Thrive in an Age of Uncertainty?: Using the ADAPT Framework to Build Resilient Academic Libraries

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Abstract

Contemporary academic libraries face significant and well-documented challenges brought about by a multitude of factors, including the rapidly evolving information landscape, the recent COVID-19 global health crisis, the complexity of the current sociopolitical climate, ongoing economic turmoil, and the need to address heightened user expectations and remain relevant in the digital age. As complex adaptive organizations, how can academic libraries respond more resiliently to all the uncertainty and change associated with our time?

One way for academic libraries to do so is to embrace, and act upon, the need for a nimbler organizational culture predicated on the ability to quickly respond to change, adapt to internal and external pressures, and continuously iterate on major organizational processes and services. This article argues that the ADAPT framework which is based on the findings of a recent survey of academic library leadership can help conceptualize these changes. This article defines the key components of the ADAPT operational model and explains how it can be used as the foundation for library practitioners to combine the principles of agile management, data-driven decision making, adaptive and participatory leadership, and strengthening partnerships with key stakeholders to enable libraries to transform their service models and ways of working.

INTRODUCTION

Academic libraries today face a multitude of immense challenges and disruptions that stem from the need to adapt to the rapidly changing landscape of technology, scholarly communication models, and financial constraints. In these conditions, maintaining high-quality services and resources becomes increasingly difficult amidst budget cuts that are often exacerbated by the pressure to invest in new initiatives to stay relevant (Cargill, 2008; Atkinson, 2021). Additionally, academic libraries increasingly must cope with accelerating change driven by disruptive technologies that reshape traditional publishing while the serials crisis continues to drive up subscription costs (Ball, 2016; Saunders, 2015). This environment of uncertainty is detrimental to academic libraries' ability to fulfill their mission.

In response to these challenges, academic libraries have traditionally taken an inward-looking approach that, in essence, amounts to an attempt to find solutions from within the organization. The exact measures academic libraries may elect to take vary but typically include re-evaluating workflows and processes, initiatives to enhance staff skills through training programs, and efforts to develop partnerships with publishers and vendors to negotiate better pricing models (Maricevic, 2016). However, this reactive approach has significant limitations that can hardly be overlooked. First, there exists potential for conceptual disagreements within the organization itself about what changes are truly needed and how to effectively implement transformative initiatives across the organization (Stoffle et al., 1996). Moreover, transforming operations and service models is extremely resource-intensive, requiring major investments of time, budget, and staff effort that many libraries struggle to accommodate (Ball, 2016; Saunders, 2015). Libraries also face the constant challenge of balancing new initiatives like supporting open access publishing while continuing to deliver core services and meet basic user needs in areas like reference, instruction, and collections (Webster, 1983).

LIBRARIES AS COMPLEX ADAPTIVE SYSTEMS

The impact of uncertainty necessitates a mindset shift in academic libraries—from merely reacting to disruptions to proactively building resilience. Resilience has been formalized in the literature as a function of adaptability and vulnerability, emphasizing the importance of both components in achieving organizational resilience (Matzenberger, 2013). Resilience is crucial for libraries to rebound, remain flexible, thrive, and continually adjust amidst the constant flux of change and transformation (Raetze et al., 2022).

To navigate the uncertainty inherent in the complexity of the current information landscape, two complementary theoretical frameworks offer valuable

insights: Complex Adaptive Systems (CAS) Theory and Resilience Theory. CAS Theory views organizations like libraries as resilient, self-organizing systems that adapt and learn through local interactions co-evolving with their dynamic environment (Holden, 2005; Freeburg, 2020). Such organizations remain flexible and responsive even in unpredictable times. Key properties of CAS that come to play include self-organization, emergence, non-linearity, and co-evolution with the environment, which libraries can leverage (Akpinar & Özer-Çaylan, 2022).

Resilience Theory, on the other hand, focuses on enhancing the understanding of disaster resilience dynamics. It aims to identify and strengthen the positive adaptive capabilities of people and organizations to respond effectively under adverse circumstances like disasters (Coetzee et al., 2016; Fullerton et al., 2021). Resilience involves abilities such as response, monitoring, learning, and anticipation, improving an organization's ability to perform or function as required not only in the face of adversity but, more importantly, during normal conditions as well (Nemeth & Hollnagel, 2022; Woods, 2015).

