Best practices for managing innovations in public libraries in the United States

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Best practices for managing innovations in public libraries in the United States

By: Devendra Potnis, Joseph Winberry, and Bonnie Finn

Abstract

Public libraries serve as anchors for thousands of communities across the country. Innovations are critical for the survival and relevance of public libraries in the country. Few studies, if any, identify the best practices for managing innovations in public libraries based on the experiential guidance shared by administrators of public libraries recognized for their innovations. This empirical study fills in the gap by identifying the challenges and solutions for managing innovations in public libraries in the United States. A thematic content analysis of qualitative responses collected through an online, anonymous survey of 219 administrators of 211 innovations in 106 urban public libraries awarded for their innovations reveals 30 unique challenges to planning and implementing innovations and an equal number of solutions, which were then organized into (a) strategy, (b) finance, (c) organizational behavior, (d) human resource management, and (e) communication clusters. Administrators and staff in public libraries need to develop competencies in these five areas to better manage innovations in the future. Other public libraries can learn, apply, and benefit from these best practices. Best practices for managing innovations, if applied, can enhance the perceived and real value of public libraries to their local communities.

Keywords: Public libraries, Innovations, Library administrators, United States, Challenges, Solutions

Reference:
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Introduction

Public libraries serve as anchors for thousands of communities across the United States (Jaeger, Gorham, Bertot, and Sarin, 2014). For instance, they play a key role in supporting democracy, harnessing social cohesion, educating citizens on a range of contemporary topics (e.g., nurturing curiosity and learning among children, and lifelong learning for adults) (Authors, Under review), and enhancing information literacy to help users retrieve, evaluates, and use information independently (Hafner and Sterling-Folker, 1993; Klinenberg, 2018; Cooke, 2018). Public libraries provide a “social infrastructure” that shapes the way people interact with each other (Audunus et al., 2019; Klinenberg, 2018; Scott, 2011), thereby serving as public sphere institutions underpinning democracies and rational discourse (Audunus et al., 2019; Widdersheim and Koizumi, 2016, 2017).

The existence and contribution of public libraries to society is needed more than ever in the increasingly polarized social and political landscape of the United States (US).

Public libraries are currently facing numerous challenges related to the political climate and technological transformation among other factors. For instance, the politicians who fund libraries often have a narrow view of what public libraries should be and do (Gazo, 2011). As a result, since 2010, the United Kingdom (UK) has closed almost 800 public libraries, which accounted for around 20% of public libraries in the country (Flood, 2019); in the same period, the government spending on public libraries also decreased by 30% in the UK. Similarly, most of the public libraries in the United States (US) have consistently experienced budget cuts since 2008 (ALA, 2020). Recently and for the fourth consecutive year in the US, the president has proposed the elimination of all federal
funding for all public libraries in the country (EveryLibrary, 2020). In the backdrop of a growing popularity of smartphones and social media across all age groups, public libraries in the US have experienced a steady decline in physical library visits of around 3% every year since 2013 (Albanese, 2020). Smartphones decline the attention span of users (Zomorodi, 2017), which negatively affects reading habits and serves as one of the top-ten challenges faced by public libraries (Smith, 2019).

Free access to electronic resources provided by libraries also does not necessarily lead to their use by patrons, leading to the underutilization of library resources and infrastructure (Potnis et al., 2018).

To mitigate these challenges, public libraries need to design and implement new ways of serving patrons so that library services remain relevant to people with different levels of comfort with technology (Knight, 2017; Potnis et al., 2016; Potnis et al., 2018; Wójcik, 2019a). However, increasing technologically minded and community-specific services would require public libraries to innovate.

Innovation, i.e., the process of implementing new programs, collaborations, processes, or combinations of activities (Nicholson, 2019; Potnis et al., 2019), can help public libraries thrive by meeting the needs and expectations of local communities (Strange, 2008; Vassilakaki, 2015; Wójcik, 2019b), government agencies, not-for-profits, and businesses in uncertain and rapidly changing times (Milam, 2008; Pew Research Center, 2013). Innovations also improve the operational efficiency of public libraries (Holt, Elliott, and Dussold, 1996; Koizumi, 2014; Koizumi and Widdersheim, 2016; Sin and Vakkari, 2015). The survival and success of organizations like public libraries depends on their ability to innovate on a continual basis (Varis and Littunen, 2010).

