DIGITAL LIBRARY READINESS IN AFRICA: A STRATEGIC HUMAN RESOURCE PERSPECTIVE

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Abstract

The success of any digital library endeavour significantly depends on the human capital of the implementing organisation. Many African institutions and academic libraries in developing countries are focusing and channeling significant resources into planning and setting up digital libraries. However, the main hurdle for many of these efforts is the human resource capacity of staff expected to implement these projects as several studies show a considerable skills gap in many digital library projects leading to sustainability challenges.

The aim of this paper is to propose the application of the Balanced Scorecard (BSC) in evaluating digital library resources and services in Ghana to determine the readiness of academic libraries in implementing sustainable digital library services. As a result, the study examines the strategic plan of a multi-campus public university in Ghana with a view to aligning it to the same university's library digital strategy using the BSC. The study proposes to academic libraries involved in digital initiatives to be mindful of the digital, financial and societal contexts in which they operate.

The study is expected to contribute to efforts at finding strategic measures to drive the vision of the digital library African institutions.

Introduction

The need for performance management in academic libraries has become a critical success factor in the digital age. Increasingly, academic libraries are required to implement performance management in their quest to reinforce their strategy and complement their resources. Performance management is a key element in evaluation in the strategic management process. Strategic management consists of a set of managerial decisions and actions which determines the long-term performance of an organisation (Wheelen & Hunger, 2012).

One of the performance management systems that have recently been adopted by libraries is the Balanced Scorecard (BSC), largely seen as a strategic human resource management (SHRM) tool. Lepik (n.d.) describes SHRM as the linking of human resources with strategic goals and objectives.

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The BSC is a widely accepted organizational performance model that ties strategy to performance in four critical areas: finance, learning and growth, customers, and internal processes. While originally designed for profit-oriented private sector organisations (Weng, 2011), the Scorecard has been adopted by non-profit and government organizations, including some libraries. The BSC is the brainchild of Harvard Business School professors Robert S. Kaplan and David P. Norton in the early 1990's as a reaction to the industrial age emphasis on financial measures as the sole indicator of success. The thrust of their work was captured in their award-winning book The Balanced Scorecard: Translating Strategy into Action. They argue that the economic realities of the information age require a more well-rounded set of measures to evaluate and drive an organization's performance:

> The Balanced Scorecard is a new framework for integrating measures derived from strategy. While retaining financial measures of past performance, the Balanced Scorecard introduces the drivers of future financial performance. The drivers, encompassing customer, internal business process, and learning and growth perspectives, are derived from an explicit and rigorous translation of the organization's strategy into tangible objectives and measures (Kaplan & Norton, 1996).

Linkages between measures (both within and across the four perspectives) help ensure that the organization maintains a truly "balanced" approach (Lewis, Hiller, Mengel & Tolson, 2013). Similarly, strategic initiatives are directly aligned to the measures, resulting in the implementation of programmes with prospects of helping to meet the goals of the organization being aligned in the scorecard.

The Harvard Business Review recognises the framework as one of the top 75 most influential ideas in the 21st century (Niven, 2003). In 2002, Bain & Company found that about 50 per cent 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, as the concept has matured, the pool of non-profit organizations exploring the use of the Balanced Scorecard has grown along with specialized expertise in the use of the model in specific settings. Research into the use of the scorecard has begun to proliferate 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). These late adopters include the health sector (Trotta, Cardamone, Cavallaro, & Mauro, 2013; Ming, 2013); education (Brown, 2012; Kurt Schobel & Cam Scholey, 2012); and the public sector (Northcott & Taulapapa, 2012). In the educational sector, significant attempts at applying the BSC have unsurprisingly included libraries. Matthews (2008) identifies in a list a number of libraries using the BSC such as the Singapore Public Library and the University of Virginia Library. Obviously, this list enumerates only a small number of academic libraries who have adopted the scorecard (Lewis,

Hiller, Mengel & Tolson, 2013). Kaplan (2010) affirms this new direction by libraries by insisting that their performance cannot be measured by financial indicators but by their success in providing effective services to their communities which involves use of non-financial measures.

