



Performance Management in Academic Libraries: A Balanced Scorecard Approach for Digital Services

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ABSTRACT

The purpose of this article is to demonstrate how the Balanced Scorecard could be used as a performance management tool in academic library digital services at a large multi-campus University in Ghana, the University of Education, and Winneba. Despite the fact that it was initially designed for private sector commercial organisations, the Balanced Scorecard has been found useful by non-profits such as libraries. The study demonstrates the contribution of digital library services to the strategic goals of universities by aligning strategic digital library initiatives to the four Balanced Scorecard perspectives which are: customer; finance; internal processes; and learning and organisation. The study is expected to contribute to efforts at finding strategic measures to sustain digital library services in academic libraries.

Keywords: Balanced scorecard, Digital libraries, Performance measurement, University of Education, Winneba.

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I. Introduction

Academic libraries have adopted the Balanced Scorecard (BSC) as a performance management system (Wing, 2011). Performance management in academic libraries has become a critical component of academic library planning with its ability to reinforce library strategy and complement scarce resources. Performance management is a key element in evaluation in the strategic management process. The BSC is a widely accepted organisational performance model that ties strategy to performance in four critical areas: Finance, Customers, and Internal Processes, and Learning and Growth. Despite the fact that it was initially designed for profit-driven private sector businesses, the Scorecard has been found useful by non-profits such as libraries (Wing, 2011).

The BSC is the brainchild of Harvard Business School professors Robert S. Kaplan and David P. Norton who developed it in the 1990s to counter the emphasis on financial measures as the most important factor of organisational growth. According to the authors, technological and social changes require new approaches to evaluate and promote the performance of an organisation (Kaplan & Norton, 1996). They opine further that while it is important to retain financial benchmarks of

previous performance, the BSC introduces the enablers of future financial performance which includes customer, internal business process, and learning and growth perspectives. They conclude that these measures are extracts from a thorough and stringent understanding of the organisation's strategy into actual objectives and measures (Kaplan & Norton, 1996). Some experts are of the view that the resultant connections between the measures enhance the organisation's ability to achieve a stable strategy (Lewis, Hiller, Mangle & Olson, 2013). Furthermore, strategic initiatives are directly aligned to the measures, which in turn result in the implementation of programmes which can help to meet the goals of the organisation being aligned in the Scorecard.

The Harvard Business Review names the BSC as one of the most valuable innovations of the modern era (Given, 2003). In 2002, Bain and Company disclosed that about half of Fortune 1,000 companies in North America and about 40 per cent in Europe were using a version of the BSC (Kaplan & Norton, 2001). However, with the growth of the concept, a large number of non-profit institutions have adopted the BSC as a tool to achieving organisational success. These late adopters include the health sector (Trotter, Cardamom, Caballero, & Mauro, 2013; Ming, 2013); education (Brown, 2012; Kurt Shovel & Cam Schooled, 2012); and the public sector (Northcott & Taulapapa, 2012). In the educational sector, attempts at

applying the BSC have unsurprisingly included academic libraries. Mengel and Lewis (2012) Matthews (2008) identifies a number of libraries using the BSC such as the Singapore Public Library, University of Virginia Library, Johns Hopkins University Library, McMaster University Library and the University of Virginia Libraries. The University of Virginia Libraries has used the BSC since 2001 (Mengel & Lewis, 2012).

Research into the use of the BSC abounds in several non-profit and public sector organisations which, hitherto, identified financial measures like budgets, donations, expenditures and budgets appropriated as performance indicators (Kaplan, 2010). In the library literature, research into the use of the BSC in academic libraries is growing fast (Matthews, 2008; Matthews, 2011; Corral, 2015; Mengel & Lewis, 2012; Reid, 2011). Reid (2011) asks in her study if the BSC was appropriate for performance management in academic libraries. She answers that the BSC is a relevant tool that can assist academic libraries to demonstrate their value as knowledge organisations capable of offering quality services to the academic community. Mengel and Lewis also emphasise the role of the BSC as a collaboration-enhancing tool for academic libraries, while Corral (2015) views the BSC's strategy map as a tool to unravel the tacit qualities and expertise of subject librarians.