Innovations are inherently risky, so “innovation cannot just be left to chance – it needs managing” (Rowley, 2011, p. 256). Most libraries actively undertake program, process, partnership, and technology innovations to create new and greater value for their communities (Potnis et al., 2019). Participation, making & creating, learning, new outreach, and partnerships are the key
activities of innovative public libraries in the US (Nicholson, 2019), which require and/or represent processes that need to be managed proactively. Hence, it becomes increasingly necessary for public libraries to effectively manage different types of innovations.

Public libraries that fail to manage innovations face potentially fatal consequences. For instance, in their appraisal of why nearly 800 British public libraries have closed since 2010, Coates (2019) suggests that libraries are not innovative enough to meet the changing needs of library patrons:

There is no evidence anywhere that English people have lost interest in reading. They still regard the idea of public libraries as valuable and important. They see both as essential to a good society. If libraries provided good services, they would be well used (p. 4).

The finding that most British people still support public libraries despite their declining use and operation is reminiscent of a 2013 report in the United States that found that while 90% of respondents felt that the closing of the local library would have a negative impact on the community, just 67% of respondents said it would affect them or their family (Pew Research Center, 2013). The same study found that 80% of respondents were not aware of most or any of the services offered by their public library, which suggests that communication with external stakeholders is an integral part of managing innovations. If ignored, it could adversely affect the adoption of innovations. Low uptake of innovations implemented by libraries signals a failure to manage innovations and can lead to the low real and perceived value of public libraries for local communities.

Research question

To understand and analyze the issue of innovation management in depth and to provide structured guidance to public libraries, this study investigated the following research question.
RQ1: What are the challenges and solutions to managing innovations in public libraries in the United States?

Literature review

This sub-section presents research on critical factors that can possibly help library administrators manage innovations in libraries. A number of studies, for instance, have found that the ability of library leaders to manage innovations is influenced by management process, objects of management (e.g., human resources, organizational culture), management techniques (e.g., strategic planning, partnership), and miscellaneous factors (e.g., competence of leaders, competence and mindset of staff, availability of fund).

Management process

According to Rowley (2011), innovation should be seen as a process rather than an end-product. For instance, Wójcik (2019b) proposes the following four-stage process of managing innovative services in libraries: analyzing the current state of library services, selecting the type of innovation needed to meet the needs of patrons, building competitive advantage, and high-quality design for customers using the service. Rowley (2011) discusses innovation capabilities and culture, innovation portfolio, innovation processes, innovation leadership, innovative and creative teams, open innovation and collaboration, and user engagement in innovation as key factors in managing innovations.

Objects of management

Organizational culture represents the deeply rooted values and beliefs shared by the employees of an organization (Jantz, 2017), and influences the management of innovations in public libraries. For instance, after surveying nine public libraries in New Zealand, which implemented Facebook, Neo and Calvert (2012) conclude that most public libraries are interested in adopting
innovations, but at the same time, do not wish to associate themselves with innovations that might negatively impact the library’s image among the public. After presenting the skills needed by library authorities, Durrani and Smallwood (2008) note that librarians would be willing to learn and apply the skills needed for undertaking innovations, only if their organizational culture nurtures and supports risk taking.

**Management techniques**

Based on their experience, Deiss (2004) advises that innovations without strategy can lead to innovations that are unusable, misleading, ill-timed, or insensitive to patrons’ needs. After reviewing the relevant literature on managing innovations in libraries, Deiss (2004) concludes that effective innovation cannot occur without the use of strategies that promote vision and planning. For instance, libraries need to (a) develop the ability to create value-adding innovative services on a continuous basis, (b) employ decision-making strategies about innovations, and (c) deliver innovative services to patrons (Deiss, 2004). After interviewing front-line managers at a public library system, Leininger (2015) found that public library managers often get caught up in the daily work that supports the status quo and find it difficult to make time for long-range planning required for innovations in their libraries.

Goulding, Walton, and Stephens (2012) surveyed library students and practitioners in academic and public libraries in the UK to learn about their opinions of skills needed by library leaders. One of their major findings was that awareness of trends in innovations and understanding of best practices for managing innovations by others can help library administrators formulate a strategy. For instance, the case study of an innovative public library that created a model for generating and assessing innovations by public library administrators provides a valuable window into the workings of one innovative public library (Rubleske, Kaarst-Brown, and Strobel, 2010).
However, more research is needed to learn how innovations are managed in other public libraries and provide discernible guidance.

