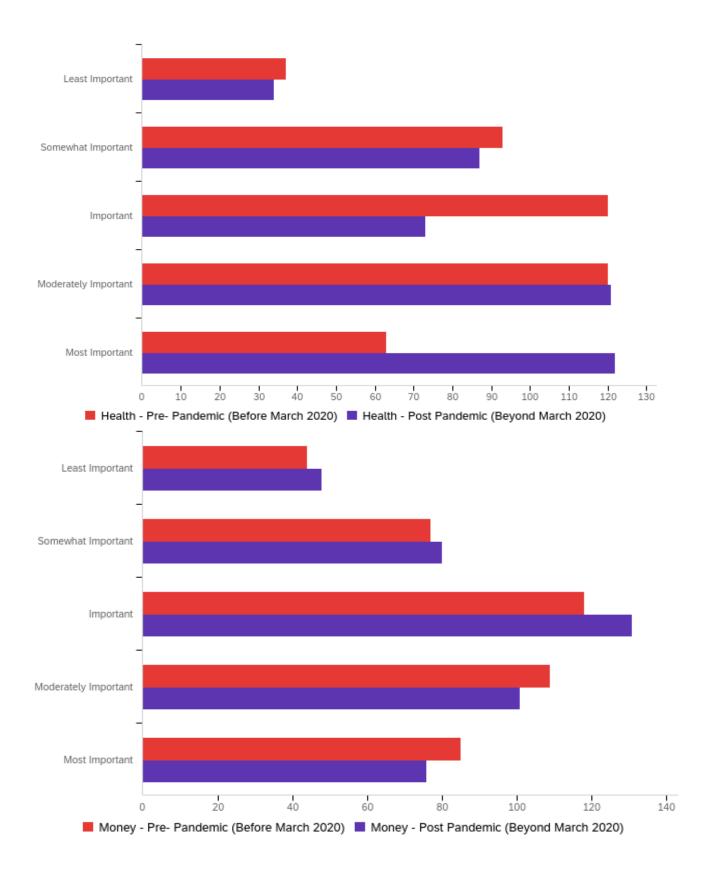
pandemic and post-pandemic. However, respondents' money goals did shift during the post-

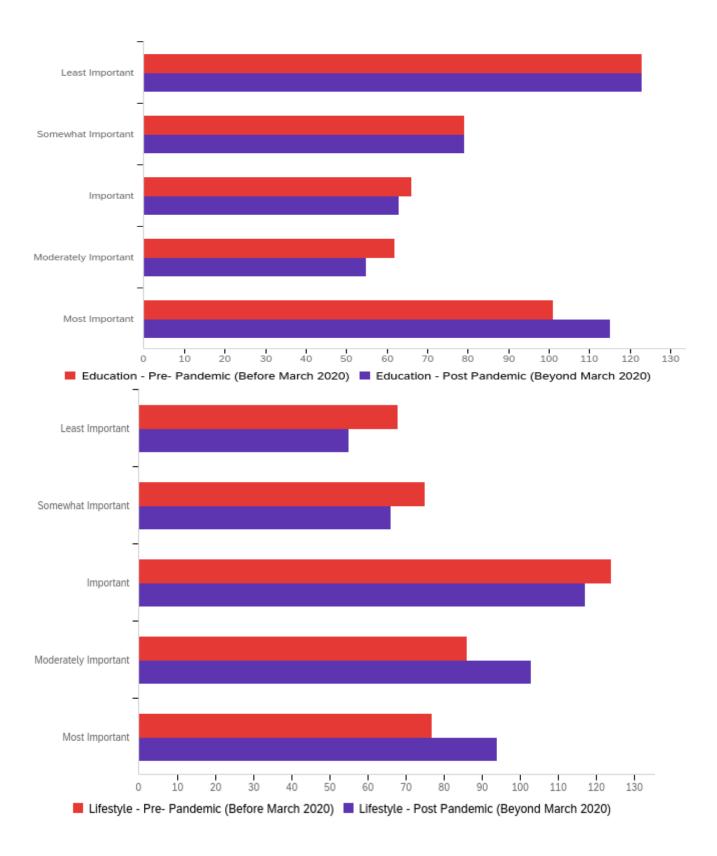
pandemic, and lifestyle goals were rated either very important or most important.

Figure 0.29

Survey Response: Importance of Personal Goals (Family, Health, Money, Education, and Lifestyle)

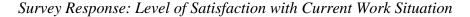






The personal component of the DEX framework also looks at how an employee views their career, values, needs, and balance between personal and professional commitments. The respondents were asked to choose how satisfied they were with their workplace situation concerning the following: (1) Alignment with personal values and needs, (2) Attention to wellness and health, (3) Career Trajectory, (4) Flexibility, (5) Organizational Support, (6) Professional Development, and (7) Work-Life Balance. Figure 4.30 illustrates the current alignment of respondents' work situations and values.

Figure 0.30



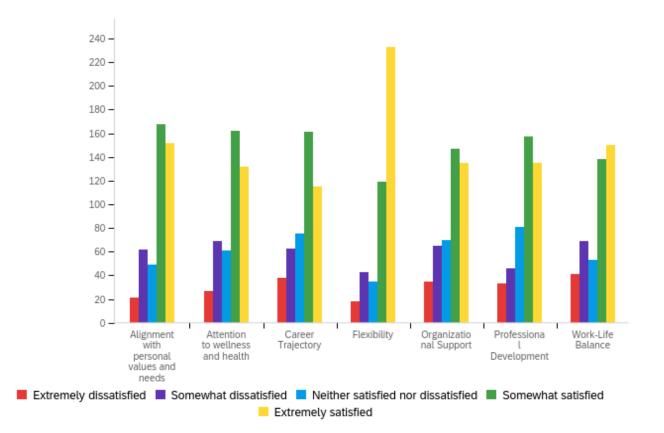


Figure 4.30 illustrates that Flexibility has the highest level of satisfaction with research administrators. Alignment with personal values and needs, attention to wellness and health, and

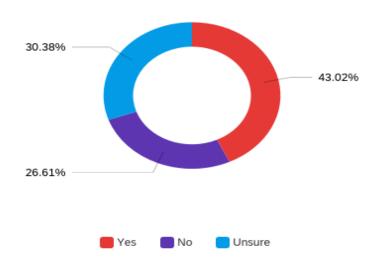
career trajectory showed some dissatisfaction with some research administrators. This indicates that there is still some work that needs to be done with professional development, well-being, and providing organizational support to assist with aligning professional work with employees' needs and values.

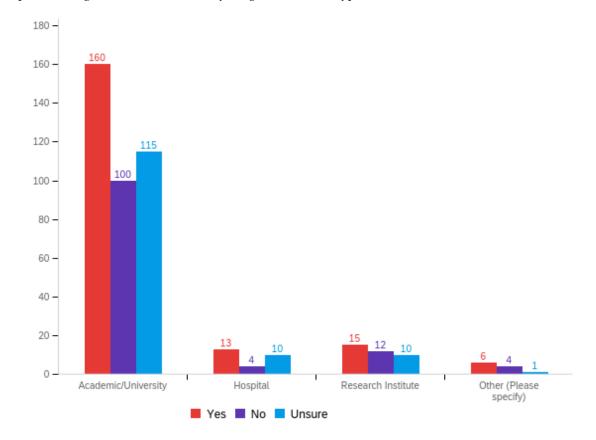
The following section will illustrate the survey results about organizational brand factors, types, and strengths. As discussed in Chapter 1, organizational brand in the DEX framework refers to organizational reputation and organizational pride, brand identity, and the cause of brand reputation and fame. For research organizations, this is important because organizations would like to be at the top for research funding, the best compliant institutions, and well recruited for research faculty. Figures 4.31, 4.32, 4.33, and 4.34 will present survey data reviewing the organization brand component for the DEX framework.

Figure 4.31 shows that more than 50% of the respondents either needed to learn their organizational brand or needed clarification about the organizational brand.

Figure 0.31

Survey Response: Organizational Brand





Survey Response: Organizational Brand by Organizational Type

Figure 4.32 illustrates the organization's brand responses by organizational type. Academic and universities (82%), Hospitals (7%), Research Institutes (8%), and other organizations (3%) know their organization brands. The respondents that needed to learn their organizational brand were Academic and Universities (83%), Hospitals (3%), Research Institutes (10%), and other organizations (3%).