Kaplan (2010) affirms this new direction by libraries to balance financial measures with non-financial measures, insisting that the use of financial indicators alone in assessing performance of libraries is not appropriate. He maintains further that libraries, as service organisations, should be measured by their ability to provide effective services to their communities. This makes the use of the BSC ideal for performance management in academic libraries. Despite the utility and applicability of the BSC in African academic libraries, published research within the African context is lacking in this area of strategic planning. This research is, among others, aimed, principally, at demonstrating the application of the BSC in African academic libraries, and in particular Ghana. It also seeks to propose and promote the use of the BSC to complement strategic planning and management initiatives in Ghanaian academic libraries. Finally, the study is intended to demonstrate the value of digital library services in academic libraries by aligning strategic initiatives to the strategic goals of its parent institution.

II. Statement of the Problem

Academic libraries are increasingly facing budget cuts and are often being required to justify their request for new, innovative services, showing how these expensive services "fit in" the organisational strategy of their parent institutions. Digital library services are innovations with the potential of revolutionising library services. However, the high costs of developing digital library services also mean that academic libraries are constantly called upon to justify their request for funding, and provide evidence of return on investments, often in financial terms. This need for justifying investment in innovative library services through financial measures often places undue pressure on academic libraries. This is because libraries are, essentially, non-profit, service organisations which should

be evaluated by their ability to provide effective services to their communities (Kaplan, 2010). Consequently, academic libraries are constantly uncertain of the sustainability of their digital services, even if they are initiated at all.

This study proposes the application of the Balanced Scorecard as a performance management tool to demonstrate the value of academic library digital services on the academic community. To achieve the principal objective of this study, the authors demonstrate how the BSC may be used to align the strategic digital library initiatives of an academic library with the strategic goals of the library's parent institution.

III. Background and Strategic Goals of the University of Education, Winneba (UEW)

The University of Education, Winneba is a large multi-campus university in Ghana comprising a main campus, three satellite campuses and 33 distance learning centres across Ghana (UEW Diary, 2017). The University is one of the largest teacher education universities in Africa with a total student population of 57,000 (UEW Diary, 2017). Due to its focus on teacher education, it employs distance education as a major strategy to upgrade and train both under-qualified and unqualified teachers without requiring their leaving the classroom for full-time education. The University is, therefore, expected to plan strategically in order to achieve its goals. The overall goals of the University are expected to be achieved at the micro-level, where every department, including the University Library, is expected, to support the University Strategic Plan by aligning their own department-level goals to that of the University.

The five-year (2014-2018) Corporate Strategic Plan of the University of Education, Winneba was designed to build on the gains of its predecessor (2003-2008) Corporate Strategic Plan, which was developed prior to the university attaining full-fledged university status. Thereafter, a subsequent strategy (2009-2013) was to help the university in its transition period as a full-fledged university. Implementation of the previous Plan was by means of an innovative peer-campus-review process by the Strategic Plan Monitoring Committee (SPMC). The 2014-2018 Corporate Strategic Plan has been developed to ensure that the University is strengthened to remain focused on its vision of being an internationally reputable institution for teacher education and research; and on its mission of training competent professional teachers for all levels of education as well as conduct research, disseminate knowledge, and contribute to educational policy and development. The current Plan will vigorously pursue National, Regional and International Partnerships for Development. There is the need to improve on the branding and visibility of the University in the international arena, and to enhance regional and international collaborations in this highly-technological and globalized world.