The mission of academic libraries is to support teaching, learning and research. Failure to effectively support the achievement of these goals, according to Hughes (2000), would result in increasing competition in the delivery of information services for higher education, implying that academic libraries might lose their position in providing information services to their parent institutions. Consequently, academic libraries have implemented digital libraries as a response to user-centred requirements in education. Digital libraries in the 21st century have a considerable positive impact on education, as it enables sharing of learning resources in support of not only distance education, but also on-campus and independent discovery-based learning (Fox, Gonclaves & Kipp, 2002). The growth in the development of digital libraries is attributable to the rise of lifelong learning and the move towards student-centeredness, with problem-based methods in teaching and learning; a phenomenon which has led to the recognition that digital libraries are crucial in providing access to much needed digital information sources (Tedd & Large, 2005:14). Digital libraries are defined by the Digital Libraries Federation (2002) as:

> Organisations that provide the resources, including the specialised staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities.

Digital libraries offer enormous opportunities to developing countries to participate in global affairs and raise the standard of living of their people. According to UNESCO (2006), digital libraries are critical in developing countries. One reason for this is that traditional sources of information – for example, books – are often hard to obtain, and digital libraries make it possible for large numbers of people to access them at a potentially low replication cost. Another reason is that web access in developing countries is typically low, widening the knowledge gap between the developed and developing world. Digital library technology can ameliorate this, because – despite many people's assumptions to the contrary – it does not have to depend on the Internet for distribution.

An important goal of digital libraries is to support educational goals, an effort which has been recognized as an important issue by researchers (Shih et al, 2011). UNESCO (2006) describes three distinct roles that digital libraries can play in education:

- As an environment for learning (student experience);

- As an authoring space (again, in support of student experience);

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- As a resource for teaching (course development).

Statement of the problem

Academic libraries in Ghana are increasingly required to integrate their resources into the curriculum of their parent institutions to prove their relevance. Many institutions are running distance learning programmes which require the library to exploit available resources in support of distance learners as much as they support full time students (Alfrih, 2010). Again, libraries have had to deal with academic quality issues such as the need to distinguish between high and low quality research materials, due in part, to the proliferation of free open access resources online. Finally, the expectations on the library to assume a much more central position in the lives of the learning community by offering access to network services, information literacy training and virtual support services have placed new human resource requirements on the academic library in order to develop innovative services.

Digital library deployment is an expensive endeavour for many institutions in Africa particularly Ghana. The reasons are obvious. These include the huge financial outlay involved in subscribing to online databases, installation and maintenance of servers, acquisition of terminals, training costs, among others. However, in spite of the difficulties academic libraries experience, many have realised the immense goals of digital libraries and have therefore implemented digital library services.

However, one of the main challenges for academic libraries who are implementing digital library services is the need to sustain their services given the calibre of human resource capital within their organisations. This study is therefore aimed at proposing a strategic human resource management strategy to determine the readiness of African libraries in deploying digital libraries.

Study objectives

The aim of this paper is to propose the application of the Balanced Scorecard in evaluating digital library resources and services in Ghana to determine the readiness of academic libraries in implementing sustainable digital library services. As a result, the study examines the strategic plan of a multi-campus public university with a view to aligning it to the same university's library goals using the Balanced Scorecard. The basic question guiding the study is "What specific measures contribute to sustainable digital library services in academic libraries"? More specifically, the study intends to develop:

- measures for all critical activities of the library;

- a strategic human resource management approach for effective implementation of the library's strategic digital initiatives.