The CAS and Resilience Theory provide some generalizable guidance for organizational adaptability and sustainability. However, implementing agile management practices, such as continuous improvement, customer-centered approach, empowerment of teams, and a shift toward continuous learning and adaptation (Denning, 2016), has come with a certain amount of challenges, as evidenced by the findings of a recent study involving, among other study participants, academic library leaders in the region (Trembach, 2024). Among the issues identified by the study participants were resistance to change and a certain level of discomfort with workflows that traditionally have been associated with agile management (Denning, 2016). The survey participants also identified a lack of adequate staff time and insufficient resources for intensive work periods often required in agile organizations that feature cross functional team collaboration and interaction. On the other hand, several significant benefits of adopting more agile and adaptive library practices were also recognized, including user-centric planning, more collaborative work, and skill development for teams and individual employees (Trembach, 2024).

THE ADAPT MODEL

The work to develop personal and organizational resilience capacities in staff that lead to positive outcomes remains an area of top priority for many academic library leaders today. Arguably, the success of this work is predicated on an organization-wide shift in the mindset of those in charge, because change management and managing change is very different from traditional management approaches of the past. Thus, to enable resilience and agile management practices, everyone within

an organization must be willing to engage in difficult strategic conversations and embrace some unforeseen challenges and also opportunities that come with those.

Given that today's academic landscape is evolving faster than one can comprehend, it appears safe to make a prediction that adapting to change and becoming more agile is going to be on the forefront of the conversation involving academic libraries, and libraries of other types, for that matter, for the foreseeable future. This outlook has prompted the development of the ADAPT model of contemporary library operations. This model integrates five critical components addressing specific challenges and opportunities in modern library management: Agility, Data-Driven Decision Making (DDDM), Adaptive Leadership, Partnerships, and Transformation.

The first component of the framework is *agility*. In the context of library management, agility refers to the library's ability to respond swiftly and effectively to changes in its operational environment. As has been noted above, it is imperative that contemporary academic libraries be flexible enough and adaptive enough to reimagine the vital processes and services on the fly, in response to a crisis or any other type of change in their operating conditions.

Naturally, enhancing organizational agility is a long-term top-to-bottom commitment that, more often than not, entails implementing measures, such as flexible workflows and decision-making through methodologies like scrum, a project development strategy in which multiple teams work together as a unit on a product or idea from inception to a prototype before full-scale implementation is considered (McBurney et al., 2020). A byproduct of this "test and learn" approach is a culture of experimentation and continuous improvement born out of these agile organizational values and principles. Adopting agile practices enables libraries to manage crises more effectively and seize new opportunities across all areas of operations, from leveraging emerging technologies and developing digital resources to responding to user preferences quickly while designing new services.

Examples of specific strategies and tools that libraries can use to integrate agile practices into their workflows include short planning cycles to allow for regular reassessment of goals and priorities, conducting frequent review sessions where cross-functional teams reflect on successes and areas for improvement, conducting performance reviews, and using tools like Kanban boards to provide transparency and keep everyone aligned on tasks and progress (Jaggars & Jones, 2018). Additionally, Niemi-Grundström (2014) illustrates how academic libraries can successfully adhere to agile methods using the case of Tampere University of Technology Library where notable service improvements were achieved through quality assurance, user-centered approach to service design, efficient decision-making, and team empowerment.

The next component of the ADAPT Model is *data-driven decision making* (DDDM), a practice that involves using quantitative and qualitative data to guide

strategic decisions. This approach ensures that decisions are based on empirical evidence rather than intuition or tradition. The crucial role of DDDM in complex adaptive organizations can hardly be overemphasized. When an organization, on the whole, is ready to engage in difficult strategic conversations, information and data form the basis upon which many of these critical strategic decisions are made. Libraries use a variety of data sources and metrics to inform their work, such as usage statistics that can help library staff glean valuable insights into user needs and preferences.

