



Innovation strategies in academic libraries using business entrepreneurial theories: Analysis of competing values framework and disruptive innovation theory

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ABSTRACT

Academic libraries are currently experiencing a drastic change; this change has been necessitated with the introduction of the internet and the advancement of technology. Traditionally, academic libraries were the sole providers of information in the university environment. However, with the introduction of the internet, information access is scattered, and the academic library that previously used to enjoy the monopoly of being the only disseminator of information, now has competitors. The internet has changed the way information is accessed, packaged, shared and disseminated. Library users are changing the way they access information. Despite all these changes, academic libraries are yet to fully develop and embrace appropriate strategies to address these new realities. This paper highlights the significance of introducing innovative strategies in academic libraries for sustainability purposes, using business entrepreneurial theories, competing values framework and disruptive innovation theory in the transformation of academic libraries into a value addition organization.

Introduction

Academic libraries are considered to be the pillar of academic. Otike & Hajdu (2021, p. 19) note that academic libraries are recognized as a symbol of truth within a university, thus, the role of the academic library is undisputed. Nakitare et al. (2020) allude that an academic library is an integral component of academic institutions. Academic libraries being established alongside their parent institutions make them a semi-autonomous institution; hence, they depend on funds and support from their parent organization. Traditionally, academic libraries have enjoyed the monopoly of being the sole providers and disseminators of information in academia. However, with the introduction of the internet, academic libraries started experiencing competitors. Wachira & Onyantha (2016, p. 137) citing Henner (2002) note that information communication Technology (ICT) has brought competition to libraries through the way information is accessed and utilized. Knight (2017, p. 294) citing Sennyey et al. (2009) argues that with the introduction of the internet, academic libraries no longer enjoy the monopolistic reign as the sole providers of information. However, despite the entry of competitors, academic libraries have been slow to adapt to change. Aslam (2021) notes that academic libraries are organizations that traditionally are known to be resistant to change. The authors allude that since

academic libraries are at the centre of educational transformation, they should show flexibility, adaptability and change. Stoffle et al. (2003, p. 363) emphasize that the only choice libraries have is to change and survive, or stick to the past and fail. The authors further state that “in profit business those who always stick to traditional ways, always find themselves obsolete if they refuse to change, change is always inevitable in business” (2003). Neal (2001, p. 2) argues that for libraries to survive the future they need to incorporate an entrepreneurial approach of processing, disseminating and providing access to information content. Stoffle et al. (2003, p. 366) observes that libraries are not immune to the current digital competition. It is therefore as a result of the above developments that forms the backbone of this paper.

Innovation strategies in academic libraries

Academic libraries have not usually been associated with the term *innovation* and *strategies*. This can be related to the fact that academic libraries are dependent and rely heavily on their parent organizations. Thus, their survival and dependence is on their parent organization. Jantz (2012, p. 3) argues that most academic libraries are controlled administratively and financially by their parent organization, hence, this limits their chances to innovate. The author (2012, p. 3) notes that

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due to the fact that libraries are considered as spenders, rather than fund generators, it is usually hard for them to convince the parent organization of the necessity for change. Vassilakaki & Moniarou-Papaconstantinou (2016, p. 244) citing Jantz (2012); Rowley (2011) asserts that organizations are forced to change and innovate once they experience the need to succeed and survive in a hostile and competitive environment. In trying to differentiate between change, strategy and innovation, Vassilakaki & Moniarou-Papaconstantinou (2016, p. 245) citing Brown and Osborne (2012); Deiss (2004); Rowley (2003–11) explain that “change results to the development or offering of a new service. Strategy would enable information organisations to make important decisions on identifying, implementing and promoting innovation in all levels” while on the other hand, Deiss (2004); Kostagiolas et al. (2011) as cited by Vassilakaki & Moniarou-Papaconstantinou (2016, p. 245) says that “innovation would enable them to create and offer added-value information services to their users”.