As the word cloud in Figure 4.33 shows, for the 43% that did know their organizational brand, they indicated the brand was centered around education, research, service, innovation, and health while providing the highest, best, and excellent level of service.

Survey Response: Organizational Brand Types



Figure 4.34 shows the organizational strengths of an organizational brand. The organizational brand strengths indicated in the survey included recognition, strong, service, innovation, research, and education. Recognition can help employees see that their organization values them through either a reward program or by valuing their contributions to the team and organization. Strong managers and leaders can ensure that organization keeps its brand and recognition together. Innovation, research, and education are organization missions that can put an organization at the top of its industry. Research organizations need an infrastructure to have strong innovation, research, and education missions.

Survey Response: Organizational Brand Strength

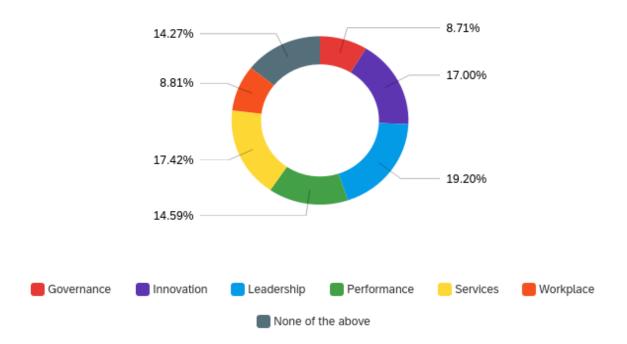


Organizational brand awareness is how well an organization's customers know and recognize the organization's brand. Strong academic brand awareness can improve research faculty retention, improve student enrollment, increase fundraising, and increase external grant funding. Figure 4.34 illustrates the organizational brand factors awareness of the following: Governance, Innovation, Leadership, Performance, Services, and Workplace. Brand Governance (8.71%) supports the natural evolution of the brand and its development on a long-term scale. Innovation (17%) in brand awareness finding creative ways to promote and increase awareness, such as rebranding, service or product innovation, or organization growth. Leadership (19.2%) in brand awareness can create credibility and trust within the organization. Brand performance (14.59%) measures a set of outcomes from the organization's branding efforts. This can be done

through engagement surveys, performance goals, and evaluations to determine the strengths and weaknesses of the organization. Services (17.42%) can help an organization's brand by providing awareness for other organizations struggling in a specific area. Workplace (8.81%) in brand awareness is an organization's reputation and the value it can bring to its employees. Leadership, Innovation, and Services were the top organization brand factors indicated in the survey. However, less than 10% of the respondents indicated that Governance and Workplace was not key organizational brand factor.

Figure 0.35

Survey Response: Organizational Brand Awareness Factors



Lived experiences, another component of the DEX framework, addresses personal and professional experiences as an individual goes through their employee journey. Personal

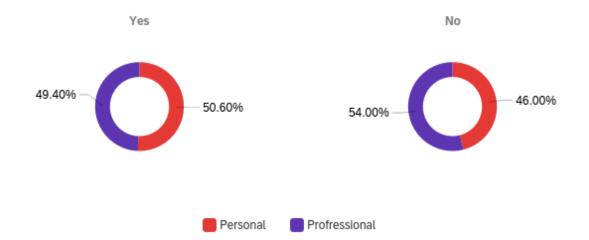
experiences are experiences that impact an individual directly. A professional experience is an experience that is relevant to a work position or role. The following three figures (Figures 4.36 – Figures 4.38) illustrate the respondent's personal and professional experiences pre-pandemic and post-pandemic,

Figure 4.36 illustrates whether respondents perceived any change in their personal and professional experiences because of the pandemic. 51% of the respondents experienced some change in their personal experiences, and 49% experienced some form of professional change.

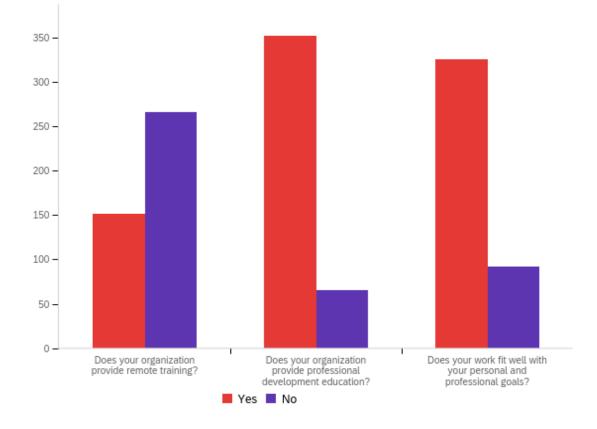
Figure 0.36

Survey Response: Personal and Professional Experiences

Survey Response: Experiences



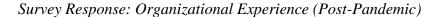
The survey also asked the respondents about their personal and professional experiences during pre-pandemic and post-pandemic. The respondents indicated that 66% of their organizations did not provide remote training in the pre-pandemic environments, but 43% did invest in professional development.

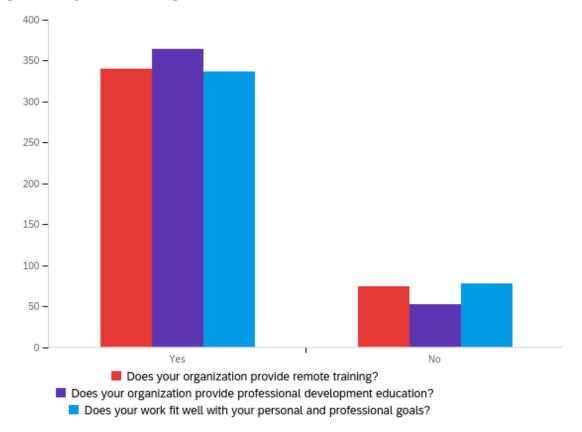


Survey Response: Organizational Experiences (Pre-Pandemic)

Figure 4.37 and Figure 4.38 shows three questions on how the respondents experienced remote training, professional development, and balance between personal and professional goals. Figure 4.37 addresses these questions before the pandemic, and Figure 4.38 addresses the same questions during the pandemic.

The pre-pandemic results (Figure 4.38) show that 2/3 of the respondents felt that remote training was not available, professional development was available, and that there was a balance between personal and professional goals.

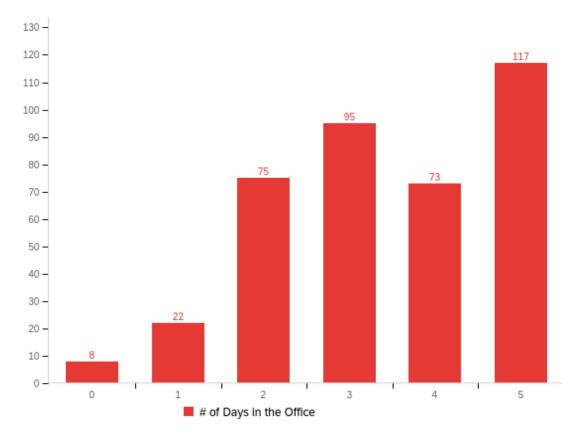




The post-pandemic results (Figure 4.38) illustrate that many respondents felt that their organization provided remote training, professional development education, and a balance between their personal and professional goals. As we continue through the pandemic, the following questions address how many days the respondent would like to work in the office.

Figure 4.39 shows the days a respondent would like to work from home. The results show that less than 8% want to work at home for 0 or 1 day. Respondents would like to work from home for 2 days (19.23%), 3 days (24.36%), 4 days (18.72%), and 5 days (30%).

Survey Response: Preferred Remote Days



Research Question 3: What is the future of research administration as the industry moves forward?

This section will provide the interview and survey results for research question #3. These interview results came from the last section of the interviews, when participants discussed the future of research administration and how the pandemic changed the research administration industry. The questions asked about future models and additional comments about the survey.

Interview Results

This section will cover the impact of the pandemic on research administration and its strategic priorities.

Impact of the Pandemic

Interviewees reported that the pandemic changed research administration practices regarding how and where work is performed but did not change the fundamental business of RA. Specifically, the interviewees articulated the following common themes in response to the pandemic:

1) Recruitment

As discussed in the above sections, recruitment became more flexible regarding whom to target for open positions. HR and Managers could target talent in other states who could work remotely and not relocate.

2) Working independently

By working at home, staff could work independently versus in a team setting with colleagues sitting next to them. Work and training were changed to self-managed exercises.