Moreover, in the era of DDDM, academic libraries nationwide recognize the importance of using predictive analytics for assessing trends and anticipating challenges, as evidenced by the 2021 survey of 196 academic librarians conducted by *Library Journal* in conjunction with EBSCO (Library Journal, 2021). Ninety-one percent of the respondents indicated they used predictive analytics to inform their understanding of how students, faculty, and researchers engage with their library and ultimately demonstrate the library's value to campus administration (Library Journal, 2021). Additionally, prioritizing data in decision-making can enhance library capacity for cross-functional problem-solving because this data can be shared across teams through dashboards, whether physical or virtual, and other collaborative tools.

Next, *adaptive leadership* is an indispensable component of resilience-building efforts. This involves being strategic about enhancing one's emotional intelligence and a willingness to delegate responsibility through greater reliance on teams. Library leaders recognize teamwork as an indispensable component of modern library functioning. In a recent library leadership study, 84% of the respondents ranked teamwork as 'very important' among the skills desired in new hires (Trembach, 2024). Consequently, adaptive library leaders should commit to promoting a shared vision by involving staff in planning processes. Doing so helps cultivate a sense of ownership in the organization's decisions. Overall, adaptive leaders are guided by the awareness that people are the most valuable asset of any organization. Therefore, adaptive leaders commit themselves to creating a supportive environment and are willing to celebrate success and reward initiative.

Building a resilient library cannot be done in isolation, of course. This is why academic libraries increasingly rely on *partnerships and collaboration* with both internal and external stakeholders, the next component of the ADAPT Model. While many libraries do engage in partnerships, the model encourages a broader scope of collaboration and intentional leveraging of diverse expertise to move an organization forward. Engaging various constituencies, like faculty and students, through user experience research gives those stakeholders a sense of ownership and co-creating solutions to problems together. Examples of internal collaborations include subject librarians partnering with their library colleagues and departmental

faculty to develop tailored research support services and access a broader range of expertise. (Walsh & Rana, 2020).

External collaborations often extend beyond a single campus. Increasingly, they include other libraries, consortia, and networks that are formed to enable sharing the libraries' best and most successful practices. The scope of consortial practices has expanded over time from licensing electronic resources and administering integrated library systems (Guzzy, 2010) to coordinating public service activities and combining subject expertise (Rosa & Storey, 2016).

The final component of the ADAPT Model, *transformation*, refers to how libraries perceive experimenting with organizational structures, library space, new technologies, and service models. Recent examples of such transformations are the development of virtual research consultations and course-embedded librarian support. All these innovations ultimately serve to expand the library's reach and impact. However, concerted efforts to collaborate and become nimbler in their managerial approaches can only come to fruition when a given library is willing and ready to continuously transform and invest in research and innovation, whether this research entails looking into user experience, emerging technologies, or the role of generative AI in learning and education.

CONCLUSION

Confronted with unprecedented challenges that necessitate a fundamental shift in their traditional operational approaches, academic libraries today increasingly employ the principles of Complex Adaptive Systems (CAS) theory and Resilience Theory in an attempt to enhance their adaptability and sustainability in the face of uncertainty. These efforts involve implementing various measures, such as structured change management practices, fostering adaptive leadership, and embracing new service models that align with evolving user needs. Empirical evidence discussed in this article supports the overall effectiveness of these approaches, despite significant obstacles, such as organization-wide resistance to change and resource constraints. The ADAPT Model provides a comprehensive framework for academic libraries to navigate these challenges by emphasizing agility, data-driven decision-making, adaptive leadership, partnerships, and continuous transformation and serves as a vehicle for academic libraries to build resilience, meet evolving user needs, and position themselves as vital contributors to the academic mission of their institutions.

REFERENCES

Akpinar, H., & Özer-Çaylan, D. (2022). Achieving organizational resilience through complex adaptive systems approach: a conceptual framework.

Management Research: Journal of the Iberoamerican Academy of Management, *20*(4), 289-309.