Business entrepreneurial theories

For an organization to embrace change and innovate, there is always the need to transform the process of how things are done, which necessitates disruption. Consequently, as a result of disruption, the organizational culture has to be adjusted and modified for effectiveness. This paper analyzes two theories: competing value framework and disruptive innovation theory. The paper gives an analysis of their functions, structure and how they can be used to enhance innovation strategies in academic libraries.

i. Competing Values Framework (CVF)

The Competing Values Framework (CVF) is a theoretical framework that was initially developed in the early 1990s by Quinn and his colleagues from research conducted at the University of Michigan. One of the major indicators of the framework is effective organizational performance. Ikramullah et al. (2016, p. 336) notes that in principle, the competing values framework was established to measure organizational effectiveness. Cameron & Quinn (2011, p. 38) add that the framework was developed to answer questions that were related to effectiveness. Over the years, the framework has been found to be a useful model for organizing and understanding a wide variety of organizational and individual phenomena, including theories of organizational effectiveness, organizational culture, organizational design, organizational quality, leadership competencies, stages of lifecycle development, leadership roles, financial strategy, brain functioning and information processing. Carvalho (2010) citing Cameron & Quinn (1999, p. 7) alludes that “organizational culture is very important as many change approaches attempted by organizations, e.g., reengineering, TQM (Total Quality Management) and downsizing, failed whenever the culture of the organization remained the same”. Cameron et al., (2014, p. 15) indicates that Competing Values Framework emphasizes that achieving value in all the quadrants is important for organizational effectiveness over a long period of time.

The competing value framework is divided into four quadrants that represent opposite or competing assumptions: flexibility and discretion versus stability and control, internal focus and integration versus external focus and differentiation.

The Competing Values Framework assists in distinguishing two major intersecting dimensions in organizations. One dimension (horizontal) reflects the extent to which an organization has a control orientation. The dimension runs from an emphasis on flexibility, discretion and dynamism to an emphasis on stability, order and control. The second dimension (vertical) reflects the extent to which an organization is focused on its internal or external functioning. This dimension runs from an emphasis on internal orientation, integration and unity to an emphasis on external orientation, differentiation and competition. These two dimensions form four quadrants which

represent a distinct organizational culture and define what people value about an organization’s performance (Innovation). (See Fig. 1) The core values in each quadrant represent opposite or competing assumptions and that is how the framework got its name. Each quadrant is identified as a cultural type representing basic assumptions, orientations and values. Lindquist & Marcy, (2016, p. 172) note that CVF is significant because it integrates many different values and levels of analysis within an organization; these values include traditional practices, leadership styles, teamwork and group interactions, conflicts and miscommunications. CVF initiates innovations within organizations and also is used as a measure of success and effectiveness. The values can be summarized as follows;

CVF four major culture types

The four major competing value frameworks are as follows;

- a) Clan (Collaborate): The clan or rather collaborative culture type. Cameron & Quinn (2011, p 47) notes that it is called clan because it is considered as a family type of organization. The assumption of this flexible type of organization is that work can be done through teamwork, collaboration, and loyalty. Here organization is held together by trust, traditions and loyalty.
- b) Hierarchy (Control): This is based on Weber’s (1947) seven classical attributes of bureaucracy, posited during the time when there was a need to increase efficiency in production of goods and services. In hierarchical organizations it is believed that there is a well-prescribed chain of command and decision-making, and duties are allocated depending on the positions and level. Proponents of hierarchical culture believe that it leads to stable, efficient, highly consistent products and services.
- c) Adhocracy (Create): This flexible organization type encourages flexibility in the work environment so as to innovate and also take risks. Cameron & Quinn (2011, p 49) note that this is the fourth ideal type of organization that emerged as the world was moving from the industrial age to the information age. The main aim here is creativity and innovation.