**Miscellaneous factors**

Walton and Webb (2017) identify miscellaneous factors related to the library leadership, which can affect innovation management: leading by example, shaping organizational culture/values, ensuring appropriate training/development takes place, helping develop appropriate organizational structures, and establishing appropriate reward and recognition. For instance, it is the responsibility of library leaders to continually mold organizational culture so that institutional stakeholders become increasingly receptive to change, and staff contribute freely, actively and effectively in managing the change triggered by innovations (Walton and Webb, 2017).

Bitter-Rijpkema, Verjans, and Bruijbzeels (2012) describe how over the past few decades, “the job description of a public librarian has moved from information to knowledge worker with a focus on innovative co-creation of meaning” (p. 2). Their realization that “learning, creativity and knowledge sharing are crucial for knowledge workers in general, but even more so for public librarians” (p. 2) demonstrates how skill building is essential in managing emerging innovation (Bitter-Rijpkema, Verjans, and Bruijbzeels, 2012).

Implementing innovations is challenging without funding. Lack of funds is one of the most widely cited reasons for the inability of public libraries to plan and/or implement innovative initiatives. In support, Rubleske (2012) notes that:

The argument that local public libraries are less able (or unable) to innovate in the absence of slack resources, or when faced with scarcely enough resources to deliver basic services, has been made with little opposition for nearly 40 years (p. 16).

Based on the literature review focusing on the strategic role of communication in managing change in libraries, Kuchi (2006) suggests that communication is quintessential to managing
innovations in libraries. After analyzing five scenarios of various changes introduced by implementing innovative technology solutions, Conrad (2018) concludes that communication is critical for getting people excited about any innovation and cultivating enthusiasm for changes introduced by innovations. Findings of a study on marketing innovations in two public libraries to teenagers in New Zealand suggest that libraries need to compose effective communication messages that resonate with different audiences when advertising innovations (Biggs and Calvert, 2013). Also, since public libraries are often funded by local government agencies, innovations should be co-branded and placed within the context of the local government’s strategic endeavors.

It is important to note that most of the above empirical studies focus on managing innovations and/or changes in academic libraries. Academic libraries, which are typically housed in academic institutions, differ from public libraries in terms of business models, funding models, patron demographics, contextual parameters, organizational structures, and organizational culture. Innovation brings about change in all libraries but introducing and managing change is a different process in academic and public libraries. Widdersheim, Lund, and Kemboi (2019) note that several studies “discuss organizational change frameworks utilized at large academic research libraries, but it is not clear how to apply these models in a public library setting” (p. 2). Uncertainty lingers around issues of managing innovations in public libraries. Overall, innovation in public libraries is an underdeveloped literature topic (Bieraugel, 2015; Kermani and Solhdoost, 2017).

Unlike this current study, few if any past studies on managing innovations are based on the challenges and solutions reported by administrators in multiple library settings across the US. Importantly, all the administrators that participated in this current study lead and manage innovations that have won awards.

**Methods**

*Context: Urban public libraries*
Large urban areas are at the center of the demographic shifts changing the composition of the US (Kotkin, 2010). Urban public libraries serve the majority of library-using Americans, with patrons from diverse groups and communities (Lichter and Ziliak, 2017). This study focuses on large urban public libraries, with the potential to provide a model representative that can be scaled to libraries across the country, including the smaller urban and rural libraries that may not have the same resource availability.

Data collection

This paper is part of a larger study conducted with winners of the Urban Libraries Council’s Top-Innovators Award. The Urban Library Council is the “premier membership organization of North America’s leading public library systems (Urban Libraries Council, 2018: 1).” Every year, the council recognizes initiatives with the Top-Innovators Award, to libraries that “showcase out-of-box thinking and new alignment of resources to further education for people of all ages, address race and social equity in… communities, build digital inclusion and literacy, and enhance civic engagement for strong democracy” (Urban Libraries Council, 2018). We emailed an online survey designed using Qualtrics to 219 administrators of 211 award-winning innovations in 106 public libraries, which won the Top-Innovators Award from 1998 to 2018. The list of all the award-winning libraries considered for this study can be found at: https://www.urbanlibraries.org/innovations. It was one of the most effective strategies for eliciting response from library administrators, since they are often busy (Jordan, 2015) and it would have been challenging to schedule in-depth interviews with them. They could take our survey at their convenience and at their own pace. The open-ended survey asked library administrators to report: (a) the official job title or position in their library, (b) the state in which their library is located, (c) the fiscal budget of their library, (d) the degree of importance for innovations to succeed in libraries, (e) top-3 challenges they experience in planning and implementing innovations in their library, and (f) solutions that address the challenges. To retain the
anonymity of survey respondents we did not require them to reveal their contact details and library information. We received 108 total responses, with a response rate of 49.3%.