The Balanced Scorecard Process

The BSC is a strategic measurement and management tool that aligns the organisation's mission and strategy into a balanced set of integrated performance measures (Chan & Ho, 2000). Unlike traditional methods, the BSC has the following characteristics: (i) it provides management with a 'balanced' business overview that includes intangible assets and is correlated with critical outcome areas (Kaplan, 2010); (ii) the system facilitates the alignment of individual behaviour with organisational goals (Zelman *et al*., 1999; Kaplan, 2010); (iii) the BSC not only investigates past events but predicts also future performance through the use of forward-looking measures (MacStravic, 1999); and (iv) this 'strategic management' tool has an important role in implementing company strategies because it provides a system of management by objectives, a framework for the formulation, implementation and sharing of corporate strategies.

As with many other prominent performance management models, the Balanced Scorecard process appears relatively straightforward. Kaplan (2001) advises potential adopters to:

- Identify the organization's strategic objectives. Categorize these objectives into four perspectives (financial, customer, internal process, learning and growth);

- Render these objectives to a "strategy map," a one-page representation of the organization's strategic objectives;

- Construct metric(s) to measure progress on each objective;

- Set ambitious but reachable targets for each metric;

- Identify strategic initiatives to improve the chance of meeting targets;

- Communicate Scorecard results regularly – both to staff and stakeholders;

- Review and adjust the full complement of objectives, measures, targets and initiatives on a regular basis

In spite of this relatively straightforward approach, the Balanced Scorecard is not a simple or quick undertaking. The process demands a significant investment of time and intellectual labour. To be successful, the model also requires strong commitment from top level leadership and mid-level managers to champion the process to staff, customers and other stakeholders. Conversely, the impact on the organization can be equally significant. The Scorecard forces an organization to have new – sometimes challenging – conversations, and to analyse aspects of its current and future state that may have otherwise gone unexamined. Ultimately, the Scorecard may substantially shift an organization's strategic direction or dramatically change how its human capital and other resources are allocated. The Scorecard is, by its very nature, a change driver. And the change is relentless. The model

commits the organization to continuous and regular reflection and to communicate the results of those reflections with a new level of discipline and precision.

Achievement of equilibrium is at the core of the BSC system. Balance must be attained among factors in three areas of performance measurement: financial and non-financial indicators, internal and external constituents, and lag and lead indicators. Equilibrium must also be attained between financial and non-financial measures; non-financial measures drive the future performance of an organization and are therefore integral to its success. Further, the use of non-financial measures allows problems to be identified and resolved early, while they are still manageable (Gumbus, 2005). The sometimes contradictory needs of internal constituents (employees and internal processes) and external stakeholders (funders, legislators, and customers) should be equally represented in the scorecard system (Niven, 2003). A key function of the BSC is its use as a performance measurement system. The scorecard enables organizations to measure performance through a variety of lead and lag indicators relating to finances, customers, internal processes, and growth and development (Niven, 2003). According to Niven (2003), lag indicators are past performance indicators such as revenue or customer satisfaction, whereas lead indicators are "the performance drivers that lead to the achievement of the lag indicators". The figure below depicts the performance indicators described:

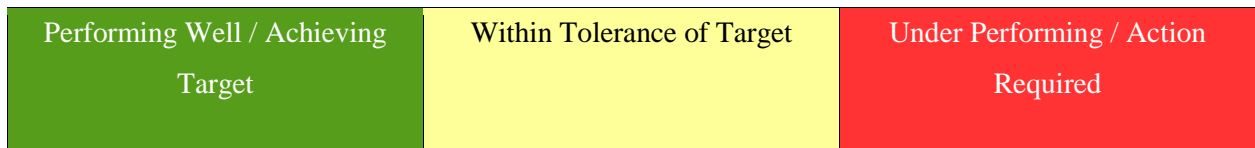| Performing Well / Achieving Target	Within Tolerance of Target	Under Performing / Action Required

Figure 1: Performance indicators

Balanced Scorecard principles and academic libraries

Even though a few libraries have adopted the Balanced Scorecard, libraries have a long tradition of collecting statistical and other measures related to organizational performance (Lewis, Hiller, Mengel & Tolson, 2013). Libraries collect input measures, which are the amounts of resources invested into the development and delivery of collections and services. Input measures often deal with collections, facilities, staffing, budget, and more recently, digital resources and technology. This results in records of the number of volumes, user seats, librarians, budget provision or computers. These data often form the basis of many of the regional or national statistical surveys where comparisons between libraries can be made.