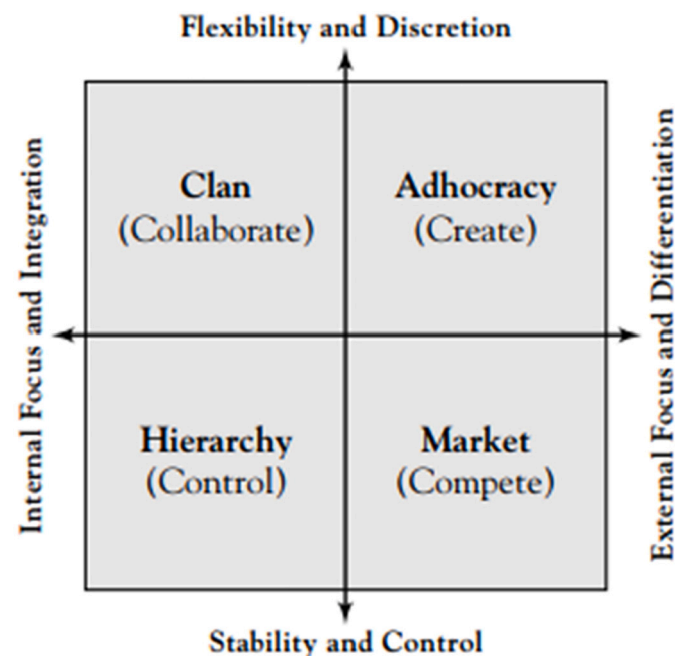


Fig. 1. The Competing Value Framework. The Competing Values Framework Cameron & Quinn (2011, p. 39).

d) Market (Compete): This refers to the type of organization that functions as a market by itself. Cameron & Quinn (2011, p 44) note that the term market should not be taken as a synonym of marketing or marketplace. This transaction is mainly external. It is controlled by competitiveness and productivity, not rules and procedures.

Application in academic libraries

The library is an organization that encompasses variables that are interconnected when viewed in light of adaptation to change. Maloney et al. (2010, p. 323) note that the “CVF seeks to express the underlying values in an organization and how those values can be applied to the process of organizational change”. The application of CVF in libraries can be summarized as follows: an academic library is an organization that is continually developing and changing, and the library, like the CVF, is divided into various cultures. As such, application and implementation of innovative strategies does not only require academic libraries to adapt to the new ways of doing things, it also requires changing organizational culture (Varner, 1996, p. 2). CVF is an organizational process that incorporates all the functions that are involved in the library from an individual level to the organizational level, to the outcome level of productivity (see Fig. 2). Incorporating competing value frameworks in academic libraries will enable academic libraries to analyze all the functions and procedures of the academic library using a single model.

As mentioned earlier, academic libraries are mandated to serve the academic community (external forces), however, for them to be able to offer adequate services they need to align their processes and functions (internal focus). With the application and implementation of innovation strategies, there is a need for libraries to be able to align their process of “flexibility and discretion” and “stability and control”. Adopting the competing values framework can provide leaders in academic libraries alternative choices or strategies that allow a solid basis for decision-making (Varner, 1996, p. 11).

- a) **Internal Focus (Clan and Hierarchy):** The internal focus is associated with the processes that take place internally in the academic library. In the CVF the internal focus incorporates the Clan and Hierarchy culture. The internal focus is usually associated with personnel, their duties and how they interact to ensure the success of the organization. In the academic set-up, the internal focus will comprise library administration and the library staff, and the competency of the staff will determine success and effective communication and work relations that are under the Clan and organizational structure and control under Hierarchy culture.
- b) **External Focus (Adhocracy and Market):** The external focus is associated with the targeted and intended users, their satisfaction with the products and utilization of the products. The external focus

in academic libraries is important, as the customers’ needs are used to determine the services that ought to be introduced or that are in high demand. The external focus constitutes the Adhocracy, which is involved with creation and innovation of products and services to the users’ preferences, while the Market is involved with the intended user of the products and services – in the case of library users: students, faculty members, researchers and stakeholders.

