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INNOVATION THROUGH PARTNERSHIPS: A CRITICAL REVIEW OFTHE UNIVERSITY OF NAIROBI ONLINE APPLICATION INFORMATION SYSTEM

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ABSTRACT *As a leading institution of higher learning in Africa, The University of Nairobi is credited for producing top notch students in respective fields. The institution has assumed a lead role in innovation on areas which improve service delivery to the students. This is a case study which explores on how the university aspires to maintain the top accolades by employing global standards in the running of its affairs. True to this aspiration is the innovative nature that the university has attempted in revolutionizing the running of its programs. The institution has heavily diversified its courses and aligned its programs to accommodate the diverse requirements of its stakeholders. Many colleges have been opened in various strategic locations of the country to tap into the ever growing demand for knowledge. It is evident from the leading scholars that the University of Nairobi has very little challenge locally. Looking at the key players in most industries in Kenya, one will often realize that in most institutions in Kenya, top management are alumni of the University of Nairobi. This is an attestation of the place the University holds in the corporate space in Kenya. Despite these achievements, the University still finds itself lagging behind in various areas some of which require corporate experience to excel in. This study looks at the student's online application process and interrogates how the university has innovated the process of on-boarding students into the institution through partnerships. The study espouses the need to partner with specialized firms to achieve success in a chosen area. The study demonstrates that innovation can propel an institution above its competitors by enabling the institution achieve sustainable competitive advantage. The University of Nairobi has been struggling with manual enrollment process of new students. Since competition for students' has been stiff in Kenya following the remarkable spread of universities across the region, the University of Nairobi has experienced diminishing enrollment numbers. To counter this challenge, the University sought to reorient its enrollment process so as to tap into the unreached population. The implication of this study is to encourage partnerships as a springboard to achieve innovation. The objective of this study was to establish how partnerships can lead to innovation. The study is grounded in both innovation and partnership theories. The study finds that innovation is not invention and that partnerships are catalysts for innovation as they enable the partners to nurture their competencies, talents and perspectives to create a sustainable competitive advantage over competition.*

Key words: Innovation, partnerships, automation, alliances, collaboration, OAIS.

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Introduction

Historically, partnerships between institutions of higher learning and other organizations span decades. Universities have been and continue to be a source of resourcing for organizations. As a source of manpower, Universities have been considered worthy stakeholders as they fill an important gap for organizations. In the contrary, the relationship between Universities and other organizations has been seen to be one sided. The empirical link between innovation and partnerships has been studied (Casper and Miozzo, 2013). To overcome sector specific gaps, this study investigates how the University of Nairobi (UoN)has managed to innovate its product offering through collaboration. The study gives credence to the recently launched online application information system (OAIS) which has opened up the University to the entire globe.

The study seeks to evaluate how partnerships can accelerate innovativeness of institutions of higher learning so as to deliver value to a common clientele of these institutions through collaboration and ultimately resulting into sustainable competitive advantage. Through partnership, the UoN has demonstrated it can gain global student's enrollment into the University programs. This is an attestation that innovation can be delivered through partnerships. The empirical focus for this study is partnership and innovation between institutions of higher learning and external entities.

Technology companies like Safaricom, Google, and Apple among others find innovation simple and easy to adopt. These firms therefore easily embrace innovation as a strategy. Executing innovative strategies in Universities of higher learning has remained a challenge since the core competencies of Universities is in knowledge development and sharing. However, competition is becoming stiff within the Universities forcing these institutions to rethink their competitive models and reorient their strategic push to remain visible. For these institutions to remain competitive, they have learnt that for the sake of their continuity, they must make innovation part of their DNA.

For institutions of higher learning to become innovative, they must find partners who will help them appreciate that innovation is an everywhere, all-the- time capability. Innovation must therefore cease to be a champion of specific department and become an-everyone affair. This way, the importance of innovation will begin to yield notable benefits to the Universities. Skarzynski and Gibson (2008) observe that innovation is the only insurance against irrelevance. Innovation improves quality. Quality delivers lower warranty costs hence happier customers. Happier customers increase sales volume which ultimately result into increased income for the organization.

Scholars have observed that common purpose is a prerequisite to innovation where collaboration exist (Gillier, Kazakci, & Piat, 2012). Finding common purpose between UoN and its partners is an important aspect when it comes to finding a common ground

– reason to collaborate. The ultimate goal is to deliver a win –win situation for both the University and the organizations they aim to partner with. The benefit derived from the collaboration must deliver value to all parties concerned. This way, it will be possible to sustain the partnership.