3.3 Data analysis

We applied thematic content analysis to analyze the top-3 challenges study participants experienced when planning and implementing innovations, in addition to the solutions they devised or plan to implement in addressing these challenges. The inter-coder agreement between the two coders was over 90%. The coding lasted for two months.

Findings & discussion

Thirty-nine libraries from 18 states participated in this study (see Figure 1). All of them had a fiscal budget of more than $1 million. When asked about the degree of importance attached to innovation success in libraries, around 67%, 30%, and 3% of respondents reported extremely important, very important, and moderately important respectively. Thus, all the respondents realize the importance of innovations in public libraries.

Figure 1. Geographic Spread of Participating Libraries
Table 1 summarizes the 30 unique challenges experienced by respondents when implementing innovations, which we have organized into (A) strategy, (B) finance, (C) organizational behavior, (D) human resource management, and (E) communication clusters. Numbers indicate the amount of challenges in each cluster. For instance, there are seven unique challenges associated with administration and staff in the organizational behavior cluster. Administration and staff, collectively, might lack (a) negotiation skills, (b) the right attitude to embrace innovation, (c) the ability to delegate tasks associated with innovative programs, (d) motivation to switch existing work practices for innovations, (e) the ability to make decisions, and (f) collaboration. A few administrators also had trouble in getting buy-in from staff when introducing and implementing novel ideas.

Table 1. Challenges to Managing Innovations

<table>
<thead>
<tr>
<th>#</th>
<th>Challenge</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td><strong>Strategy</strong> (n = 8)</td>
</tr>
<tr>
<td>1</td>
<td>Priorities</td>
<td>Unable to identify, evaluate, and set priorities</td>
</tr>
<tr>
<td>2</td>
<td>Community-centric innovations</td>
<td>Not designing and/or planning innovations around the dynamic needs of local communities</td>
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<tr>
<td>3</td>
<td>Partnerships</td>
<td>Not being able to identify, assess, form, and/or sustain “right” partnerships at the right time</td>
</tr>
<tr>
<td>4</td>
<td>Managing time (as a resource)</td>
<td>Wrong timing of implementing tasks and events; Unable to balance time for services and programs</td>
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<tr>
<td>5</td>
<td>Managing information (as a resource)</td>
<td>Unable to collect, store, retrieve, and/or use information for making decisions and taking actions</td>
</tr>
<tr>
<td>6</td>
<td>Managing space (as a resource)</td>
<td>Events, services, and programs competing for the limited space in libraries</td>
</tr>
<tr>
<td>7</td>
<td>Managing inventory (as a resource)</td>
<td>Inability to store and manage stuff needed for various events, services, and programs</td>
</tr>
<tr>
<td>8</td>
<td>Managing technology (as a resource)</td>
<td>Not selecting and using technology for carrying out library operations and helping patrons complete tasks</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td><strong>Finance</strong> (n = 2)</td>
</tr>
<tr>
<td>9</td>
<td>Funding</td>
<td>Limited or no funds; Finding money</td>
</tr>
<tr>
<td>10</td>
<td>Budgeting</td>
<td>Limited or no budget for implementing innovations</td>
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<tr>
<td>C</td>
<td></td>
<td><strong>Organizational Behavior</strong> (n = 7)</td>
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<tr>
<td>11</td>
<td>Collaboration</td>
<td>Not able to organize teams, delegate tasks, and/or resolve personnel issues</td>
</tr>
<tr>
<td>12</td>
<td>Power distribution and dynamics</td>
<td>Lack of centralized decision-making delaying the process of making decisions; Imbalance in power introduced by innovations</td>
</tr>
<tr>
<td>13</td>
<td>Negotiation</td>
<td>Unable to manage conflicts, bargaining with partners, and/or contracts with partners</td>
</tr>
<tr>
<td>14</td>
<td>Buy-in</td>
<td>Not making sure that union is on board; Not persuading staff; Not convincing staff for the change associated with innovations</td>
</tr>
<tr>
<td>15</td>
<td>Motivation</td>
<td>Not encouraging and incentivizing staff throughout the process of managing innovations; Lack of focus and enthusiasm</td>
</tr>
<tr>
<td>16</td>
<td>Accountability</td>
<td>Not holding leaders and team members responsible for tasks and outcomes; Not making leaders and teams members answerable for their performances and contributions to innovations</td>
</tr>
<tr>
<td>17</td>
<td>Lack of diversity</td>
<td>Assembling teams without any diversity in terms of demographic factors, experience, and ideas, among others.</td>
</tr>
</tbody>
</table>