3) Resilience

Due to the pandemic experience during which leaders collaborated to develop best practices and procedures for remote work, organizations came to believe that they could get through any disaster, event, or pandemic.

4) Adaptability

The Pandemic taught leaders how to become more accommodating, sensitive, and adaptable to staff and situational factors.

5) Future Thinking

Leaders became more aware of the need for business continuity planning, adequate infrastructure, and a healthy organizational culture.

Strategic Priorities

Most interviewees indicated no changes to their strategic priorities in response to the pandemic. Strategic priorities for research institutions interviewees included: becoming one of the top institutions in the country for research faculty recruitment, increasing research funding, continuing to build on international collaborations, continuing to support the researchers while maintaining a safe, compliant environment, and for academic institutions, increasing student enrollment, especially in remote and hybrid education programs.

Strategic priorities that did change in response to the pandemic included the following summarized themes:

- 1) Continue to look for areas to improve processes
- 2) Cultivating a culture through digital and remote means
- 3) Leaders use forward-thinking to make decisions
- 4) Embrace the digital work environments
- 5) Increase diversity, inclusion, and equity
- 6) Hire strong employees who can support the faculty so they can concentrate on doing the research. Faculty shouldn't have to be worried about sorting staffed offices.

As the industry moves forward, as discussed in the interviews, research administration leaders should continue to use forward-thinking, train staff in the required digital skillset, and embrace the new world of remote work.

Survey Results

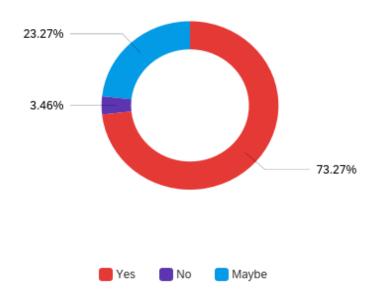
This section will present post-pandemic participant preferences for the number of days in the office and their preferred future work models.

Figure 4.30, provided earlier in this chapter, indicated that the respondents wanted to be at home five days (30%), four days (19%), three days (24%), two days (19%), one day (6%), 0 days (2%).

As employees were transitioning back to the office, the respondents were asked if there were any practices they wanted to bring back into an office environment. Their most common answers are provided below:

- 1) Walking schedule times
- 2) I don't ever want to go back in
- 3) More flexibility with schedule and hours
- 4) No paper files and documents
- 5) Use Zoom meetings to replace phone calls
- 6) Change Dress codes

As organizations move forward (See Figure 4.40) in this new world of work, 73% of the respondents predicted that their organizations would maintain the current work environment models. Twenty-three percent of the respondents indicated that they needed clarification or guessed that the models might continue as they moved forward.



Survey Response: Moving Forward Work Environment Models

Conclusion

This chapter described the results of this study of digital employee experience in research administration by investigating the challenges resulting from the pandemic, evaluating the digital transformation of research administrators as they continue their employee journey throughout the pandemic, and providing insights regarding the design of research administration future workplace models as the industry moves forward in the new world of work. The research conducted to address three key questions included a mixed-methods approach of interviews and surveys. Eleven participants were interviewed for this mixed-methods study. Five hundred-seven participants' perceptions were captured in the survey research portion of the study. All were in the research administrators (NCURA), Society of International Research Administrators (SRA), and Res-Admin List Serve members. The findings from the RA leadership interviews showed that: 1. Organizational readiness is critical for any significant change in work environments, 2. Digital work culture continues to challenge the field, and 3. More discussion is needed regarding how organizations can invest in improving DEX in research administration.

The survey's key findings showed that employees want a) flexibility no matter the work environment, b) organizational support for remote and hybrid models, and c) continued investment in digital tools, practices, and processes. The next chapter, Chapter 5, will detail this study's findings, recommendations, limitations, and potential directions for further research.

Discussion

Introduction

This chapter will summarize the findings, recommendations, limitations, and further research opportunities for this study on the digital employee experience in research administration. As described in Chapter 1, this study aimed to evaluate how research administrators perceived their digital employee experience during the Pandemic and to obtain information on how the research administration industry perceived post-pandemic work models. The researcher used a mixed-method interview and survey approach to gather perceptions and insights from various research administration leaders and over 500 research administrators.

The results described in Chapter 4 were centered around three research questions:

- (1) What Challenges did research administrators encounter during the Pandemic?
- (2) What are research administrators' perceptions of digital transformation during their employee journey?
- (3) What is the future of research administration as the industry moves forward?

For each research question, the researcher will summarize the relative findings, compare the findings to the literature, and then interpret the contribution of the findings to the existing literature.

Question#1: What Challenges did research administrators encounter during the Pandemic?

This study documented many challenges, but the three main findings included: distributed work challenges maintaining team intimacy and organizational culture and using new technology tools and practices.

Franken et al. (2021) examined the losses and gains of working remotely during the

pandemic. Findings showed that the technology challenges included coping with slower network speeds, inadequate hardware and software, and communication limitations when technology replaced in-person contact. Franken's work also illustrated that remote work caused stress and loss of productivity due to work-life conflicts, increased the spread of work hours to accommodate work-life conflicts, and replaced commuting times with longer work hours. Workload challenges included virtual meetings, growing workloads, technology failure creating lost time, and workload increases due to increased productivity within the organization. Team relationship challenges were a lack of face-to-face interactions, working virtually delayed projects with colleagues, and needing help to replace face-to-face modes of working with technology in some situations. The findings of this study discussed below support some of these challenges described by Franken, etc. This study focused on the research administration industry, the increased workloads, technology challenges, and productivity concerns supported the Franken 2021 finding.

Finding #1: Team Intimacy was a concern for management and staff.

Due to the pandemic, teams were forced to work remotely for a significant amount of time, creating remote work challenges and isolation for team members. One of the key findings was that individuals had difficulty interacting with faculty and staff during the pandemic. They felt the personal conversations were lost since there was no in-person group setting. Additionally, on-the-job learning, such as asking team members questions about work, was challenging since they were not sitting next to each other, employees were consistently in Zoom meetings, and some had at-home distractions to deal with, such as at-home teaching. Franken's study showed that employees lost face-to-face interactions, virtual work hindered progress on some projects, and technology could not replace face-to-face modes of working in some situations. However, as with this dissertation study, Franken found that extra efforts were made by both leaders and staff to support their teams. These efforts included innovation, creativity, and perseverance in completing the work even though challenges of technology and isolation were found in many cases.

Finding#2: Maintaining a work culture when employees were distant in their remote work environments.

Organizational culture was difficult to maintain during the pandemic due to lost in-person collaboration, limited or no in-person events, and the difficulty of having new hires fit in since they could not meet staff in person. Management tried various online events to help with this loss of collaborative capability, but employees sometimes felt disengaged or uninterested in participating. Training and onboarding needed to be completed virtually with new hires, and new hires had to do more self-training to learn new responsibilities. The organizations that were researched did try online engagement methods like virtual happy hours, virtual lunches, and games like Research Administration Jeopardy; however, in most instances, these did not work to engage the staff. In some instances, organizations even tried on-campus retreats to get staff and management together, but employees didn't have an interest in coming to campus. Franken's study did not focus on cultural findings such as the virtual events described in this dissertation study.

Finding #3: Organizations differed in their technology infrastructures when the pandemic occurred.

It took some organizations longer than others to catch up to the technology required for remote work. Even within the organizations, each employee experienced some differences with their technologies in their home environments based on internet speed, computer equipment, and digital literacy with software applications. As in Franken's study, various home network speeds impeded productivity in some areas.

Question#2: What are the perceptions of digital transformation for research administrators during their employee journey?

The findings in this section provide insights into how the participants viewed the digital workplace environments, employees' experience, and digital employee experience perceptions due to the pandemic. Most of the research results came from this question, but the three main findings are discussed below. For additional results, please refer to Chapter 4.

The interviewees described a digital workplace environment as one that continues to have all its business processes, tools, and practices to complete the work responsibilities in a digital environment. To meet these responsibilities, organizations should have a 360-degree view and the necessary software and hardware to complete the tasks while communicating remotely. *Finding#1: The challenges of a digital workplace environment focused on communication issues, employee engagement, unstable home environments, and HR concerns.*

As reported in the interviews and surveys, communication posed challenges during the pandemic. Respondents noted that there needed to be more forward-thinking communication from leadership on how organizations would deal with the pandemic and the return-to-work options. In some instances, employees needed to learn what the next steps would be.