- c) **Flexibility (Clan and Adhocracy):** Flexibility dimension is associated with innovation and at the same time high risk takers; the staff work and communicate via a collaborative and teamwork approach so as to establish and create innovative services and products for users. There is no strict structure in this dimension; the goal is geared towards end product and satisfaction of the users. The Clan constitutes the library staff who collaborate together to create added-value products for their users through Adhocracy (create). Flexibility dimension incorporates the Clan and Adhocracy which are usually associated with high risk takers, but equally they are attributes of success and innovation, since their duties are not static and are able to change with customer preference.
- d) **Stability (Hierarchy and Market):** This dimension constitutes a strict and established process, protocol and procedure in conducting business. There are well laid processes and procedures (Hierarchy) and the target market or users are known (Market). In academic libraries, this constitutes the library organizational structure with the targeted market being the university community. The Stability dimension, though strict, has always been associated with a well laid plan and organization, which gives it a high possibility of constant success and positive results as the risks involved are minimal. Consequently, individual academic libraries can use the Organizational Culture Assessment Instrument (OCAI) to constantly check their existing and preferred organizational culture against recommendations for change represented by the desires of academic library users.

ii. Disruptive innovation theory

In the past decade, the application of disruptive innovative theories in libraries was not anticipated; however, the need for transition and development means that libraries are not immune to this theory (Adekoya & Adedimeji, 2021) citing (Ryan and Grubbs, 2018). “Disruptive innovation was first proposed by Christensen in his formative book *The Innovator’s Dilemma*, which initially focuses on disruptive technology” (Christensen, 1997) as cited by (Wang et al., 2021). Adekoya and Adedimeji (2021) note that the theory of disruptive innovation is an excellent way of seeing how innovation influences development. Wang et al. (2021) citing Christensen (1997); Christensen and Raynor (2003); Christensen et al. (2015) describes disruptive innovation as services or products that bring transformation to a business in the way it operates.

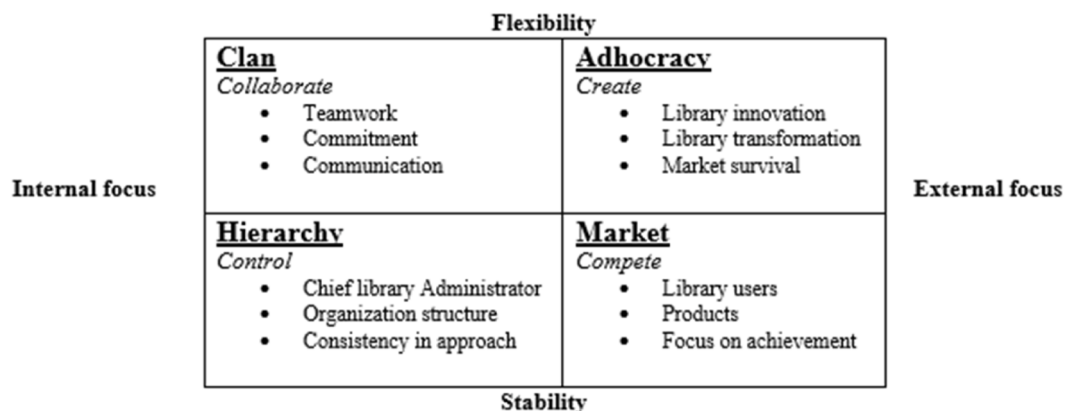


Fig. 2. The competing value framework academic library model.

Larson (2016) alludes that disruptive innovation has been well described by Christensen (1997) on the way new entrants can enter into a market and disrupt a well-established firm or businesses. Wang et al. (2021) citing Christensen et al. (2018); Feder (2018); Vecchiato (2017) argue that disruptive innovation can equally be used as a strategy to assist a company to maintain competitive and profitable market and improve productivity. According to Christensen, disruptive innovation occurs when a small company enters into a market with fewer resources at the bottom market, but slowly rises to the top market and eventually controls the market. The word “incumbent” is used to refer to the existing business while “entrants” is used to refer to the new business or firm. The interpretation of disruptive innovation has taken various versions. Christensen et al. (2015); Larson (2016) notes that disruptive innovation usually happens in a number of ways. It can be Low-End disruption innovation or New-Market disruption innovation. The Figure below describes New-Market disruption innovation.