Atkinson, J. (2021). The times they are a-changin': But how fundamentally and how rapidly? Academic library services post-pandemic. In D. Baker, & L. Ellis (Eds.), *Libraries, Digital Information, and COVID* (pp. 303-315). Chandos Publishing.

Ball, J. (2016). Where are we now? Delivering content in academic libraries. *Insights*, *29*(2), 167-171

Cargill, J. (2008). Personnel and technology: An opportunity for innovation. *Journal of Library Administration, 13*(1-2), 31-46.

Coetzee, C., Van Niekerk, D. and Raju, E. (2016). Disaster resilience and complex adaptive systems theory: Finding common grounds for risk reduction. *Disaster Prevention and Management, (25)*2, 196-211.

Denning, S. (2016). How to make the whole organization "Agile". *Strategy & leadership*, *44*(4), 10-17.

Freeburg, D. (2020). Leadership and innovation within a complex adaptive system: Public libraries. *Journal of Librarianship and Information Science*, *52*(2), 451-463.

Fullerton, D. J., Zhang, L. M., & Kleitman, S. (2021). An integrative process model of resilience in an academic context: Resilience resources, coping strategies, and positive adaptation. *Plos One*, *16*(2), e0246000.

Guzzy, J. E. (2010). US academic library consortia: A review. *Community & Junior College Libraries*, *16*(3), 162-184.

Holden, L.M. (2005). Complex adaptive systems: Concept analysis. *Journal of Advanced Nursing*, *52*(6), 651-657.

Jaggars, D., & Jones, D. (2018). An agile planning and operations framework. *Performance Measurement and Metrics*, *19*(2), 121-126.

Library Journal (2021). *Analytics play a key role in campus library operations* [White paper]. https://s3.amazonaws.com/ImageCloud/research/whitepapers/2022/LJ_EBSCO_whitepaper_v8%20FINAL.pdf

Maricevic, M. (2016). National libraries and academic books of the future. In R.E. Lyons et al. (Eds.), *The academic book of the future* (pp. 57-65). UCL Press.

Matzenberger, J. (2013), A novel approach to exploring the concept of resilience and principal drivers in a learning environment. *Multicultural Education & Technology Journal, 7*(2/3), 192-206.

McBurney, J., Hunt, S. L., Gyendina, M., Brown, S. J., Wiggins, B., & Nackerud, S. (2020). Library research sprints as a tool to engage faculty and promote collaboration. *Portal: Libraries and the Academy*, *20*(2), 305-338.

Nemeth, C.P., & Hollnagel, E. (Eds.). (2022). *Advancing Resilient Performance*. Springer International Publishing.

Niemi-Grundström, M. (2014). Developing, evaluating, and managing library with agile methods. *Library Management*, *35*(6/7), 481-485.

Raetze, S., Duchek, S., Maynard, M. T., & Wohlgemuth, M. (2022). Resilience in organization-related research: An integrative conceptual review across disciplines and levels of analysis. *Journal of Applied Psychology, 107*(6), 867–897.

Rosa, K., & Storey, T. (2016). American libraries in 2016: Creating their future by connecting, collaborating and building community. *IFLA Journal*, *42*(2), 85-101.

Saunders, L. (2015). Academic libraries' strategic plans: Top trends and under-recognized areas. *The Journal of Academic Librarianship*, *41*(3), 285-291.

Stoffle, C.J., Renaud, R., & Veldof, J.R. (1996). Choosing our futures. *College & Research Libraries*, *57*(3), 213-225.

Trembach, S. (2024). Employability of library and information science (LIS) school graduates: Library leadership perspective. *Journal of Library Administration*, *64*(2), 148-167.

Walsh, B., & Rana, H. (2020). Continuity of academic library services during the pandemic: The University of Toronto libraries' response. *Journal of Scholarly Publishing*, *51*(4), 237-245.

Webster, D. E. (1983). Issues in the financial management of research libraries. *Journal of Library Administration*, *3*(3-4), 13-22.

Woods, D.D. (2015). Four concepts for resilience and the implications for the future of resilience engineering. *Reliability Engineering & System Safety, 141*(9), 5-9.