The second challenge, employee engagement, revealed concerns and issues during the pandemic. For some employees felt like they were on an island and expected to work independently. For other employees, independent work did not create concern as they were welltrained and experienced. For these, the challenge was adapting to their new work environment. Experienced in the field or not, professional employees needed continued support from their teams and managers.

As the interviews and surveys reported, the third challenge was the need for more consistent at-home work environments. Examples of this challenge included but were not limited to differences in internet speeds, home equipment such as monitors and printers, background obstacles such as kids, dogs, and parents, and office space.

Franken's study illustrated that many experienced problems with at-home working spaces, such as having to share the same space with family members. However, others found that the home-office improved the overall work-life experience. Additionally, some liked the financial benefits such as not having to commute but saving on commuting times resulted in increasing work hours.

Finding #2: Leadership finding ways to maintain a digital culture with remote and hybrid models.

This finding appeared throughout the research. Leaders stated that organizations in 2022 were still trying to find answers regarding how to maintain the culture of the in-person office. Maintaining the culture was challenging, with staff dispersion and flexible schedules. Leaders felt that the culture had been lost and were looking for answers to the question of how to develop a new digital work culture as organizations continue to work remotely and in hybrid models in the coming years. Teams tried virtual happy hours, retreats, and various activities, but most staff wanted to avoid coming into the office or participating in events through digital platforms.

In line with these findings, McKinsey's (2022) "Digital success requires a digital culture" describes ways to overcome the cultural barriers found in this study. The steps include gaining support from the top, removing silos, and breaking through risk aversion. They suggest that all organizations should reinvent their organization for the digital age by creating the right culture.

The data obtained from this dissertation, Franken's (2021), and McKinsey's (2022) studies suggest that organizations and leaders should have a balanced strategy that allows employees to maximize their work hours, no matter their work location, but also allows for their own personal and family time.

Finding#3A: Organizations should invest in Digital Employee Experience tools and practices.

This study's survey results indicated that Digital Employee Experience is essential, but the staff was unsure who led DEX in their organization or if their organization emphasized DEX. As described in Chapter 1, the DEX framework (Gheidar & Zanjani, 2021) includes the following parts: technology, digital culture, leadership, physical environment, business strategy, career, brand, and personal traits. According to this study's survey results, organizations need to improve and invest in these areas to support employees as they move forward. 1E Work Wonders (2022) DEX report showed that 90% of the respondents viewed their organization needing improvement in DEX. The benefits of digital employee experience, as described by VMW (2022), included increased employee satisfaction, the ability to manage a comprehensive digital employee experience, cultivate a remote-first culture, accelerate onboarding, attract and retain talent and engage employees with adoption programs.

Improvements in technology support, in this study, included consistent broadband for employees no matter where they were located, additional IT support for research administration staff, and digital literacy improvements.

Leadership and organizational culture improvements include engagement surveys and employee experience discussion sessions. These improvements allow employees to become ambassadors who deliver the best customer experiences. Respondents also indicated that they were either unsure or didn't know if digital transformation training was in place for employees to learn more about digital transformation techniques.

Finding #3B: A Statistically Significant relationship between DEX Importance and Geographic Location

The survey respondents indicated the perceived importance of DEX in their organization by noting whether DEX was unimportant, somewhat important, moderately important, very important, or extremely important. As noted in Chapter 4, the ANOVA results (Figure 4.12) illustrated a significant relationship between DEX importance and respondent geographic location. Those located in the southern and western organizations indicated that respondents did not feel DEX was important for several reasons. Some organizations were digitally savvy before the pandemic and/or already had organizational contingency plans.

In the western parts of the country, organizations are more tech-savvy and place a larger emphasis on technology, being located near a technology hub in our country. For example, Organizations like Stanford and UCLA are located near Silicon Valley which holds the United States largest Tech Talent labor (Nick Routley, 2022). In Eastern parts of the country, there may have been a weaker emphasis on digital transformation, strong technology processes, and remote work since these organizations could typically continue to work without major disruptions from natural disasters. In the researcher's experiences and through dialogue with colleagues in these areas, Eastern organizations typically also felt behind in technology infrastructure for research administration, and in most cases, these organizations were working in paper documents prior to the pandemic.

Organizations in the southern part of the country in Alabama, Mississippi, and Florida had developed remote work plans and policies focused on natural disasters such as hurricanes and tornadoes because these disruptions would cause the workforce to work remotely if they could. Power outages could also cause disruptions for their staff, so they needed to have plans to work around them. In these areas, the pandemic was just like another disruption, so there wasn't much that needed to change besides a longer period of working remotely. These statements were also validated in the leadership interviews from these areas.

Question#3: What is the future of research administration as the industry moves forward?

The findings in this section will provide the interview and survey analysis on how the participants viewed the future of research administration as organizations move forward in their new work environment models.

Finding#1: The impact of the Pandemic has changed the landscape of research administration.

Before the pandemic, most research organizations were 100% in-office environments. Some things could be improved, such as organizations that implemented a flex work program where employees could work four days in the office and one day at home. Other organizations implemented a remote work policy due to a need to have weather contingency plans for hurricanes, tornadoes, or significant snowstorms. However, many organizations still needed a remote work policy, which created more significant challenges when the pandemic was officially announced in March 2020.

The interviews indicated that changes in the research administration landscape included recruitment methods, work independence, the capacity for resilience, flexibility, adaptation, and forward-thinking leadership. The interviews also showed that leaders had to change some of their strategic priorities by improving processes, developing a remote work culture using digital and remote tools, using forward-thinking methods, embracing the digital work environments, and hiring the best talent to support the faculty.

The surveys showed that research administrators wanted to continue working from home for 4 or 5 days per week at the end of the pandemic. Additionally, three-quarters of the respondents wanted to continue to work in their pandemic work environment model.

These results support Huron Consulting Group's (2021) "Strategic Planning beyond the Pandemic," which proposes a 3-step approach as an act of forward thinking. Similarly, Capgemini' (2021) Research titled "The future of work: From remote to hybrid" developed a list of actions that included authentic leadership, reinventing the culture, creating a robust digital infrastructure, adjusting the employee experience to meet a hybrid model, and developing a new business model to target a hybrid working model.

Finding#2: Employees would like to continue to work remotely; if not, in some form of a hybrid model.

As described in Finding #1, employees responded that they enjoyed the remote work model and hoped their organizations valued their satisfaction with this type of model. While they knew that they might have to come back into the office at some point, there were some practices that they wanted to continue to use. These practices included schedule flexibility, using digital files and no paper documents, replacing phone calls with digital platforms such as Zoom and Teams, and changing in-office dress codes.

The survey and interview results showed that research administrators also wanted to continue to work remotely or in some form of hybrid work model. This study found that a more significant proportion of staff wanted to continue remote work than the Mercer (2020) and McKinsey (2021) studies that showed that 1/5 of work-from-home workers would like to continue to work from home after the pandemic. The McKinsey study also predicted that these

workers would continue to work remotely, and virtual meetings would continue after the pandemic.

Finding#3: Organizations should seek the opportunity to change their recruitment methods by expanding their talent pool with out-of-state hires

Interviewees indicated that organizations had to rethink their recruitment and retention methods. Prospective employees wanted job flexibility in a remote or hybrid work environment. Based on the research data, if organizations continued to force employees to return to work fulltime, employees would be left to find opportunities in remote work environments. Organizations had to be open to out-of-state employees if their infrastructure was in place. However, RA organizational leadership also had to think through tax implications, health insurance implications, and compensation variances between rural and city salary requirements in the new remote work situations.

As part of the employee experience lifecycle stages, HireVue (2020) indicated that recruitment is the initial stage of the employee journey. Recruitment is the first interaction the employee has with the organization as a potential employee.

VMWare's (2022) "Benefits of a Digital Employee Experience Strategy" illustrates that attracting and retaining talent is one benefit of having a Digital Employee Experience Strategy.

Compared with the literature, this study's research indicates that research administration has some work to do with regard to employee retention and recruitment methods. The following sections will address the limitations of this study, implications for further research, and implications for practitioners.

Limitations

This study is limited in scope due to the timing of the data collection and the participant research recruitment methods. The research was conducted during the summer, so the researcher had to take additional steps to recruit participants for the interviews and the surveys due to vacations, employees leaving institutions, and participants needing to complete the survey. Due to the lack of survey responses in August 2022, the researcher had to amend the IRB protocol to include additional research recruitment methods, i.e., direct emails, to reach a more targeted population. Once the IRB amendment was approved, the survey research continued in September 2022. Additionally, a certain number of surveys were less than 50% completed due to the lack of interest in the digital employee experience portion of the survey. Even with these limitations, there are needs for further research on this topic.