**D**

| 18 | Staff size                      | Lack of enough staff to work on innovations |
| 19 | Staff time                      | Staff with limited or no time for innovations |
| 20 | Staff skills                    | Lack of skills and knowledge among staff for innovations |
| 21 | Staff readiness                 | Resistance to change; Lack of willingness and acceptance of innovations |
| 22 | Staff authority                 | Responsibility without authority; Allotting staff insufficient power to make decisions |
| 23 | Lack of trust                   | Suspecting staff’s ability to implement innovations |
| 24 | Lack of group brainstorming     | Staff or administrators cannot brainstorm to generate good ideas |
| 25 | Lack of experience              | Staff or administrators lacking experience of planning and implementing innovations, including preparing requests for proposals |

**E**

| 26 | Data collection                 | No or faulty methods of collecting data from stakeholders to understand their needs |
| 27 | Language/Messaging              | Inability of administrators to use effective language and/or frame “right” messages |
| 28 | Communication of methods/criteria | Biased and/or flawed communication of evaluation methods and performance criteria to staff |
| 29 | Marketing                      | Lack of marketing and/or advertising of innovations |
| 30 | Building audience              | Unable to identify and/or build audience through marketing |
Table 2 lists the 30 solutions proposed by administrators for managing innovations in public libraries. A solution such as “listening to others” was proposed as a strategic solution, but it has the potential to address the challenges associated with multiple clusters, like organizational behavior and communication. Similarly, realigning staff with community needs is a solution shared by human resource management and strategy clusters. Campaigning, collaboration opportunities, accountability, and investment in staff training are a few other inter-cluster solutions. “Transparent communication” and “communication plan” are the only two intra-cluster solutions for the communication cluster.

Table 2. Solutions: Best Practices for Managing Innovations

<table>
<thead>
<tr>
<th>#</th>
<th>Solution with Brief Description</th>
<th>S</th>
<th>F</th>
<th>OB</th>
<th>HRM</th>
<th>C</th>
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<tbody>
<tr>
<td>1</td>
<td>Listening to all internal and external stakeholders</td>
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<td>2</td>
<td>Instilling data-driven decision-making practices</td>
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<td>3</td>
<td>Establishing accountability in all actors involved in planning and managing innovations</td>
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<td>4</td>
<td>Managing time as a resource for innovations</td>
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<td>5</td>
<td>Realigning space in consultation with the staff</td>
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<tr>
<td>6</td>
<td>Testing/piloting innovations before full implementation</td>
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<td>7</td>
<td>Start small and scale rapidly (one-dollar-at-a-time approach)</td>
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<td>8</td>
<td>Aggressive marketing with well-crafted, clear, and simple messages</td>
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<td>9</td>
<td>Leveraging existing partnerships and building new partnerships for funding</td>
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<td>10</td>
<td>Creating/pursuing novel opportunities for funding in the library community and library system</td>
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<tr>
<td>11</td>
<td>Be creative in searching for and pursuing unconventional sources of funding</td>
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<tr>
<td>12</td>
<td>Efficient budgeting to ensure less or no wastage of dollars</td>
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<td>13</td>
<td>Periodically refining the scope of the innovative initiatives to avoid escalated commitment and sunk cost</td>
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<td>14</td>
<td>Creating an organizational culture where failure is expected and celebrated; enhancing the tolerance of risk of loss/damage</td>
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<td>15</td>
<td>Promoting an organizational culture that embraces open-mindedness</td>
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<tr>
<td>16</td>
<td>Be inclusive in planning and implementing innovations</td>
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<tr>
<td>17</td>
<td>Work through staff resistance through communication and discipline when necessary</td>
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<tr>
<td>18</td>
<td>Mastering negotiation skills and techniques</td>
<td>* *</td>
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<tr>
<td>19</td>
<td>Setting clear expectations for staff during planning and implementation of innovations</td>
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<tr>
<td>20</td>
<td>Evaluating current staffing models to identify opportunities for efficient sharing of tasks related to newly introduced innovative initiatives</td>
<td>* *</td>
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<tr>
<td>21</td>
<td>Hiring staff who understand the significance of innovations and speak the languages that libraries need to positively interact with patrons; Using volunteers to offset full-time and skill limitations of staff</td>
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<tr>
<td>22</td>
<td>Immediately filling in vacant positions at all branches of the library systems</td>
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<td>23</td>
<td>Periodically realigning staff with community aspirations</td>
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<tr>
<td>24</td>
<td>Investing in in-house designs and ideas proposed by staff; Encouraging staff’s creativity and efforts of translating ideas into implementation plans</td>
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<tr>
<td>25</td>
<td>Continually exploring how to share learnings with staff (i.e., increasing knowledge management practices)</td>
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<tr>
<td>26</td>
<td>Making opportunities available for staff to volunteer to self-select to join in the process of planning and implementing innovations any time they like; Facilitating opportunities for staff to collaborate across work units</td>
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<tr>
<td>27</td>
<td>Continuing to grow staff skills so that they can feel comfortable participating in the process</td>
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<tr>
<td>28</td>
<td>Being transparent and honest with staff and partners</td>
<td>* * *</td>
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<tr>
<td>29</td>
<td>Continued communication about current successes to build enthusiasm and support among staff and administrators</td>
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<tr>
<td>30</td>
<td>Communicating essential messages quickly and consistently to avoid confusion; Ability of supervisors to explain to those who work for them</td>
<td>*</td>
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</tbody>
</table>