I. New-Market disruption innovation

In the New-Market disruption innovation (Fig. 3), small firms come in at the bottom line of the market and serve products and services to the markets ignored by the incumbent as outlined below (Larson, 2016);

- (1) Incumbent business ignores the market trend and focuses on innovating and developing products for its regular, high-demand mainstream clients.
- (2) The entrants take advantage of the ignored markets and develop products that suit the ignored market.
- (3) The incumbent ignores the entrance of the entrants and continues to focus on its high-demand markets
- (4) The entrants continue advancing and move up the market, developing products that suit the incumbent market
- (5) The entrants finally start attracting the incumbent’s mainstream customers and market disruption takes place.

II. Low-Market disruptive innovation

In the Low-Market disruptive innovation (Fig. 4) entrants usually focus on under-served customers. As such, the entrants come with new products which at the beginning are of low quality and low price; entrants continue to improve them over time until they become the highest demand product or service for the market.

This causes disruption by eliminating the incumbent. In the library “market”, this can be equated with the introduction of the internet, which in the beginning was slow and unwieldy. However, with time, the internet has become a preferred source for fast, easy access to

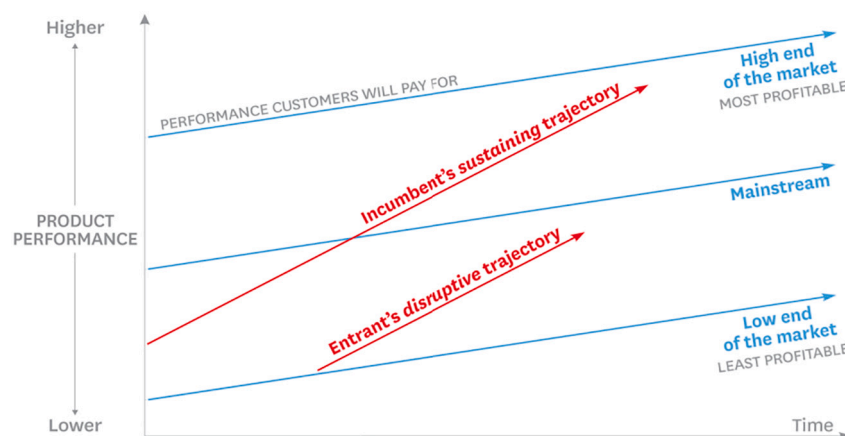


Fig. 3. New-Market disruption Disruptive Innovation model. Source: (Christensen et al., 2015).

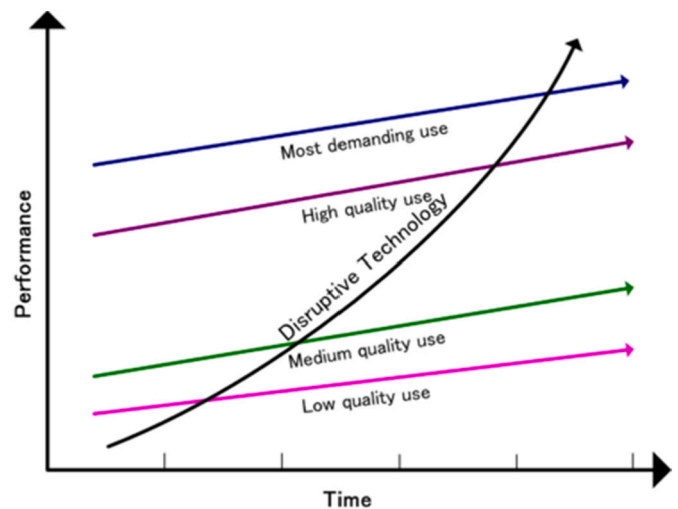


Fig. 4. Low-market disruptive innovation. Source: (Hübner, 2018).

information.

Application of disruptive innovation theory in the academic library

It is obvious that currently, disruptive innovation has begun to pose a threat to incumbent library operations. Accordingly, libraries need to re-adjust themselves. In the academic library setting, disruptive innovation is related to the fact that academic libraries are gradually being surrounded by new technologies and roles which cannot be managed with traditional management principles and practices. Therefore, the application of disruptive innovation in academic libraries will enable the library to do the following;

- (1) Disruptive innovation will enable libraries to continuously revise library courses in accordance with changing trends and market needs. Yeh & Walter (2016, p. 797) note that disruptive innovation forces academic libraries to redefine their services and themselves to meet library users needs.
- (2) Disruptive innovation theory will entice libraries to engage themselves in innovation-driven developments to improve their services. Adekoya and Adedimeji (2021) citing Bhoi (2017) allude that disruptive innovation improves library service provision.