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, Hiller, Mengel & Tolson, 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 are often used as stopgap initiatives for library

effectiveness. In spite of the strength of output measures, they do not actually measure the impact of specific services or resources had on that user. Nor are they connected to achieving any strategy or set of objectives.

The next set of measure, Process measures, tracks the activities related to turning inputs into outputs. These are occasionally called efficiency measures as they calculate the amount of time per activity or the cost of that activity (for example, the average length of time to upload a dissertation or pre-prints unto the IR or the cost of scanners). Relatively, process measures can incorporate the customer component such as the average time it takes to download order a dissertation or the required log-in procedures for the download to be completed.

Finally, outcome measures consist of the impact of a particular service or resource on the customer or what that service or resource enables the customer to do. Successful outcome measures are usually linked to objectives and goals, which may be defined by the parent institution or external stakeholders (Lewis, Hiller, Mengel & Tolson, 2013)

The University of Education Winneba (UEW)

UEW was established by the University of Education, Winneba Act 2004, (Act 672) on May 14, 2004. It was originally established by PND C Law 322 (1992) as the University College of Education of Winneba (UCEW) through the amalgamation of seven diploma awarding institutions - the Specialist Training College, the Advanced Teacher Training College, the National Academy of Music - all located at Winneba; the School of Ghana Languages, Ajumako; College of Special Education, Mampong-Akwapim; St. Andrews Training College, Asante-Mampong and the Advanced Technical Teacher College, Kumasi.

The University is charged with the responsibility of producing professional educators to spearhead a new national vision of education aimed at redirecting Ghana's efforts along the path of rapid economic and social development. The University of Education, Winneba is expected to play a leading role in the country's drive to produce scholars whose knowledge would be fully responsive to the realities and exigencies of contemporary Ghana and the West African sub region.

The University has four Campuses namely, Winneba Kumasi Mampong-Ashanti and the Ajumako Campuses. A fifth campus to host the College of Distance Education and Extension Services is being developed at Techiman. The University currently has eleven (11) faculties and forty-nine (49) departments.

At the end of the 2007/2008 academic year (i.e. at the beginning of the 2009/2013 Strategic Plan), student enrollment was 25,024 (45% female) comprising 14,175 full-time, 9,284 distance learning and 1,565 sandwich and part-time. The University had total staff strength of 1,465 (23% female)

comprising 322 research and teaching staff and 1,143 non-teaching staff. However, at the end of the 2012/2013 academic year, student enrollment had risen to 43,460 comprising 17,487 full-time, 15,564 distance learning and 10,409 sandwich and part-time. Out of the total enrollment, 18,603 of them were female representing 43%. The University had a total staff strength of 1,998 (23% female), comprising 420 research and teaching staff and1, 578 support staff (university website, 2015).

Strategic plan of UEW

The five-year (2009-2013) 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. 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).

Digital library services at UEW

The Library of the University of Education, Winneba is responsible for the acquisition and management of electronic information resources for the university. The UEW Library System consists of Osagyefo Library and North Campus Library at the South and North Campus respectively (both in Winneba), College of Technology Education (COLTEK) Library in Kumasi, Nana Afia Serwah Kobi Ampem II (NASKA II) Library at the College of Agriculture Education in Mampong, and College of Languages Education Library in Ajumako. In addition to these, there are two specialized libraries namely, the Centre for School and Community Science and Technology Studies (SACOST) and Institute for Educational development and Extension (IEDE) Libraries in Winneba (Library Guide, 2013).

Through the Consortium of Academic and Research Libraries in Ghana (CARLIGH), the Library subscribes to 38 academic databases where approximately 38,000 online journals can be accessed. 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).