Another priority area in this Plan is the enhancement of quality assurance. There is also the need to improve on the monitoring and evaluation of academic programmes, institutionalize Control Self-Assessment (CSA) programmes and ensure maintenance of processes,

standards, and guidelines for quality assurance in the University. Priority will increasingly be given to enhancing excellent academic standards in teaching, learning, and research. Provision of state of the art teaching and learning equipment and facilities to consolidate achievements in academic standards will be vigorously pursued. Another major area of concern is the adoption of administrative procedures in anticipation of the implementation of the collegiate system of governance in the University. As such Information and Communication Technology (ICT) will be harnessed to pursue the core functions of the University.

Pro-poor policies and affirmative action strategies are another anchor of the Plan as it makes provision for access to equity for the underprivileged, the marginalized, persons living with disability and to less endowed schools. Relatively, the Plan makes room for the provision, improvement and expansion of distance education services, facilities, and opportunities as it is critical to providing access to education (University website, 2015).

IV. Digital Library Services at the University of Education, Winneba

The University Library System of the University of Education, Winneba consists of a main library, and three satellite libraries on the three satellite campuses. Through the Consortium of Academic and Research Libraries in Ghana (CARLIGH), the Library subscribes to 38 academic databases which provide access to approximately 38,000 online journals. To ensure access to these resources, the library provides computing facilities on all campus libraries with Internet connectivity. Remote access is provided through wireless connectivity facilities for library patrons with laptops, and hand-held devices like I-Pads and smart phones. In addition to these resources, the library has implemented an institutional repository where scholarly works of students, faculty and other members of the university are uploaded to promote wider distribution of these resources. The library has also deployed an online catalogue, brand-named WINNOPAC, which enables library patrons to search for records of library materials via any computer or hand-held device with Internet connectivity (Library Guide, 2013).

V. Performance Management in Academic Libraries

Academic libraries have long been collecting data that are geared towards the organisational function (Lewis et al., 2013). Some of these data include input measures, data that involves the quantity of resources that are committed into the provision of information resources and associated services. Input measures often concern the development of collections, physical resources (facilities), human resources, finance, and technology. According to Matthews (2011), quantifying input measures is, relatively, the easiest. On the other hand, tracking the actual use of these resources and services is achieved through the use of output measures that actually keep track of uses or transactions associated with library activities (Lewis et al., 2013). In a digital library service

like an Institutional Repository (IR), these might include number of Web site visits, number of downloads, computer log-ins via library or remote terminals etc. Output measures may be indicators of the effectiveness of library services. A weakness of output measures are, however, their ineffectiveness in gauging the impact of actual services on library patrons. Furthermore, they are incapable of being matched to any strategy or set of objectives.

Another approach to performance management in libraries is the use of *process measures* or *productivity measures* (Matthews, 2011). These tracks the range of tasks that are undertaken to process inputs into outputs. These measures estimate the depth of analysis required to assess the cost and time needed to achieve an effort. For instance, the amount of time needed to upload a dissertation or a pre-print into the digital library of one library compared to that of another library. Relatively, process measures can anticipate the average download time for digital objects in the digital library. Finally, *outcome measures* are useful in depicting the level of use of digital library resources. Matthews (2015) describes outcome measures as a measure of success that indicates how well the digital library is performing.

VI. The Balanced Scorecard Process

The BSC represents one of the major tools for performance management in modern organisations through its ability to match the goals of the organisation and its strategy in an effort to create a matrix of action indicators (Chan & Ho, 2000). As opposed to other established approaches, the BSC is characterised by a number of strengths. Firstly, the BSC can provide organisational leaders with an impartial outlook of the business and relate this outlook to the prospects of the business (Kaplan, 2010). Secondly, it also enhances the possibility of connecting personality attributes to the goals of the organisation (Zelman et al., 1999; Kaplan, 2010). Thirdly, the Scorecard may enhance the ability of the organisation to anticipate the prospects of the organisation in the short to medium-term (MacStravic, 1999). Finally, the BSC may assist the organisation to strategise through specific objectives which may be implemented across the organisation (Kaplan, 2010). As with many other prominent performance management models, the Balanced Scorecard process appears relatively straightforward. Kaplan (2001) advises potential adopters to:

1. Determine the organisation's strategy and specify them into four measures, namely, Finance, Customer, Internal Processes, and Learning and Growth.
2. Represent the strategic objectives into a strategy map.
3. Develop a series of performance measures (metrics) to track the achievement of the strategic objectives.
4. Develop high standard targets that are within reach for every single metric.
5. Determine prudent actions to enhance the chance of achieving the set targets.
6. Communicate with both internal and external stakeholders on the progress of the Scorecard.