S: Strategy; F: Finance; OB: Organizational Behavior; HRM: Human Resource Management; C: Communication
Several solutions can address multiple types of challenges and/or associated with multiple clusters of solutions. For instance, “listening to all internal and external stakeholders” is a solution proposed by some of the respondents in this current study which is related to strategy, organizational behavior, and communication clusters. The following subsections discuss challenges experienced and corresponding solutions proposed by surveyed respondents who implemented innovations in their libraries.

**Strategy**

Organizational strategy represents the process of creating a unique and valuable position (i.e., competitive advantage) for the organization, when producing, selling, or delivering products or services (Peteraf, 1993). Leaders typically spearhead the process of identifying the purpose of the organization, the scope of activities that would be undertaken by the organization, and the type of competitive advantage the organization should strive for, in the future, which are also the three key elements of any organizational strategy. The resource-based view of designing strategy shows that organizations need to effectively manage their resources such as time, technology, space, and inventory, for achieving this competitive advantage over others (Barney, 2001). Leaders can also better manage their resources by making data-driven decisions and creating an appropriate culture in the organization (Lavie, 2006).

Strategy and leadership are inextricably related to each other. Goulding, Walton, and Stephens (2012) recommend generic strategic planning skills such as decision making, problem solving, external awareness, and change-management for library administrations, since these skills are vital for public libraries to prove their worth to funders, especially in challenging financial times.

This current study provides specific actionable solutions as part of a strategy to manage innovations in public libraries. Sample solutions proposed by the surveyed respondents include: aligning any new initiative with a library’s vision, crafting intentional strategy, identifying competing
priorities and evaluating priorities so that their libraries do not compete or deplete their limited resources, and identifying partners for implementing innovations. A Learning Experiences Manager at a public library, who participated in this current study, thinks that “innovation for innovation's sake is useless.” Listening to the needs of patrons and having data via surveys to demonstrate a given need are useful ways of conducting an environmental scan.

Leaders responsible for managing innovative projects should pay attention to time, information, space, inventory, and technology. These factors pose great challenges for administrators managing innovation. Information is often hard to obtain because partners sometimes are not willing to share the data needed to serve patrons in novel ways; space is often in shortage because different functional areas in libraries compete for space; technologies can prove difficult to harness because devices can malfunction and become dysfunctional. To meet these challenges, administrators suggest a number of solutions, including keeping things simple; setting the time-limit for tasks; realigning space with community needs; and testing technology solutions before launching initiatives relying on these solutions.

**Finance**

Some of the financial hardships reported by administrators, in this current study, were: lack of funding, limited budget for tinkering with new ideas, limited resources for implementing novel processes, lack of unencumbered funding, costs prohibiting scaling of innovations in multiple branches of public libraries, and difficulty finding money - both before rolling out innovations and for sustaining them later. Although money is always a topic of discussion in the literature and in practitioner conversations, it was not the only focal point of the survey respondents in this study. For instance, the surveyed CEO of a public library noted: “I am not listing money as a hurdle. It does not get to be an excuse.”
Past research recommends creating additional funding opportunities for libraries, such as finding funders who will champion innovations (Hamilton, 2004), setting up foundations and endowments for public-academic partnerships (Goodman, 2009), and aligning with and meeting the needs of community stakeholders with funding dollars (Fried, Kochanowicz, and Chiranov, 2010; Grant, 2015).