Library Balanced Scorecard for University of Education Winneba (UEW)

The literature shows a number of successful BSC implementations in public and nonprofit sector institutions. Academic libraries may want to consider the potential usefulness of the BSC in aligning financial factors with their mission in the context of customer and stakeholder, human resources, and internal process requirements. Kettunen (2007) argue that the BSC can allow libraries to focus on efficient ways to produce high quality service outcomes despite their reliance on usually limited inputs. Figure 2, depicts how an academic library can begin translating the core BSC perspectives into its organizational.
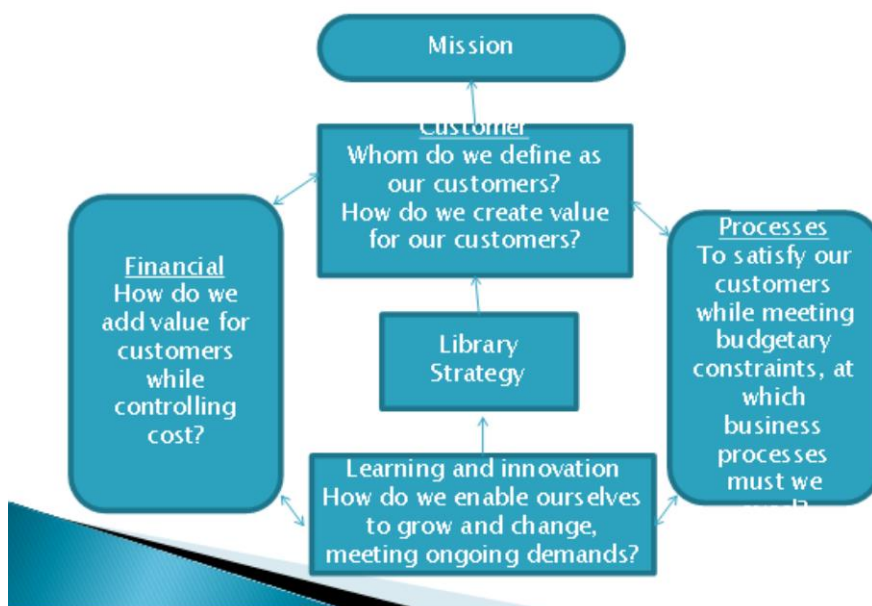
Figure 2: A strategy map (Niven, 2003)

The Customer Perspective

The customer perspective attempts to answer the question: "to achieve our vision, how should we appear to our customers?" The customer perspective aims at the immediate needs and desires of students, parents, faculty and staff, alumni, the corporate society and the whole community at large. Ruben (2004) avers that students are not only impacted by the teaching environment but also by the learning environment, which includes facilities, accommodation, physical environment, policies and procedures, and more importantly, interpersonal relations and communication and from every encounter and experience. As such, 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 library's strategies and have been rendered in the Table below:

Objective	Measures	Strategic initiatives	Targets
Integrate the Library into the University's Teaching, Learning and Research Mission	New Content in Institutional Repository Library Involvement in Student Learning Library Involvement in Student Learning (Online)	• Cloud Storage • Digitization Program • Institutional Repository • Learning Support • Library Services	Achieving target

Objective	Measures	Strategic initiatives	Target
		Staffing Model • Learning Support	
Facilitate scholarship	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	• Electronic books and journals • Integrated library management system • User needs • Institutional repository • User needs • Digitization • Cloud services • User needs	Within target tolerance
Improve the reputation of the university	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	• Learning support • Convocation • Staff Training and development • Marketing • Consortia and conferences	Action required

Table 1: The Customer Perspective

The Finance Perspective

This 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 programs. All pathways were included in this perspective, indicating the need for financial support in all areas of the strategic plan.

Objective	Measures	Strategic initiatives	Target

| Grow services through an expanded development programme | 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 | • Organise grant and proposal writing workshops

• Make provision for separate campus library budgets

• Participate in consortium activities | Achieving target |
| Create financially sustainable services | Efficient and effective use of facilities, space, services, systems and resources.