7. Reflect on, and make necessary changes as needed.

In spite of this relatively straightforward approach, implementing the Balanced Scorecard requires a comprehensive commitment in terms of time and fiscal resources, as well as, cooperation from upper to mid-level leadership to rally support for the various tasks involved in implementing the Scorecard. Implementing the Scorecard also requires the organisation to engage in deep reflection of its present and prospective aspirations, which hitherto, remained on the fringes (Lewis et al., 2013). These dynamics can significantly affect the allocation of resources in the organisation. Mano and Creaser (2014) affirm these challenges, adding that the process of implementing the BSC is a difficult one which may require specialist expertise or software. They indicate further that, the selection of key performance indicators (KPIs) is also another important challenge. This is due to the lack of an explicit approach to guide the selection of these KPIs. However, they found in their study that factors such as, relevance of the KPI to the organisational strategy, prior knowledge or familiarity with a KPI, and the use of measures by benchmarking partners, may be useful in guiding libraries deploying BSC during the selection of their KPIs ((Mano & Creaser, 2014).

The BSC seeks to obtain stability in the performance of the organisation. This involves achieving stability among factors in three areas of performance measurement: financial and nonfinancial indicators, internal and external stakeholders, and lag and lead indicators. Furthermore, there is also a need to ensure stability between financial and nonfinancial measures. Nonfinancial measures are crucial as they enhance the future prospects of an organisation. Again, nonfinancial measures ensure that challenges are identified on time and addressed within a certain time-frame (Gumbus, 2005). To reduce the chances of confrontation between internal stakeholders, such as, employees and internal processes and external stakeholders (funders, legislators, and customers), Niven (2003) opines that their perspectives must be integrated into the Scorecard.

One of the major roles of the BSC is its performance measurement role. This role is achieved through a mix of *lead* and *lag* indicators that relate to finances, customers, internal processes, and growth and development (Niven, 2003). According to Niven (2003) lag indicators consist of performance indicators including, revenue or customer satisfaction, while lead indicators are "the performance drivers that lead to the achievement of the lag indicators". The Figure below depicts the performance indicators described:

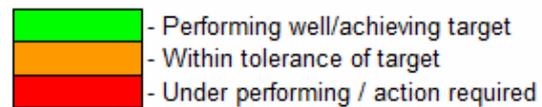


Fig. 1. Performance indicators

VII. A Scorecard for University of Education, Winneba (UEW) Digital Library Services

The literature shows a number of successful BSC deployments in public and non-profit sector institutions. Kettunen (2007) argues that the BSC has the potential to enhance the ability of the library to concentrate on more efficient methods of achieving quality services. Figure 2 depicts how an academic library can begin translating the core BSC perspectives into its organisational strategy.

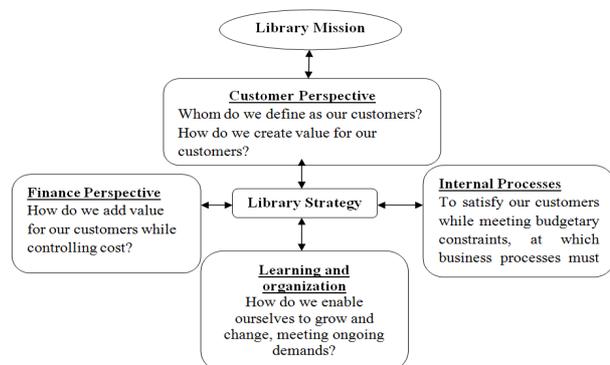


Fig. 2. A strategy map (Niven, 2003)