Globally Universities and organizations have partnered a lot in various areas. More often than not, operating organizations have used the Universities as research centers. Through scholarships, the organizations have funded various research areas in the fields of their interest. In this case, Universities have acted as incubation grounds for new ventures for such organizations.A visit to various local and international universities websites shows various partnerships in areas of research and innovations. Kenyatta University for example has partnered with Chandaria foundation where the foundation contributed Kenya shillings 25 million towards construction of Chandaria Business and Innovation Centre Plaza at the university. To encourage innovation, Kenyatta University has also partnered with National Commission for Science, Innovation and Technology (NACOSTI). This partnership has seen students awarded various prizes for their innovations. Imbaya (2013) demonstrate how Moi University collaborated with other institutions to promote tourism and hospitality industries in Kenya.

Recent partnerships has seen the University of Nairobi forming Partnership for Innovative Medical Education in Kenya (PRIME-K) in collaboration with two of its longstanding training partners (the University of Washington (UW) and the University of Maryland Baltimore (UMB)). The PRIME-K aims at strengthening and building the clinical and research capacity at the UoN College of Health Sciences thereby improving human resource capacity for health in Kenya.In addition, Total, a leading oil company has entered into partnership with the UoN in which it offers scholarships and internship placements for the UoN students. Total aims at supporting the University through such scholarships as a corporate social responsibility (CSR) venture.

Focus of the present study

This study examines the collaboration between the UoN, KNEC and KCB Bank with the aim of empowering the UoN to widen its students' enrollment process through innovation. The study accesses the importance of partnerships and its contribution to innovation. In addition, the study seeks to establish whether innovation driven partnerships contribute to competitive advantage for the UoN.

There are twenty two public Universities and twenty four private chartered Universities in operation in Kenya as at 2015 – see Appendix 1 and 2 (KCCPS, 2015). These Universities compete to recruit from candidates who sit form 4 examinations in Kenya Certificate of Secondary Education (KCSE). Each year, these Universities compete to recruit the best in KCSE. This makes competition for attention very stiff. Out of the seventy thousand eligible students (in 2015), the Universities have been engaged in a cut throat competition to convince students to take up their courses. This competition has been exacerbate by the need for the Universities to self-fund their activities due to diminishing government and donor funds.

The UoN by virtue of being the oldest institution of higher learning in the country has enjoyed the lion share of the student's demand for the programs offered at the University. However, with the proliferation of many new Universities, this status has begun to reduce forcing the UoN to seek new fresh ways of reaching out to prospective students. Thus, the UoN is now conducting open days, advertising both in local and digital channels for prospective clients as well as seeking new online methods of recruitment.

The location of the UoN has given it advantage over other Universities. Its central location within the central business district (CBD) has enabled it attract many self-sponsored students especially the working class who attend evening classes. The university has in addition offered free parking facilities for the students most of whom drive from work to attend classes. Despite these efforts, competition has not been easy. A number of Universities have acquired building right at the doorstep of the UoN main campus eroding the advantage the UoN has enjoyed over time. Some of these Universities have even come up with adjusted programs some of which include having classed start as early as 6 am and end by 8 am.

Students Enrollment

Student enrollment services for the UoN has been a manual process. This required that a prospective student visit the University or University College physically to collect the recruitment forms. Once the forms were completed, the student would return the same to the University together with all necessary certificates and transcripts. Upon receipt of the forms, the University would manually go through the verification exercise – a painstaking exercise devoid of errors and occasional loss of documents along the value chain. Delays and communication barriers meant that the UoN started losing its competitive advantage to other colleges who had set up campuses around the UoN.

The number of new enrollments therefore diminished and as such, the University embarked on a new drive to onboard new students and cut down on the inefficiencies of the manual process. The UoN has thus devised a new innovative method of attracting new student. This, has been made possible due to partnership through KCB Bank and Kenya National Examination Council. This innovative solution did not come easy. It took the effort of the ICT team, various management units tasked with recruitment of students and the collaborative efforts of valued partners to achieve this project.

The University of Nairobi faces diminishing admission numbers as a result of competition resulting from the proliferation of other Universities most of which set base within the precincts of the UoN. These Universities are private, lean and their operational efficiencies are agile. They can in a matter of hours or within a day or so deliver a verdict upon receipt of student's applications. The UoN by virtue of the large number of applications coupled with a

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centralized verification process, makes it appraisal process lethargic. This leads to delays in processing the many applications which come its way.

Despite the UoN having identified a solution through ICT, it was still not possible to move alone (without external partners)this is because for any application to be processed, there are various prerequisites which have to be met first. These include; the need for a prospective student to have paid the application fee. There are also various payment options available for the prospective students both locally and globally (these are; card payment, cash payment and mobile payment –M-Pesa). Secondly, the need for the verification of the certificates attached in the application whether they are genuine. This required KNEC to be brought on board and lastly, the need to confirm to the students that they have been taken in or not in the programs of their choice. Scholars have argued that resisting innovation will lead to loss of competitiveness which is what UoN finds itself in (Van der Linde and Porter, 1995).