Respondents of this study also suggested a few solutions. These include: seeking alternative funding sources such as internal and external grants and donors, partnering with public and private sector organizations with similar objectives, and financial planning for managing budgets.

Organizational behavior

Organizational behavior, i.e., human behavior at work (Davis and Newstrom, 1981), is a sub-area of the management literature, which covers the topics related to onboarding of employees, motivating employees, managing their teams, collaboration, and stress, and managing changes in organizations (Steers, 1981).

The respondents of this study reported a series of challenges in this area. The first set of challenges as identified by the respondents include: the inability to set priorities, the inability of librarians to collaborate with others; not having everyone needed at the table during planning; and a lack of authority provided to librarians responsible for meeting goals. To these challenges, no solutions are offered.

The second set of challenges concern with the failure of innovations. To these challenges, the surveyed library administrators proposed creating an organizational culture that celebrates failures resulting from innovations. One director of a public library said:

I created a culture where failure is expected and celebrated. We encourage people to fail often and early. There isn't anything wrong with failed experiments, its [sic] how we learn. If someone isn't failing enough, we talk because I assume they aren't reaching high enough.
The third set of challenges are related to the resistance of librarians, patrons, and partners to adapt to the changes introduced by innovations, and the lack of open-mindedness needed for innovations. The most common solutions proposed by respondents were: motivating stakeholders and getting their buy-in, maintaining focus and enthusiasm among staff for appropriate levels of participation, refreshing the scope of the innovative initiatives, and being inclusive in planning and implementing innovations.

**Human resource management**

Human resource management deals with all the issues related to employees or staff in any organization. Sample issues include but are not limited to recruiting diverse set of employees, searching for talent in the job market, professional development activities of employees, retaining employees, addressing personnel issues, and firing of employees (Bernardin, 2007).

Library administrators in the current study reported three sets of challenges. The first set of challenges were: the lack of adequate staff to schedule events or programs in libraries, and limited staff as a constraint to expanding services. As a result, despite wishing to include every staff member in the decision-making process, several administrators surveyed for this study cannot do so, which makes it challenging for them to have enough buy-in from staff when implementing innovations.

Sample solutions proposed by the administrators surveyed for this study were: filling in vacant positions at all branches, evaluating current staffing models and identifying opportunities for more efficient task sharing, realigning staff with community aspirations. Library administrators can also benefit from the past research (e.g., Stejskal and Hajek, 2015; Michnik, 2015) that suggests using technology to streamline services and free up human capital, when possible, to manage innovations in libraries.
The second set of challenges were associated with the inability of public librarians to purchase, install, and use technology for serving patrons and the lack of experience in preparing a “Request for Proposal” when inviting bids from potential partners.

The solutions proposed by the surveyed administrators include: offering professional development opportunities to librarians, giving them more time to learn new skills, letting them experiment with new ideas, and encouraging them to share experience and guidance with others. One of the surveyed administrators, who served as the Chief Executive Officer of a public library, sees “education, training, setting clear performance expectations and holding people accountable” as a set of solutions to enhance staff competencies. The supervisor of one library branch, who participated in this current study, identified project management training as an essential skill for all staff, regardless of their duties and responsibilities.

The third set of challenges were related to the low confidence levels of librarians and lack of creativity among librarians when working on innovations in libraries.

There was no direct solution proposed for addressing the low confidence levels of librarians, but the respondents think that librarians should start believing in themselves when working on novel ideas. Keeping up with current professional trends to have a broader awareness of the wider world was recommended by the respondents as a solution to stimulate creativity among respondents.

**Communication**

According to the survey respondents, unclear expectations for achieving goals can prevent librarians from contributing meaningfully to the innovative initiatives in their libraries. Hence, it is the job of the administrators to communicate their expectations clearly. Librarians are often unaware of the rubric or criteria used by administrators to evaluate their performance, which can affect the type and level of their participation in innovative projects.
As the process of implementing innovations evolves, administrators need to frame effective messages and consistently communicate them to all concerned partners and stakeholders. An executive director of a public library, in this current study, thinks that there is an art to crafting “clear and simple messages” and explaining the messages “to those who work for the libraries” which can bridge the communication gap in libraries. Continued communication about current successes to build enthusiasm and support among staff and administrators was one of the most frequently reported pieces of advice by the surveyed administrators.