a. The Customer Perspective

The customer perspective is focused on the short-term needs of the academic community and its external partners (Ruben, 2004). Ruben (2004) contends that both the teaching environment and learning environment shape the user experience of students. In the library context, these include physical infrastructure, library spaces, rules and regulations, and standard communication procedure, among others. Consequently, an examination of the Corporate Strategic Plan of UEW reveals that Theme 1 of the Plan which reads: "Excellent academic standards in teaching, learning and research" is a customer-focused objective. If aligned to the BSC, four sub-objectives emerge which have been captured into three succinct objectives. These sub-objectives have been further aligned to the library's strategies and are rendered in Table 1.

TABLE I
CUSTOMER PERSPECTIVE

<i>Library objective</i>	Measures	Strategic initiatives	Targets
<i>Integrate the library into the university's teaching, learning and research mission</i>	Implement emerging technology services Promote library involvement in student learning Promote library involvement in student learning (online)	Needs assessment Cloud Storage Digitization Program Institutional Repository Needs assessment Information Literacy instruction Needs assessment Online instruction Digital reference Remote circulation services Remote access to subscription databases	Achieving target
<i>Facilitate scholarship</i>	Implement a digital library strategy that supports scholarly activities New discovery search interface that will be more user friendly and increase visibility of library resources Expand scope of special collections and increase use of special collections and archival materials	Needs assessment Electronic books and journals Integrated library management system Needs assessment Mobile OPAC Services Needs assessment Institutional repository Digitization Cloud services	Within target tolerance
<i>Improve the reputation of the university</i>	Library staff representation on University-wide groups Library staff understanding of university's strategic directions. University community's awareness of the value the Library adds to their activities. Establish strategic partnerships with national and international library bodies and agencies	Involvement in statutory committees' work Conferences Attendance of convocation Staff training and development User awareness survey Marketing Consortia Sister library agreements	Action required

b. The Finance Perspective

The finance perspective focuses on financial resources spent on collections, technology, staffing and training and operations. This perspective is divided into two areas: outcomes and future growth. Outcomes includes cost breakdown of assets and capital, investment in human capital, and tracking and reporting on program support. These outcomes are expected to fuel future growth and

enhance value for stakeholders, improve talent management and knowledge management, fund innovative new services and support new curricula and programmes. All pathways were included in this perspective, indicating the need for financial support in all areas of the strategic plan. Table 2 presents the finance perspective.

TABLE II
FINANCE PERSPECTIVE

<i>Library Objective</i>	Measures	Strategic initiatives	Target
<i>Grow services through an expanded development programme</i>	Improve staff skills in proposal writing and grantsmanship Decentralise financial allocation Seek membership of library consortia to ensure reduced cost in library resources e.g database subscriptions	Needs assessment Grant and proposal writing workshops Separate campus library budgets Consortium activities	Achieving target
<i>Create financially sustainable services</i>	Ensure efficient and effective use of facilities, space, services, systems and resources. Engage in library publishing activities Plan collaborative research activities	Needs assessment Information Commons Needs assessment Open access institutional repositories Editorial unit Needs assessment Research conferences Departmental seminars	Action required

c. Internal Processes Perspective

This perspective is concerned with the business processes that must be pursued in order to satisfy shareholder and customer needs (Kaplan, 2011). These include the processes of recruiting staff, building collections, providing services and implementing appropriate technologies. Following careful analysis, it is found that Theme 3, “Enhanced access and equity” represents the internal processes perspective. This implies enhancing access to digital library resources, services and

technologies on the one hand, and addressing staff concerns on work processes on the other. Table 3 depicts the paths in this perspective. This perspective is the basis of any strategy and it involves the intangible resources of an organization. The concerns of this perspective are the internal skills and expertise required to sustain the internal processes. The learning and innovation perspective is concerned with the jobs, the systems, and the climate (organization capital) of the enterprise.