- (3) Through disruptive innovation, academic libraries will be able to categorize all users in regards to their needs and ensure that all their needs are met satisfactorily. Disruptive innovation will enable academic libraries to establish their niche.
- (4) Disruptive innovation theory will enable libraries to engage in constant re-evaluation of themselves and services so as to ensure that they are relevant in the market. [Adekoya and Adedimeji \(2021\)](#) citing Mohammed, (2018b) argue that disruptive innovation enables the library to transform from traditional practices to new practices of management and operations.

[Wang et al. \(2021\)](#) citing [Bhattarai et al. \(2019\)](#); [Karimi and Walter \(2016\)](#); [Vecchiato \(2017\)](#) note that “disruptive innovation is an important strategy that firms can adopt to improve performance”. This theory is significant to academic libraries and libraries in general, as it can guide them on the various stages through which disruptive innovation occurs and how they can address these stages. The theory of disruptive innovation is important in academic libraries because, not only does it apply to new products and services, but also to library management, staff and the market. As such, conceptualizing this theory will enable academic libraries to establish a fundamental innovation strategy model allowing for adaptation and implementation of innovation and innovation strategy in the academic library. This model will factor in the role of entrants (new products) into an organization and how the incumbent (the academic libraries) can react and adjust to a new and changing environment.

Competing value framework and disruptive innovation theory

The competing value framework and disruptive innovation theory complement one another. The use of both in academic libraries to enhance innovation strategies will yield greater success, as opposed to a single approach. The significance of competing value framework is that it subdivides the academic library into four quadrants that enable a comprehensive disruptive innovation and organizational change to be factored in – disruptive innovation to the staff, disruptive innovation to organizational structure, disruptive innovation to the market and disruptive innovation to change (create). The competing value framework will enable policymakers to envision the academic library as a whole and an independent entity that is subject to change. As such, through the adoption of disruptive innovation theory, all the four cultures of academic libraries can be incorporated. Innovation strategies necessitate organizational change; the use of competing value framework with disruptive innovation theory can dismantle resistance to change and facilitate innovation. For instance, with advanced technology brought in by the entrants, library staff must undergo advanced training, library and information studies programs must revise their curricula to fit new changes, or the roles of both become redundant and could be overtaken by ICT personnel. Competing value framework and disruptive innovation theory enhance the evaluation and upgrade of the academic library as a facet of the whole organization which must adjust.

Importance of innovation strategy in academic libraries

Most academic libraries have strategic plans; however, much of this documentation manifests as subsections of broader parent organization long-term strategic documents. The importance of having an innovation strategy cannot be overstated, with the current, ongoing technological disruptions it is imperative for academic libraries to consider having their *own* established innovative strategies. Examples include;

1. Business Continuity: Innovation strategy ensures that there is survival, success and continuity of an organization. [Rowley \(2011, p. 252\)](#) argues that innovative strategies are paramount for an organization to succeed and survive. With the proliferation of technology and the paradigm shift of library users’ information needs, there is a

necessity for academic libraries to adopt and adjust to new information products and services, so as to continue being relevant (e.g., the shift from physical books to the internet or electronic resources). [Rowley \(2011, p. 261\)](#) recommends involving library users in creating innovative strategy for continuity. The author describes the involvement of library users in innovation as co-production or co-creation, just as in business. Taking into consideration users’ feedback in innovation practices ensures that the library is able to pinpoint its users’ and their needs. In the disruptive innovation theory, the strategy of relying on customers’ feedback can be equated with the “New-Market disruption innovation theory” where the entrants overshadow the incumbent and take over the market as a direct result of customer feedback being ignored by the incumbent. [Bieraugel \(2015, p. 357\)](#) citing [Walton \(2008, p. 128\)](#) note that library services and products are developed for the benefit of library users; as such, library users should be involved in library innovation as creative partners so that the services and products being developed fit user needs. This ensures relevancy, thus enhancing business continuity.