It is equally important to communicate with external stakeholders, including partners, and keep them in the loop all the time. The Strategic Initiatives Manager at a public library, who took our survey, shared their secret to managing innovations in their library: “Established communication plan and active implementation of the plan so all groups are aware of project requirements and expectations for participation and success” can make things easier for all. They also added:

“Strong project plan with clear description of goals that is communicated to all team members at the project’s outset. Includes continued communication with the team as the project continues to check on progress toward those goals. Develop strong project plans that include a clear description of goals and outcomes, a communication plan that encompasses all partners and stakeholders, an implementation plan to guide project development, and ongoing project evaluations to adjust to changing conditions.”

As per the survey respondents, open communication, clear expectations, and transparency are critical for executing innovative projects in libraries. To this point, an assistant director of a public library in this current study provided anecdotal evidence which underlined the significance of communication:

I came in after all decisions had been made but before the systems were implemented. I believe there was pressure from Administration to get the ILS migration done. This pressure
influenced the selection process of a vendor and other decisions that seriously impacted implementation. I believe that we must be honest and realistic about what we are able to achieve within a given time frame and communicate this to library staff, leaders and patrons.

Public understanding and subsequent adoption of innovative programs in libraries is critical for their success. According to the survey respondents, sometimes their libraries fail to build an audience for their forthcoming innovative programs. To avoid this problem, a public library manager surveyed for this study asks their peers to “plan and implement a wider marketing of services to reach both library members and non-library users.”

Solutions proposed by the survey respondents for effective communication are in line with, and in fact, more detailed than some of the past studies (e.g., Biggs and Calvert, 2013; Rossmann, 2019; Widdersheim and Koizumi, 2017), which outline for creating a sustainable and consistent communication plan across all platforms and venues for different audiences. This fact validates the value embedded in the guidance offered by administrators of award-winning public libraries.

Conclusion, limitations, and future research

Very few studies empirically investigate ways to manage innovations in the library and information management literature (Rowley, 2011). This study conducted with award-winning administrators of public libraries fills in the gap by identifying 30 unique challenges and an equal number of solutions to managing innovations in libraries. We classify these challenges and solutions into five clusters: strategy, finance, organizational behavior, human resource management, and communication.

These findings present the specific competencies needed to manage innovations in public libraries. Findings also demonstrate the significance of skills and knowledge related to management (i.e., strategy, human resources management, and organizational behavior), finance, and communication for enhancing the ability of public libraries to better-serve their communities. There
is a need for professional training programs dedicated to equipping library administrators with these competencies. Library and information science programs should also explore the possibility of teaching these skills in their academic programs.

Existing research presents lack of funding as one of the most widely experienced challenges faced by public libraries while managing innovations. In contrast, this study finds that the inability of administrators to manage their human resources and strategy can lead to more than 50% of the challenges (i.e., 16 out of 30 challenges) to managing innovations in public libraries (see Table 1 above). Administrators need to be proficient in managing human and non-human resources (i.e., technology, information, space, inventory, and time).

The wide range of job titles held by the survey respondents, who were responsible for managing innovations in their public libraries, suggests that innovations are planned and implemented across multiple functional areas in public libraries. Hence, any administrator, manager, or executive responsible for leading any public library system, a branch of a public library, or a functional area in a public library needs to have the skills and knowledge needed to plan and implement innovations.

Several studies present the leadership and management competencies required to manage public libraries (Henricks and Henricks-Lepp, 2014; Jordan, 2015). However, job advertisements recruiting managers or leaders for public libraries rarely mention innovation management as a desired characteristic. Considering the significance of innovations for public libraries, findings from this study enhance the need for leaders and managers to develop the five competencies needed to manage innovations. Experiential guidance in terms of the solutions offered by the administrators in this study can help other public libraries better plan and implement innovations.

Small sample size is one of the limitations of this study. All the respondents represent urban public libraries, which can also limit the generalizability of their solutions for managing innovations.
in small, rural public libraries. In the future, the researchers of this study plan to interview 24 administrators who are willing to provide an explanation for their responses in the current survey. The researchers would also like to study the relationship between the types of award-winning innovations and the corresponding challenges experienced and solutions devised by library administrators for managing these innovations.

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