TABLE III
INTERNAL PROCESSES PERSPECTIVE

Objective	Measures	Strategic initiatives	Target
<i>Ensure preservation of the scholarly record</i>	Implement strategy to grow relevant and valuable collections to support teaching and learning. Establish linkages with academic departments for depositing rules of scholarly works.	Digital libraries e.g Institutional repositories Faculty librarian programmes	Achieving target
<i>Maximise space for research and scholarship</i>	Establish library self-services Develop new policies on library learning culture	Research commons Updated library rules	Action required
<i>Improve discovery of and access to scholarly resources</i>	Promote collection Satisfaction Increase downloads from the Institutional Repository Promote use of licensed e-resources Promote digitisation Electronic migration of serials	Electronic Books Improved bandwidth Marketing Digitisation centre Web site Re-engineering Cloud Storage Digitization Program	Achieving target

In the context of digital libraries, this perspective will determine the provision of the information technology infrastructure (local area network, link to the Internet, and application software), and whether or not this provision may result in efficient and effective digital library services. Learning and innovation perspective is also concerned with whether or not the library staff possess the optimum morale for their jobs. Finally, this perspective will also be concerned with whether or not evaluation and assessment is integrated into the organisational culture of the library. Again, a critical look at the strategic plan of UEW shows that Theme 2, i.e. “Proactive and responsive

administrative system” represents the innovation perspective in the Plan. After aligning the elements in the strategy to the BSC, a scorecard is produced for this objective. The first path applies to the development of human capital; the second to technology capital; while organisational culture was added to support the other two. Human capital includes the skills, training and knowledge of the work force; technology capital includes systems, databases and networks; while the last path is dedicated to organisational culture which involves leadership, alignment and shared values.

TABLE IV
LEARNING AND INNOVATION

Library Objective	Measures	Strategic initiatives	Target
<i>Recruit, motivate and develop the highest quality library staff</i>	Institutionalize staff mentoring system Improve library budget for staff development Sponsor more staff to upgrade themselves Establish linkages with academic departments and other libraries or library organisations	Staff mentoring schemes Staff development Scholarships Exchange programmes	Within target tolerance
<i>Effectively implement re-organisation and strategic plan</i>	Build and resource campus libraries. Ensure the integration of services across campuses Promote use of common library software in all libraries	Well-resourced satellite libraries Inter-library loan and document delivery services Common proprietary or open source library management system	Achieving target
<i>Implement service assessment and accountability to the UEW community</i>	Implement service assessment plans	LibQual surveys Regular user assessments	Action required

VIII. The Balanced Scorecard: Implications for Digital Library Services

a. Implications for Customer Service

The ultimate goal of the customer perspective in digital library development is to develop digital services that are community-oriented. According to Calhoun (2014:163), community orientation requires that the builders of a digital library are members of the user community. In the context of this study, librarians who are promoting digital library services must be known members of the University community and must be seen to associate with other campus stakeholders such as faculty and administrators. Most importantly, digital resources are expected to be integrated into the curriculum through collaboration and partnership (Diaz, 2012).

Furthermore, to demonstrate how financial investments fulfil user needs, academic libraries must be engaged in branding activities. Branding involves “communicating the identity, intent and nature of a digital library” (Calhoun, 2014:163). This communication must be done with the intent of making the digital library attractive to potential users which is expected to culminate in users developing a habit of associating with that particular library service. This can result in faculty who are committed and not indifferent on the value of digital resources from the library, with trickling effects on students’ desire to use digital library resources.