2. Evaluation of Performance: Having an innovation strategy will enable academic libraries to be able to measure their performance against their library users and other products. [Bieraugel \(2015, p. 354.\)](#) asserts that “an academic library must assess how well its innovative services succeed, and must often promote such successes to stakeholders outside of the library”. The lack of innovation strategies in libraries can explain why some new innovations never succeed. There is always this proposition that says “*what gets measured, gets done and what gets done, gets rewarded and what gets rewarded is repeatedly done well*”. The proposition can also be linked with the aphorism “*if you do not know where you are going, any road will lead you there*”. [Lakos & Phipps \(2004\)](#) as cited by [Chidambaranathan & Regha \(2016, p. 103\)](#) argues that libraries’ performance should be evaluated by their customers and not their employers. In earlier studies [Huang and Song \(2010\)](#) opined that libraries can use balanced scorecard innovative business tools to evaluate and reform traditional strategic management practices of libraries and consecutively introduce new practices that can be cascaded to all library sections. The balance scorecard, just like the competing value framework, has four sections that a library needs to be evaluated on: financial perspective, customer/client perspective, internal business perspective, and innovation and learning perspective. The sections enable a thorough evaluation process and ensure great performance and new innovations. Through the use of competing value framework, libraries can use the Organizational Culture Assessment Instrument (OCAI) to constantly check their performance and relevance. According to [Cameron and Quinn \(2011\)](#) an Organizational Culture Assessment Instrument (OCAI) is a validated research method to examine organizational culture and performance.
3. Justification of Funds: As mentioned earlier, academic libraries depend heavily on their parent organization administratively and financially. A clear innovative strategy can easily justify the need for academic libraries’ funds either from their parent organization or from donors and well-wishers. [Friend \(2008, p. 159\)](#) argues that with the current changes, and advancement in technology, libraries are expected to equally solicit for funds from others sources other than their parent organizations. Through the use of competing value framework and disruptive innovation, academic libraries can clearly justify the exact areas in the library that require change and innovation. For instance, with the introduction of new library services necessitated by disruptive innovation, using the competing value framework, the market will have to be trained on usage of the services, the library staff will need training, and it is probable there will be a need to readjust the organizational structure of the library.
4. Relevancy: The diverse change of information sources, and equally the change of library users’ behaviours in access and utilization of information, necessitate the need for academic libraries to adjust and

align themselves with current developments. Damanpour (1991) as cited by Bieraugel (2015, p. 354), notes that “organizations innovate to become more effective, to gain new customers and retain existing customers.” Innovative strategies enable academic libraries to align themselves. With the growth of technologies and shrinking budgets, academic libraries need to justify their presence and role (Martin & Sheehan, 2018, p. 74). Bieraugel (2015, p. 352) suggests that academic libraries should consider using the “lean startup method” to manage innovations. The “lean startup method” according to Liker (2004, pp. 27–31.) as cited by Bieraugel (2015, p. 352) is a “method that examines a manufacturing or business process, determines which parts of the process add value for the customer and which parts do not and removes the non-value-add parts”. The “lean startup method”, in other words, is used to eliminate redundancy and at the same time avoid disruption of the normal working environment. Using the disruptive innovation theory, academic libraries are able to monitor library users’ preferences fostered by entrants against the existing incumbent resources and services, evaluate and analyze, then decide on the most appropriate services and resources that offer value addition. The disruptive innovation theory keeps an organization cognizant of any entrants into the market, enabling an organization to align itself with the ultimate goal.

Entrepreneurial theories and principles in academic libraries

The application and use of entrepreneurial theories and principles is slowly invading the library space. Weech (1994, p. 70) notes that in the US, most ALA-accredited library and information studies programs in universities had introduced business courses in their curricula. The use of business terms and strategies is not new; the inception of the business model in the library occurred with marketing principles. Spalding & Wang (2006, p. 494) in earlier studies, noted that “libraries are discovering that by using marketing principles and techniques, they can understand better their users’ needs, and meet the identified needs of their clients”. Libraries became more focused on user awareness and advocacy of their services and products. However, with the current paradigm shift, the need for business entrepreneurial theories in academic libraries is important for academic library survival, change and overall application of innovation strategies for sustainability. Kiszl (2021) alludes to the importance of financial literacy in library education to enhance innovation in libraries.