Implications for Future Research

This section will address the implications for future research with respect to research method improvements, prospective studies, and future focus. Extending the research to another set of research administration leaders could improve this study, which only interviewed 11 leaders. Additionally, it would be helpful to survey the perspectives of faculty on the interview topics to determine whether their insights match the views of the research administration community.

Further, based on the results of this study, future studies should focus on how to maintain a cohesive culture in the new digital world of research administration. This study could serve as a benchmark for studies at five or 10-year intervals to monitor how models or stakeholders' views of digital employee experiences change over time. The survey in this study did not examine the impacts of employee job changes in the middle of the pandemic, so further research should address this area to see if changing organizations impact how employees perceive their experiences in remote or hybrid models. Additionally, since there was a significant relationship between perceptions of DEX importance and geographic location, further study of Eastern, Northern, and Midwest organizations could determine how the perceived importance of DEX has changed through the next period of transformation. Given the large amount of data collected for this study, future studies using deeper statistical analysis can provide greater insight into participant perceptions of DEX.

One way to improve this research would be to scale down the survey, as it was too long for some to complete and so may have affected the findings. The timing of the study could have been better since it occurred from July 2022- September 2022. A preferable time to do this survey would have been during the Fall or Spring months when there would probably be fewer out-of-office responses.

Implications for Practitioners

The findings could particularly benefit research administration leaders, managers, and decision-makers who can implement or change practices, processes, and procedures. Further, research administrators should benchmark these results against how their organizations deal with remote work, work environment models, HR concerns, and digital employee experience topics.

Research administration has historically been co-located with faculty in-office environments with file cabinets, folders, and paper files. However, there has been a shift from an office environment to a digital one in the past decade. When the pandemic occurred, this shifted work from in-office models to remote and hybrid models. As organizations decide on their future models, leaders need to stay attuned to tools and practices available in more digitalized industries to lead in environments where teams are separated by distance and time. Additionally, to lead, organizations should intentionally develop a digital culture that at least mirrors or ideally enhances the organization's culture. Work environments will continue to be adapted and amended, so as we advance, leaders should base decisions on organizational and employee requirements.

As described in finding#3, HR leaders should strategically consider how to recruit the best talent for research administration. Not only do employees want to work in environments of their own preference, but they also want benefits and compensation that they value. Organizations are faced with making tough decisions on how to retain their current staff and recruit new talent, specifically remote talent. Recruiting remote talent may come with new barriers and challenges that must be addressed, such as labor laws in specific states, compensation issues, and market equity compensation between rural and non-rural areas.

Managers and leaders must continue to adapt, develop, and implement processes and policies around digital experiences and the digital workplace. As discussed in the study's interviews, leaders had to develop remote work policies, whereas some had to adjust their already developed remote work policy. Work processes were adjusted with remote models such as Adobe Sign software, meeting security measures and project management assignments. Our leaders should change their mental models of what's best for their organization and consider how staff feel about their experiences. Studies like this one and organizations' employee engagement and employee experience surveys can go a long way toward making everyone feel included and valued. In fact, in 2023 models are continued to be analyzed and developed to help industry leaders better manage their organizational problems. For example, "The Big Reset Playbook" by The Josh Bersin Company (2023) reviews Business resilience maturity models components across four levels. These levels are 1) Hope for the best, 2) Care for the people, 3) Drive Agility

and Culture, and 4) Transform and reinvent. By following this model, leaders can focus on the health and well-being of their workforce by focusing support on employee health and safety, aggressively listening to the workforce to define return-to-work plans, and creating integrated support for families and the entire worker's life. Next, the model shows leaders can drive agility and change by reinforcing and invigorating focus on purpose and mission, communicating and supporting agile teams, and quickly adopting technology to develop new products and services. Leaders should then reinvent work, jobs, and talent practices by using adaptive transformation techniques. These include leveraging contingent and part-time workers, facilitating and supporting teams to experiment and learn quickly, and simplifying and speeding up performance management (Bersin, 2023).

Conclusion

The pandemic required the world to change how organizations conduct business and in what environment work is performed. Before the pandemic, most RA organizations used an inoffice work environment where management could hold meetings, staff could collaborate in person, and employees had a standard schedule for reporting to the office. The pandemic changed these practices across industries, including research administration.

This study was undertaken during the summer of 2022 when some employees had already transitioned to a different model than the one introduced in 2020 and 2021. The findings shed light on what the research administration industry experienced during the pandemic and how they perceived the future of research administration in the new digital world of working. For example, the study shed light on how research administration viewed these dramatic changes in the workplace, culture, business strategy, technology, leadership, and work experiences. Even though some employees are now working 100% in the office in the current state, most are either working remotely or in a hybrid form, such that offices are now comprised of multiple workforces that lack uniform employee experiences. As illustrated by this study and others, these two models bring challenges and benefits that management and staff first experienced during the pandemic. As employees continue to work remotely in some format, organization leaders must ensure they have the tools and resources to perform their responsibilities effectively. In sum, this paper explored the challenges and benefits associated with the pandemic-induced change in the research administration environment and how digital employee experience can be incorporated into strategic business models for organizations. It also provides insights into how the industry can progress in 2023 and beyond.

References

1E Work Wonders.

https://www.1e.com/resources/report/the-digital-employee-experience-dex-report

- Ackoff, R. L. (1994). Systems thinking and thinking systems. *System Dynamics Review*, *10*(2-3), 175-188.
- Adhikari S.P., Meng S., Wu Y.-J., Mao Y.-P., Ye R.-X., Wang Q.-Z., Sun C., Sylvia S., Rozelle

Belford, C. (2020). Contingency planning amidst a pandemic. KSU Proceedings on
 Cybersecurity Education, *Research and Practice*. 4.
 https://digitalcommons.kennesaw.edu/ccerp/2020/Research/4

Bersin, J. (2023, March 2). *The Big Reset Research*. JOSH BERSIN. https://joshbersin.com/research/big-reset-2020/

- Berkeley, U. C. (n.d.). *Impact of federal shutdown on sponsored projects*. UC Berkeley Sponsored Projects Office. https://spo.berkeley.edu/procedures/federalshutdown.html
- Boyer, P. & Cockriel, I. (1997). Factors influencing grant writing: Perceptions of tenured and Nontenured faculty. *SRA Journal*, *29*(3/4), 61.
- Build Remote. (2022, January 14). *Every company going remote permanently: January 12, 2022 update*. Build a better company. From home. https://buildremote.co/companies/companies-going-remote-permanently/
- Cole, S. S. (2007). Research administration as a living system. *Journal of Research Administration*, *38*(2), 14-27.

Contingency plans in the event of the need for suspension ... (n.d.). https://medschool.duke.edu/about-us/news-and-communications/school-medicine-covid-19-response/lab-research/contingency-plans-event-need-suspension-research-activities.

- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. Thousand Oaks, CA: SAGE
- Daud, S. R., Mukapit, M., Hussin, N., Yahya, W. K., & RAHIM, N. A. (2021). Digital Employee Experience (DEX). *Insight Journal*.

https://myjms.mohe.gov.my/index.php/insightjournal/article/view/14255

- Department of Health and Human Services. (n.d.). *NIH extramural response to natural disasters and other emergencies*. National Institutes of Health. https://grants.nih.gov/policy/natural-disasters.htm
- Dority Baker, M., & Abbo, T. (2020). Working post-pandemic: What campus employees need (Now). (US, Capgemini, 2021)
- Emory University. (n.d.). *Research Administration Research Administration Home*. Overview. http://www.or.emory.edu/tools_pi_researcher/index.html
- Franken E, Bentley T, Shafaei A, Farr-Wharton B, Onnis Leigh-ann, Omari M (2021). Forced flexibility and remote working: opportunities and challenges in the new normal. Journal of Management & Organization 27, 1131–1149.

https://doi.org/10.1017/jmo.2021.40

- Gartner_Inc. (n.d.). *9 future of work trends post covid-19*. Gartner. https://www.gartner.com/smarterwithgartner/9-future-of-work-trends-post-covid-19
- Gheidar, Y., & Zanjani, M. (2021). Designing a conceptual framework for digital employee experience. *Iranian Journal of Management Studies*, *14*(4), 669-680.
 10.22059/IJMS.2020.305871.674131.
- Hansen, S., & Moreland, K. (2004). The Janus face of research administration. *Research Management Review*, 14(1), 43-53.