Engage in library publishing activities

Plan collaborative research activities | • Lease spaces for workshops and conferences

• Set up an editorial unit

• Host research conferences and organise departmental research seminars | Within target tolerance |

Table 2: Finance Perspective

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 making provision for access to library resources, services and technologies on the one hand, and staff issues on the other. Below is the table depicting the paths in this perspective:

Objective	**Measures**	**Strategic initiatives**	**Target**
Ensure preservation of the scholarly record	Implement strategy to grow relevant and valuable collections to support teaching and learning Establish linkages with academic departments for depositing rules of scholarly works	• Establish digital libraries (e.g. Institutional Repositories) • Faculty librarian programmes	Achieving target

Maximise space for research and scholarship	Establish library self-services Develop new policies on library learning culture	• Research commons • Updated library rules	Action required
Improve discovery of and access to scholarly resources	Collection Satisfaction Downloads from the Institutional Repository Use of licensed e-resources Objects digitized Electronic migration of serials	• Electronic Books • Integrated Library System • User Needs • Institutional Repository • Web site Re-engineering • User Needs • Cloud Storage • Digitization Program	Achieving target

Table 3: Internal processes

The Learning and innovation perspective

This perspective is the foundation of any strategy and focuses on the intangible assets of an organization, mainly on the internal skills and capabilities that are required to support the value-creating internal processes. The Innovation & Learning Perspective is concerned with the jobs (human capital), the systems (information capital), and the climate (organization capital) of the enterprise.

This perspective asks the following questions: Is the library's information technology infrastructure (local area network, link to the Internet, and application software) adequate to meet the needs of the library today and into the near-term future? Is the motivation of library staff members high? Does the library have a culture that is willing to carefully and systematically assess the quality of services currently being delivered?

Again, a critical look at the strategic plan of UEW shows that Theme 2, i.e. "Proactive and responsive administrative system" and Theme 13, "Improve the quality assurance system" represents the innovation perspective in the plan. After aligning the elements in the strategy to the BSC, the library scorecard is produced. The first path was applied to human capital; the second to technology capital; organizational 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 organizational culture includes leadership, alignment and shared values.

Objective	Measures (Strategy)	Strategic initiatives	Target

Recruit, motivate and develop the highest quality library staff	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 • Academic programmes in library and ICT • Exchange programmes	Within target tolerance
Effectively implement re-organisation and strategic plan implementation	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
Implement service assessment and accountability to the UEW community	Implement service assessment plans	• Conduct LibQual surveys • Conduct regular communication and publicity of assessments	Action required

Table 4: Learning and innovation

Library Balanced Scorecard: Implications for strategic human resource management (SHRM)

The Customer Perspective

Researchers and practitioners deploying the Balanced Scorecard (BSC) model in education have realised the strengths of the scorecard in tackling customer service challenges, which is, questioning how to offer increased value to their students, and how they can improve their processes while containing and reducing costs (Reid, 2011). In other words, the scorecard helps to achieve the vision of the organisation by clarifying how it should appear to their customers.

The ultimate goal of the customer perspective in digital library development is to build customer and stakeholder awareness and demonstrate accountability. A library BSC can increase customer and stakeholder awareness of how the library's digital goals and objectives are directly related to financial inputs. This can put the library in a stronger position from which to request university funds for strategic initiatives directly related to the institution's broader mission, as well as to secure additional human and intellectual capital to promote the use of digital services (McDevittet al., 2008). There is a

need for effective communication and collaboration with academic staff; ensuring user awareness of the quality, relevance and appropriateness of the services provided (Cribb & Hogan, 2003). This can result in staff who are committed and not indifferent to the cause of the library, with trickling effects on staff desire to improve on their capacity through self-sponsored initiatives or institutional support. Also, a desired goal of the digital library is to design and reconstruct digital libraries as interactive and in a socially-situated context (Chern, 2014). To ensure sustainable digital libraries, 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 (Pattuelli, 2011).