This level of interaction with the user community may be achieved by designing and reconstructing digital libraries as interactive and in a socially-situated context (Chern, 2014). Wasson (2011) refers to the “living, adaptable, and expansive” system that also adapts to changing technologies (Parry, 2007) and involves staff in the earlier stages of development (Pattueli, 2011).

b. Implications for Funding and Sustainability

Traditionally, libraries’ involvement in strategic planning has not been the norm, because libraries have been given to the mistaken notion they are indispensable (McNicol, 2005). Boadi (2006) notes that there is a new paradigm shift in this direction due partly because libraries are facing declining budgets; inflation resulting in reduced book and journal subscriptions; technological developments in digitization of the collections, setting up of institutional repositories and online catalogues. These factors require concerted efforts on the part of libraries to make up for the shortfalls in their finances to continue to innovate and sustain existing digital services. As such measures to achieve this goal must be adopted. Among them is the need for staff of academic libraries implementing digital initiatives to participate in consortia activities where members have the opportunity to practice, learn and innovate in important areas such as interlibrary networking and sharing of digital content, information literacy skills, online instruction and digital reference; strategic planning and budgeting etc.

c. Implications for Service Innovation

The over-arching goal of this perspective in the academic library is the achievement of continuous improvement of digital library services, facilities and resources; enhancing the availability and visibility of course materials and ensuring cost-effective planning and implementation of information skills programs. This perspective also concerns the promulgation of measures to ensure the goals of the digital library and ultimately value to the user. An important goal of this perspective is the provision of vital collections to support teaching and learning. The initiative for this strategic objective could result in the setting up of an information system such as an institutional repository which must necessarily contain valuable digital learning objects needed by learners. This perspective also requires meeting service standards, e.g content upload turnaround time and ensuring non-duplication of print materials or vice-versa to optimise financial inputs. Again, the long-term impact of this initiative can be seen in library staff who are abreast with standards and service charters in the deployment of digital services and technologies.

d. Implications for Learning and Innovation

This perspective, sometimes called “Learning and Growth,” “Innovation and Learning,” or “Potentials,” determines the organization’s competitiveness in the long-term (Kaplan & Norton, 1996). In the case of digital libraries, librarians are expected to possess essential ICT skills and competencies to enable them bridge the digital divide (Kavulya, 2007). Alemna and Cobblah (2005) suggest the training of digital librarians in networking and database development, programming, and digitization to enhance the ability of librarians to manage digital libraries.

Similarly, the information technology readiness assessment is designed to ensure that the IT infrastructure are standard and may not be subject to technological obsolescence in the short term. This requires investment in state-of-the-art technology from well-known vendors who provide after-sales support and long-term warranty. Such steps may sustain the digital library infrastructure from any eventuality. Finally, cultivating the culture of regular and routine assessments may augur well for the sustainability of the digital library. This requires the digital library managers to integrate assessments and evaluation into the processes of learning and innovation. Specifically, the development of library user surveys may be able to focus the goals of the digital library; enhance the appeal of the digital library contents; and determine the features, attitudes and information behaviour of its target audience (Calhoun, 2014:162).

In terms of digital library readiness, this perspective is basic to the success and sustainability of digital projects. According to Poll (2001), this perspective refers to “the capability of the library to cope with the challenges of the future and its ability to change and improve”. Consequently, matters of interest to the human capital, technology and organisational culture are cardinal in this perspective. Digital libraries cannot succeed without well-

trained personnel. Therefore education, training and mentoring is at the heart of this perspective. The strategic initiatives that must be adopted should include staff mentoring schemes, training schemes and exchange programmes to nurture and develop the capacity of digital library personnel. Furthermore, there must be a commitment on the part of library and institutional leaders to commit investment into training and development to achieve this goal.

IX. Conclusion

The aim of this article was to propose the use of the Balanced Scorecard in justifying the role and demonstrate the impact of digital library services on the strategic goals of the University of Education, Winneba, in Ghana. To achieve this, the paper demonstrates how strategic digital library initiatives may be aligned to strategic measures identified in the Strategic Plan of the University. This paper concludes that academic libraries may achieve their role and purpose, and be sustainable, if they are able to demonstrate how their digital services affect the University's customers, finance, internal processes, and learning and innovation.

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