- Jones, M. (2020). Evaluating digital transformation during a worldwide pandemic in research administration [Manuscript submitted for publication]. School of Continuing and Professional Studies, Thomas Jefferson University. https://library.jefferson.edu/scott.cfm
- Kaplan, N. (1959). The role of the research administrator. *Administrative Science Quarterly.*, 20–42.
- Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., ... &

Vugt, M. V. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, *76*(1), 63. 10.1037/amp0000716

- Kulakowski, E. C. & Chronister, L. U. (2006). *Research administration and management* Jones& Bartlett Publishers.
- Landen, M. (2006). The research administrator as a professional: Training and development. *Research Administration and Management*, 75–82.
- Lund, S., Madgavkar, A., Manyika, J., Smit, S., Ellingrud, K., Meaney, M., & Robinson, O. (2021). The future of work after COVID-19. *McKinsey Global Institute*, 18.
- Lutton, L. (2021, March 30). *Coronavirus case numbers in the United States: March 30, 2021 update*. MedicalEconomics. https://www.medicaleconomics.com/view/coronavirus-casenumbers-in-the-united-states-march-30-2021-update
- McLeod, S. A. (2019, May 20). *What a p-value tells you about statistical significance*. Simply Psychology. www.simplypsychology.org/p-value.html
- Mercer LLC. The Design of the Work Post Covid-19 (2021). https://www.mercer.com/content/dam/mercer/attachments/global/gl-2020-return-to-workarticle-5-18-2020-qrd20113-mercer.pdf

National Science Foundation – Responses to Natural Disasters. NSF. (n.d.).

https://www.nsf.gov/naturaldisasters/.

Nick Routley Article/Editing: , Neufeld, W. B. D., & Graphics & Design Pernia Jamshed. (2022,

September 22). The biggest tech talent hubs in the U.S. and Canada. Visual Capitalist.

https://www.visualcapitalist.com/biggest-tech-talent-hubs-in-us-andcanada/#:~:text=Silicon%20Valley%2C%20in%20California's%20Bay,of%20nearly%203 80%2C000%20tech%20workers.

Online survey software - powering +1B surveys annually. Qualtrics. (2021, September 27).

https://www.qualtrics.com/core-xm/survey-software/.

Organizing your Social Sciences Research Paper: Types of research designs. Research Guides.

(n.d.). https://libguides.usc.edu/writingguide/researchdesigns.

Otter.ai. (2019). https://otter.ai/

Parker, K., Horowitz, J. M., & Minkin, R. (2021, May 25). How coronavirus has changed the way Americans work. Pew Research Center's Social & Demographic Trends Project. https://www.pewresearch.org/social-trends/2020/12/09/how-the-coronavirus-outbreakhas-and-hasnt-changed-the-way-americanswork/#:~:text=Just%20one%2Din%2Dfive%20say,home%20some%20of%20the%20tim e.

Parker, K., & Horowitz, J. M. (2022, March 10). Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected. Pew Research Center. https://www.pewresearch.org/fact-tank/2022/03/09/majority-of-workers-who-quit-a-jobin-2021-cite-low-pay-no-opportunities-for-advancement-feeling-disrespected/ Person, & DiNapoli, J. (2021, September 30). *Exclusive PWC offers U.S. employees full-time remote work*. Reuters. https://www.reuters.com/business/exclusive-pwc-tells-us-employees-they-need-never-return-office-2021-09-30/

QSR International Pty Ltd. (2020). NVivo (released in March 2020),

https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home

- Raat, H., & Zhou, H. (2020). Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: a scoping review. *Infect. Dis. Poverty.* 17(9):29. 10.1186/s40249-020-00646-x
- Ramarajan, L., & Reid, E. (2013). Shattering the myth of separate worlds: Negotiating nonwork identities at work. *Academy of Management Review*, 38(4), 621-644. https://doi.org/10.5465/amr.2011.0314
- Ramsden, A., & Bate, A. (2008). Using word clouds in teaching and learning. University of Bath.
- *Research continuity and planning for covid-19.* Office of the Vice President for Research and Innovation " Research Continuity and Planning for COVID-19. (n.d.).

https://www.hawaii.edu/research/research-continuity-and-planning-for-covid-19/.

Research updates and Directives: Covid-19 pandemic. Research Updates and Directives:

COVID-19 Pandemic | Villanova University. (n.d.).

https://www1.villanova.edu/villanova/provost/research/covid-19.html.

Strategic planning beyond the pandemic. Huron Consulting Group. (n.d.).

https://www.huronconsultinggroup.com/insights/strategic-planning-beyond-pandemic.

Tauginienė, L. (2009). The roles of a research administrator at a university. *Public Policy and Administration*, 1(30), 45-56. The future of work: From remote to hybrid. Capgemini. (2022, August 24).

https://www.capgemini.com/insights/research-library/the-future-of-work/ U.S.

- U.S. Department of Health and Human Services. (n.d.). Not-OD-20-082: NIH Late Application Policy due to public health emergency for United States for 2019 novel coronavirus (COVID-19). National Institutes of Health. https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-082.html
- U.S. Department of Health and Human Services. (n.d.). Not-OD-20-083: General frequently asked questions (faqs) proposal submission and award management related to COVID-19. National Institutes of Health.

https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-083.html

U.S. Department of Health and Human Services. (n.d.). *Not-OD-20-086: Flexibilities available to applicants and recipients of federal financial assistance affected by covid-19*. National Institutes of Health.

https://grants.nih.gov/grants/guide/notice-files/NOT-OD-20-086.html

Appendix 1- IRB Approval



Office of Human Research Institutional Review Board

Jefferson Alumni Hall 1020 Locust Street, Suite M-34 Philadelphia, PA 19107 T 215-503-8966 F 215-503-5738

June 7, 2022

Ana Reyes, MD School of Continuing & Professional Studies

Dear Dr. Reyes:

The Institutional Review Board (IRB) has evaluated the involvement of human subjects in the proposed research study entitled:

"Designing a Digital Employee Experience for Research Administration using a Sequential Mixed-Methods Approach" (Departmental) CFR 46.101 (2-survey, IDs required) Control #22E.365

In accordance with Federal-Wide Assurance #00002109 to the U.S. Department of Health and Human Services, I am pleased to inform you that your study was determined to be **EXEMPT** from IRB review on **04/28/2022** pursuant to Title 45 *Code of Federal Regulations* Part 46.101(b) governing exempted protocol declarations. Board #153 was notified of this exemption status at its 04/28/2022 meeting.

No further review and approval by the Board will be required if the study is to be conducted as proposed. Any proposed revision in this protocol will necessitate submission of an OHR-12 to the IRB for further consideration prior to final implementation.

Please notify the IRB by letter when the study has been completed.

This approval verifies that the IRB operates in accordance with applicable federal, local and institutional regulations that govern IRB operations.

Thank you for your cooperation in the institutional review process.

Sincerely yours,

Watten Braf

Walter Kraft, MD Director Office of Human Research WK/pds



HOME OF SIDNEY KIMMEL MEDICAL COLLEGE

Appendix 2 – IRB Amendment Approval



Office of Human Research Institutional Review Board Jefferson Aumri Hall. 1020 Locust Street. Suite M-34 Philadelphia, PA 19107 T 215-503-8956

F 215-503-5738

August 24, 2022

Anna Marie Reyes, MD Jefferson School of Health Professions

Dear Dr. Reyes:

The Institutional Review Board (IRB) has reviewed the proposed changes with regard to the involvement of humans as research subjects in your study entitled:

"Designing a Digital Employee Experience for Research Administration using a sequential mixed-methods approach" (Departmental) Control #22E.356

AMENDMENT: Survey Recruitment methods.

In accordance with Federal-Wide Assurance #00002109 to the U.S. Department of Health and Human Services, I am pleased to inform you that this <u>amendment</u> was administratively <u>approved</u> on <u>8/24/22</u>. Board #153 will be notified on 9/01/22 meeting.

(X) EXPEDITED/AMENDMENT

As per 45 CFR 46.109(f)(1), this minimal risk research study requires **no further review and approval** by the IRB as long as the study is conducted as proposed. Any proposed revision to this study will necessitate submission of an OHR-12 to the IRB for further consideration prior to implementation.