The Finance Perspective

Traditionally, libraries' involvement in strategic planning has not been the norm, because libraries have imbibed the mistaken notion that their importance would continue to be acknowledged without any questioning (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.

Internal processes

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. In the context of strategic HRM, this may imply the use of quality and transparent processes in recruiting quality library staff. The effect of this is that only the right candidates are selected to implement the goals of the digital library. Another important measure 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 Institutional Repository which must necessarily contain valuable digital learning objects needed by learners. This measure also requires meeting service standards, e.g. content upload turnaround time and ensuring non-duplication of print materials or vice-versa to optimize financial inputs. Again, the long-term impact of this initiative can be seen in

a library staff that is abreast with standards and service charters in the deployment of digital services and technologies.

Learning and innovation

This perspective, sometimes called "Learning and Growth," "Innovation and Learning," or "Potentials," is designed to assess the organization's ability to compete in the future (Kaplan & Norton, 1996). The organization may assess the skills of its employees in order to determine if the right mix and depth of skills are present to meet the changing competitive environment. The information technology readiness assessment is designed to ensure that the IT network and software applications meet the needs of the organization today and into the future. The organization may also wish to determine whether its organizational culture will support a climate for change and action as reflected in employee morale and the staff turnover rate.

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 organizational 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. Further, there must be a commitment on the part of library and institutional leaders to commit investment into training and development to achieve this goal. Also, a systematic method for assessment of services and resources must become the rule for success. The following key areas, according to Cribb (2006) must form the basis to achieving the strategic human resource goals for the digital library:

- Identification of critical activities of strategic importance to the Library's digital initiatives and the university.

- Identification of positions to match the activities.

- Creation of new descriptions for strategic positions including identification of critical skills for these positions.

- Creation of generic position descriptions as much as possible.

- Implementation of flexibility in the deployment of staff across functions and locations.

- Recruitment, induction and training of appropriate staff.

- Introduction of a Professional Development Review system for the library.

- Training in using the Professional Development Review system for all staff as well as a separate one for supervisors.

- Planning and implementation of a staff development and training program for all staff. The program must cover a broad range of activities, such as public speaking, writing, project management skills.

- Creation of library-wide policies in consultation with both staff and customer groups.

- Use of a university-wide "Organisational Change" process with a standard change management template.

- Regular round table meetings with student groups to elicit feedback about digital library services and to allow all library staff to interact with them in an informal setting.

- Workshops on change management and customer service for all library staff.

Conclusion and Recommendations

The aim of this paper was to propose the use of the Balanced Scorecard in evaluating digital library resources and services in Ghana to determine the readiness of academic libraries in implementing sustainable digital library services. The study examines the strategic plan of a multi-campus public university with the aim of aligning it to the same university's library goals using the Balanced Scorecard. This paper emphasises the fact that for academic libraries involved in digital initiatives to achieve their role and purpose, they must respond to the digital, financial and societal contexts in which they operate, otherwise they are likely to be increasingly sidelined and overtaken by commercial organizations which can use the ubiquity of the internet to provide services, without necessarily providing the quality of content or equality of access libraries are known for (Wade, 2013).

Therefore, to achieve sustainability in digital library services in terms of the quality and value of human resources, academic libraries must:

- Identify a few critical activities of strategic importance to the Library's digital initiatives and categorize them into the four perspectives of the BSC.

- Adopt objectives, measures and initiatives that ensure that staff and other internal customers are corporately and individually committed to the goals of the library's strategic digital initiatives.

- Adopt financial policies that entail outcome measures and future growth measures.

- Adopt internal operational measures that are dedicated to continuous improvement of human capital and other intangible assets of the library.

- Implement specific innovative solutions for the development of human capital, technology and organizational culture.

- Communicate the progress and results of strategic initiatives and actions to each library staff as well as other key stakeholders on a regular basis.

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