Significance of entrepreneurial theories and principles in academic libraries

Academic libraries are no longer in competition among themselves, but rather with external markets and partners. They must be strategic if they are to survive the market and continuously be relevant. This necessitates adoption of entrepreneurial theories and principles, such as:

- i. Innovative Perspective: The speed at which technology is advancing means one cannot lack innovative strategies. One either changes and survives or sticks to old habits and becomes redundant and obsolete. Academic libraries need to constantly engage in change of product and services, and this can be possible if they continually evaluate themselves and the target market needs. Using the competing value framework, the academic library is able to align itself in four different categories where change and innovation occur in an organization. (1) Leadership in the hierarchy. Leadership involves vision and competent direction to provide an adequate library organizational and bureaucratic structure that yields positive results. (2) Market. A market is the targeted users, and academic libraries must be able to work with the customers and understand their needs. (3) Clan. This involves teamwork and also education competency of the staff, to enable results and teamwork. (4) Adhocracy. This

involves continuous innovation and creation of value-added services and products.

- ii. Supply Chain and Demand Perspective: The concept of supply chain and demand is fundamental in any business. Application of entrepreneurial principles and theories will enable academic libraries to measure their users’ demand against their supply. For instance, academic libraries may believe the bigger the library the better, the bigger the book collection the higher the demand. However, with the introduction of the internet, the concept of the library as a physical space has slowly eroded. Using disruptive innovation theory, the academic library can evaluate the relevance of products offered and service performance over time. This can enable the academic library to adjust and provide services that are on demand and user-focused, not simply what libraries may think is relevant.
- iii. Establishment of Dynamism in Market: The concept of the market refers to the targeted library users in terms of products and services needed. Academic libraries’ clientele consists of students, academic staff, faculty members and researchers. Currently, the academic market is diverse, with the young population who are focused on new technology and some professors who are still entrenched in older methods of accessing information. Academic libraries need to establish their market and be able to service all these patrons effectively, without isolating any of them. Failure to do this can lead to Low-Market disruptive innovation as discussed above (Fig. 4), where an entrant comes into an organization and focuses on the under-served customers. Using the competing value framework, the Adhocracy and Market culture focus on the external dimension, creating services and products for the intended market.
- iv. Competitive Strategies: As mentioned earlier, academic libraries are in a competition, and there is a need for them to establish effective marketing strategies in order to be successful against competitors. For instance, in the business world, one can clearly see how the introduction of email almost negated the survival of postal offices, how mobile phones have all but eliminated the landline telephone and pagers from the market. Using the disruptive innovation theory, we can see that these competitions brought about with New-Market disruption innovation a situation whereby a new product comes into the market at a lower level and quickly competes with a well-established product. In academic libraries this can be equated with the introduction of the internet and computers. They are currently the major competitors of physical libraries and physical resources. Academic libraries therefore need to align themselves and establish appropriate strategies to incorporate new and advanced technology so as to remain relevant to the market.

Entrepreneurial theories and principles have significance for academic libraries, as they will assist with conceptualizing appropriate ways of offering services in a competitive environment and surviving the transitions taking place. Academic libraries should start thinking beyond the concept of physical books and clientele or risk, as Christensen and Leslie (2001) explain, going the way of large, established companies that failed against small, errant companies simply because they failed to adapt and adopt new technologies.

Conclusion

The growth and advancement in technology has brought disruptive change in the way academic libraries have traditionally operated and been managed. The change in information access, services and products is happening at speed, and academic libraries must constantly re-evaluate themselves. The competing values framework and disruptive theories offer just some of the principles that academic libraries can consider adapting for their use. For a comprehensive, innovative change

to occur in academic libraries, library and information studies curricula should offer blended programs that ensure librarians are financially literate so that they can implement and adapt these innovative business and entrepreneurial theories and principles.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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