Please notify the IRB in writing when the study has been completed.

This approval verifies that the IRB operates in accordance with applicable federal, local and institutional regulations that govern IRB operations.

Sincerely yours,

Walter Braker

Walter Kraft, MD Director Office of Human Research

WK/lb



HOME OF SIDNEY KIMMEL MEDICAL COLLEGE

Appendix 3 – Interview Recruitment Letter

OHR-8F 7/2006

Subject Recruitment Letter

Dear Subject:

Hello, My name is Michael Jones. I'm a doctoral student in Thomas Jefferson University's Doctoral Strategic Leadership Program under the School of Continuing and Professional Studies.

My dissertation study consists of interviews and surveys about digital employee experiences in research administration. This study will take about 30 minutes of your time to complete. Your participation in this study will advance our understanding of digital employee experiences in research administration today and tomorrow.

Your participation is entirely voluntary. You can end your participation, if you wish, at any time. If any question makes you feel uncomfortable, you don't have to answer it. I want to assure you that any information you provide will remain strictly confidential. Your name will not be identified or associated with any specific responses, and it will not appear in any published materials which result from this research.

If you decide to participate in this study, please reply to <u>Michael_Jones@Jefferson_edu</u> and you will receive an Adobe Digital Signature Consent form to sign. I will also appreciate it if you would let me know, if you decide not to participate.

Thank you for volunteering to participate in this study.

Sincerely,

Michael Jones Phone: 267-431-8985 Email: Michael.Jones@Jefferson.edu

Approved until END OF STUDY

Appendix 4 – Interview Questions

Digital Employee Experience in Research Administration Interview Guide

These interview questions address aspects of the digital workplace and digital employee experiences for research administration. A Pilot Study of my institution, conducted in 2021, showed that research administrators had concerns regarding the remote work transition and the necessary digital tools to conduct work away from the office. The current literature also states that organizations are beginning to learn about Digital Workplace Leadership and how to monitor an employee's experience through a digital mindset. The purpose of this interview is to collect data on how leadership views the digital workplace environment and Digital Employee Experience in the Research Administration industry.

A Zoom interview will be scheduled at your convenience. Prior to the interview, you (the participant) will be required to provide written consent stating that you will voluntarily participate in the interview. All interviews will be recorded through the Zoom recording feature to ensure the correct transcription of your interview.

After completion of the interview, the researcher will transcribe the interview from the recording, contact you and ask you to verify that the transcription is correct. When the transcription is verified, you will be asked to provide consent for the researcher to use the information for the study.

The interview will consist of four sections and all questions will be asked. The questions are the following:

1) Work Experience

- i) Please describe your current role.
- ii) Please describe the structure of research administration at your current institution.
- iii) Please describe your organization's remote work model (pre and post Pandemic)
- iv) What are your company's most significant remote work challenges regarding the pandemic?

2) Digital Environment

- i) How do you define a digital workplace?
- ii) How does your organization address employee experiences in a digital context?
- iii) What challenges have you found with remote and hybrid models during the pandemic?
- iv) What benefits have you found with a digital workplace environment?
- v) What have you learned about the importance of leadership in a digital workplace?

3) Digital Employee Experiences

i) What is a Digital Employee Experience in Research Administration?

- ii) Do you believe there has been a change in Digital Employee Experience during the past couple of years?
- iii) How important is digital transformation for an employee during their employee experience journey?
- iv) Should an organization invest in Digital Employee Experience? Why or why not?
- v) What tools and practices are required to improve the digital employee experience?

4) Future of Research Administration

- i) How did the pandemic affect the future of research administration?
- ii) How do you think your teams have adjusted to working remotely?
- iii) Do you think your teams want to go back to pre-pandemic ways of working?
- iv) How do you ensure culture is maintained when working in a hybrid or remote model?
- v) What are the strategic priorities of the organization? Have these changed due to the pandemic?

Digital Employee Experience: Research Administration

Start of Block: Survey Introduction

Hello:

You are invited to participate in a Doctoral Dissertation survey titled "Digital Employee Experience for Research Administration". This survey is being distributed to research administration communities to explore perceptions of their experiences during and beyond the pandemic.

Your participation in this survey is completely voluntary. There are no foreseeable risks to participating in this project. However, if you feel uncomfortable answering any of the questions, you can withdraw at any point. It is very important, as the industry redesigns workplaces after this pandemic to learn about your organization and your digital experiences.

Your responses will be strictly confidential and data from this research will be reported in aggregate only. Your information will be coded and remain confidential. If you have any questions about this survey or procedures, please contact Michael Jones at Michael.Jones@Jefferson.edu

Thank you very much for your support.

End of Block: Survey Introduction

Start of Block: Consent Form

By participating in this study, you are agreeing to provide the most honest answer you can. Any responses you provide will be anonymized, so that neither the research team nor additional respondents will know which is yours.

You may close the survey at any time to leave the study permanently or to take a break from the survey.

By selecting "I Consent", you are consenting to the conditions describe above.

O I consent (1)

O I do not consent (2)

End of Block: Consent Form

Start of Block: Demographics

Gender

O Female (1)

O Male (2)

Non-binary / third gender (3)

O Prefer not to say (4)

Age

18 - 24 (1)
25 - 34 (2)
35 - 44 (3)
45 - 54 (4)
55 - 64 (5)

O 65 or older (6)

Ethnicity

O American Indian or Alaska Native (1)

O Asian (2)

O Black or African American (3)

O Hispanic/Latino (4)

O Native Hawaiian or Pacific Islander (5)

O White/Non-Hispanic (6)

Other (7) _____

Organization Type:

Organization Location: (https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf)

- New England (ME, NH, VT, MA, RI, CT) (1)
- Middle Atlantic (PA, NJ, NY) (2)
- O South Atlantic (FL, GA, SC, NC, VA, WV, DE, MD, DC) (3)
- East North Central (OH,IN, IL, WI, MI) (4)
- West North Central (ND, SD, NE, KS, MO, IA, MN) (5)
- East South Central (MS, AL, TN, KY) (6)
- West South Central (TX, OK, AR, LA) (7)
- O Mountain (AZ, NM, CO, UT, NV, WY, MT, ID) (8)
- O Pacific (CA, OR, WA, AK, HI) (9)
- O International (10)

Organization Model:

Centralized = Research Administration located outside of department in a central office

Decentralized = Research Administration embedded in Faculty's Department Portfolio Approach = Research Administration embedded in Lab

Staff (Non-Management) (4)

Centra	lized Approach (1)
	tralized Approach (2)
O Portfol	io Approach (3)
Position Type	:
	Leadership (Senior Leadership and Director Level) (2)
	Management (Manager, Associate Director, Assistant Director, etc) (3)
	Faculty (1)

Role: (Choose all that apply)

Compliance/Risk (1)
Department Administrator (2)
Grant Accounting (3)
Pre-award (4)
Post-award (5)
Other (Please Specify) (6)

Experience:

O-5 years (1)

O 6-10 years (2)

O 11-15 years (3)

O 16-20 years (4)

O Greater than 21 years (5)

End of Block: Demographics

Start of Block: Pandemic Experiences

	Yes c	Comments	
	Yes (1)	If Yes, Please Provide your policy link or brief summary (1)	
Did your organization have a remote work policy prior to the Pandemic? (1)	0	0	

Please answer the following questions about your organization's policies:

During March 2020, how would you rate your organization's readiness to transition to a fully remote environment?

(1 - Not Ready, 2 - Partly Ready, 3- Completely ready)	1	2	3
Rating ()			-

What did you like the most about working remotely during the past 24 months?

What did you dislike the most working remotely during the past 24 months?

End of Block: Pandemic Experiences

Start of Block: Digital Employee Experience

Currently, what are the key (officially designated) strategic drivers for your organization?

	Change in Working Environments (1)
	Customer Services to the Faculty (2)
	Digital Transformation (3)
	Employee Engagement (4)
	Employee Productivity (5)
	Employee Retention (6)

How important is Digital Employee Experience (DEX) to the achievement of your organization's strategic goals? 1 star = Not Important 2 star = Somewhat Important 3 star = Moderately Important 4 star = Very Important 5 star = Extremely Important Level of Importance (1)

Who is leading DEX within your organization? (Select all that apply)

Digital Team (1)
Human Resources (2)
Institution does not have an emphasis on DEX (3)
Research Administration Leadership (4)
Senior Institutional Leadership (5)
Transformation Department (6)
Unsure who is leading DEX at my organization (7)

Digital Communications (1)
Digital Employee Experience (DEX) (2)
Digital HR (3)
Digital Workplace (4)
Employee Engagement (5)
Employee Experience (EX) (6)
Working environments (7)

Does your organization have a strategy for: (Select all that apply)

End of Block: Digital Employee Experience

Start of Block: Digital Employee Experience Framework

Digital experience framework: Technology

This section asks questions about your organization's Technology (For the purpose of this study, Technology is defined as "the tools, platforms, applications, and devices that are used to solve problems and improves organizational processes")

Has your organization supported you with the appropriate technology to work remotely?

▼ Always (39) ... Never (43)

Display This Question: If Has your organization supported you with the appropriate technology to work remotely? = Always Or Has your organization supported you with the appropriate technology to work remotely? = Most of the time

Please add a comment on the technology that your organization has provided:

In your opinion, How effectively has your organization adapted to research administration requirements brought about by the pandemic related moves to new software and cloud platforms? 1 - Not effective

- 2- Somewhat effective
- 3- Effective
- 4- Very effective
- 5- Extremely Effective

 Software (Examples: Zoom, Microsoft Teams, Research Administration Software, Etc.) ()

 Cloud Platforms (Examples: Box, One Drive, Google Drive, Etc.) ()

1

2

3

5

4

Display This Question:

If In your opinion, How effectively has your organization adapted to research administration require... [Software (Examples: Zoom, Microsoft Teams, Research Administration Software, Etc.)] = 5

And In your opinion, How effectively has your organization adapted to research administration require... [Cloud Platforms (Examples: Box, One Drive, Google Drive, Etc.)] = 5 What software and cloud platforms do you use frequently?

Digital employee experience: Digital Culture This section asks question about your organization's Digital Culture (Digital Culture is a concept that describes how technology and the internet are shaping the way that we interact as humans) How important is digital literacy in your organization? ▼ Not at all important (1) ... Extremely important (5)

What techniques has your organization used in the past year to understand employees? (Select all that apply)

Employee experience discussion sessions (4)
Employee focus groups (3)
Employee research project reviews (2)
Engagement surveys (1)
Other (5)

Display This Question:

If What techniques has your organization used in the past year to understand employees? (Select all... = Other

Please share some of your techniques to enhance digital employee experience:

Digital employee experience: Leadership This section asks questions about your organization's leadership

Display This Question: If Position Type: != Staff (Non-Management) Or Position Type: != Faculty

Digital Transformation Training

	Yes (1)	No (2)	Unsure (3)
Does your organization provide effective transformation training for management? (1)	\bigcirc	0	0
Does your organization provide digital tools training for management? (2)	\bigcirc	\bigcirc	\bigcirc

Is providing a great digital employee experience part of your department's values?

▼ Yes (1) ... Unsure (3)

	Organization doesn't provide (10)	Not effective at all (4)	Slightly effective (5)	Moderately effective (6)	Very effective (7)	Extremely effective (8)
Additional modules with onboarding processes (12)	0	0	0	0	0	0
Change Management training for all employees (13)	0	0	\bigcirc	0	\bigcirc	\bigcirc
Improved technology platforms (14)	0	\bigcirc	0	0	0	0
Regular training programs for employees (15)	0	0	\bigcirc	0	0	0
Self-Service online training materials (16)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other (17)	0	0	\bigcirc	0	\bigcirc	\bigcirc

How effective are digital literacy capabilities being developed in your organization?

Digital employee experience: Physical environment This section asks questions about your physical environment

What is your working environment?

	2019 (1)	2020 (2)	2021 (3)	2022 (7)
Entirely working at home (3)				
Entirely working in the office (1)				
Hybrid workplace (with a planned mix) (2)				
Not Applicable (4)				

Display This Question: If What is your working environment? = Hybrid workplace (with a planned mix) [2019] Or What is your working environment? = Hybrid workplace (with a planned mix) [2020] Or What is your working environment? = Hybrid workplace (with a planned mix) [2021]

If Hybrid, please describe the actual mix:

Do research administrators currently have the digital tools to be effective in a remote workspace?

	Yes o	Comments	
	Yes (1)	No (2)	Optional Comments (1)
Digital Tools (Research Administration software, Meeting Collaboration tools) (1)	0	0	
Devices (Computer, Printers, Scanners, etc) (2)	0	0	

Digital employee experience: Business Strategy This section asks questions about your organization's business strategy

Research Administration Process and Policies in a Digital Environment

Diį	Comments		
Yes (1)	No (2)	Not Sure (3)	Optional Comments (1)

Were your organizational policies updated for a digital work environment? (1)	0	0	0			
Were your organizational processes updated for a digital work environment? (2)	0	0	0			
Digital employee experience: Career This section asks questions about career perspectives						
In comparison to yo Ves (1)				pundernie.		
O No (2)						
Since working in the pandemic, has your priorities changed?						
○ Yes (1)						
🔾 No (2)						

Please rank the level importance of the following personal goals:
(1 = least important, 5 = most important)

	Pre- Pandemic (Before March 2020) (1)	Post Pandemic (Beyond March 2020) (2)
Family (1)		
Health (2)		
Money (3)		
Education (4)		
Lifestyle (5)		

	Extremely dissatisfied (1)	Somewhat dissatisfied (2)	Neither satisfied nor dissatisfied (3)	Somewhat satisfied (4)	Extremely satisfied (5)
Alignment with personal values and needs (1)	0	\bigcirc	0	0	0
Attention to wellness and health (2)	0	0	\bigcirc	\bigcirc	\bigcirc
Career Trajectory (3)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Flexibility (4)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Organizational Support (5)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Professional Development (6)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Work-Life Balance (7)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Please rate the following aspects of your current work situation:

Digital employee experience: Brand This section asks questions about your organization's brand Do you know your organizational brand?

Yes (1)
 No (2)
 Unsure (3)

Display This Question:

If Do you know your organizational brand? = Yes

What is your organizational brand?

Display This Question:

If Do you know your organizational brand? = Yes

What is the strength of your organizational brand?

Governance (1)
Innovation (2)
Leadership (3)
Performance (4)
Services (5)
Workplace (6)
None of the above (7)

Display This Question:

If Which of these brand factors are you aware of? != None of the above

Which of these brand factors are you aware of?

	Extremely dissatisfied (1)	Somewhat dissatisfied (2)	Neither satisfied nor dissatisfied (3)	Somewhat satisfied (4)	Extremely satisfied (5)
Governance (1)	0	0	\bigcirc	\bigcirc	0
Innovation (2)	0	\bigcirc	\bigcirc	\bigcirc	0
Leadership (3)	\bigcirc	0	\bigcirc	\bigcirc	0
Performance (4)	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Services (5)	0	0	\bigcirc	\bigcirc	\bigcirc
Workplace (6)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Display This Question	on: v your organization	al brand? = Yes			

In your opinion, identify your interaction with your organizational brand:

During the pandemic, identify how well your organization brand supported your remote work?

Digital employee experience: Personal This section asks questions about your personal insights

Have your experiences changed because of the pandemic?

	Yes (1)	No (2)	
Personal (1)	0	\bigcirc	
Profressional (2)	0	\bigcirc	

Please rate and comment on your personal and professional experiences with your organization

Pre-Pandemic		Comments	Post-Pandemic	
Yes (1)	No (2)	Optional Comments (1)	Yes (1)	No (2)

Does your organization provide remote training? (1)	0	0	0	0
Does your organization provide professional development education? (2)	0	0	0	0
Does your work fit well with your personal and professional goals? (3)	0	0	0	0

End of Block: Digital Employee Experience Framework

Start of Block: Future of Research Administration

If your organizations provides a hybrid option, how many days would you like to work from home per week?

	0	1	2	3	4	5
At-Home Days ()			_	—		

Are there any remote practices that you would like to continue if you transition back to an office environment?

Disp	lay This Question:	
	If What is your working environment? = Hybrid workplace (with a planned mix) [2022]	
	Or What is your working environment? = Entirely working at home [2022]	

As we move foreword, Do you foresee the need to continue to maintain the models your organization has implemented?

O Yes (1)

O No (2)

O Maybe (3)

Please provide any additional comments that you feel are important for this survey.

End of Block: Future of Research Administration