Globally, online application and processing of students documents has been in existence for a while. There is massive system integrations which has made applications to international Universities easy. This contextual gap has existed in Kenya hence the need for the UoN to address the gap locally. This therefore led to the question; how does the UoN conduct an online application without the need for the prospective students to move from their location?

Objectives of the University of Nairobi Online Application System

The University of Nairobi came up with the online application system to address the follow objectives:

i.) Computerization of the application process,
ii.) Integration with Kenya National Examination Council (KNEC) for validation,
iii.) Integration with a payment aggregator to offer an online payment platforms,
iv.) Automation of application process tracking via cost effective mechanisms,
v.) Providing a dynamic information retrieval mechanism to aid in decision making, and
vi.) Opening the university admission to students from across the globe.

To achieve the set objectives, the UoN noted that they are incapacitated by lack of expertise in areas of payment as well as lack of capacity to verify certificates offered within the application process. This inadequacy called for collaboration between the UoN, KNEC and KCB Bank.

Value of Students' Online Application

This innovation seeks to improve customer satisfaction. The prospective students who have always wished to join the UoN will be empowered to do so without any geographical restrictions. The zeal to join the UoN will be raised therefore making the University appealing to prospective students. A lot of time has been spent moving documents from one campus to another as well as within departments. Through this new registration process, there will be ease in facilitation of timely processing of students' admission into the University. This way, the admission numbers will grow.

Operational efficiency and cost reduction is achieved by automating the registration process as less time is spent on document movement and very little cost is also incurred when making approvals. There is also a consistent view of data as the forms completed online are uniform hence reducing any confusion and instead introducing uniformity. Lastly, there is seamless integration with other systems which make automation possible and creates ease of expansion. Future collaborations are possible as system integration can be achieved with ease.

Implication of study

The study portrays a good indication of what partnerships can do to an organization. It demonstrated that institutions can collaborate to achieve the ever elusive innovation. This way, these institutions can remain competitive by tapping into opportunities which have never been explored. The University of Nairobi for instance is capable of attracting prospective students globally. This is an attestation that partnerships can open up new business lines which would otherwise be a mirage.

Universities world over have a chance to source for students anywhere as a result of such collaborations. In addition, revenues of such institutions are set to grow hence bridging the funding deficits universities face as a result of diminishing donor funding. In a nutshell, innovations through partnerships in universities is a blessing in deed as it enables universities to support its core business financially as well as by beefing up students recruitment.

Literature Review

Within the corporate agenda of any top organization is innovation –how to introduce new ways of doing things to wow customers. Senior managers of organizations are preoccupied with finding a new way of remaining competitive. Desiring to be innovative is not necessarily making innovation happen. Skarzynski and Gibson (2008) observe that innovation is a buzz word in many organizations. Turning these nice rhetoric into reality remain a mirage for most institutions. More still, creating an ever innovative culture is a desire every top corporate institution aspire.Disruptive innovation is described as a process in which a smaller organization with fewer resources is able to successfully challenge established incumbent firms and change the competitive conversation (Christensen, Raynor, & McDonald, 2015).

More often innovation is perceived as a 'thing' which is driven by the top management- the CEO. This is contrary to expectations. Innovation gurus call for innovation to be a companywide affair where each and every employees wears innovative lenses. Skarzynski and Gibson (2008) argue that a fresh perspective needs to be taken by organizations to remain innovative. These firms need to challenge the way they operate by questioning deeply held dogmas within their company on what drives success. The players need to harness discontinuities by spotting unnoticed patterns of trends which could sustain change substantially.

The perception of a company being looked at as a product no longer hold and needs to change and instead relooked at. The new shift calls for companies to be looked at as a portfolio of skills and assets. This will leverage competencies and strategic assets of the companies to deliver innovative approaches. In addition, there is need to understand unarticulated (unexpressed) needs by putting oneself in the shoes of the customer, empathizing with the challenges customers go through. Unarticulated feelings will therefore come out to identify unmet needs. It is clear that developing innovative capability does not require any new personal creativity but rather change in perspective and being open to studying and noticing patterns most of which are untapped (Skarzynski & Gibson, 2008).

Casper and Miozzo (2013) confirm that globalization, increased scientific and technological complexities,information and telecommunication technologies have made firms to shift from closed to open innovation models where organizations are becoming open to external input from unlikely partners. Organizations are thus not looking only internally for innovations but are embracing partners to grow. Exchange for knowledge and collaboration between companies is therefore becoming a norm for innovation (Laursen & Salter, 2006)

Freire (2014) asserts that there is a paradigm shift in organizations in which investment is moving from internal to external through collaborations. This is due to dwindling funding for research work where a pool of funds as research grants to universities is under serious scrutiny. The stark economic reality propel universities to craft new ways of doing business. Universities therefore find solace in partnerships. Partnership has now become a buzz word and a savior for that matter through which the Universities can afford to make innovation a reality without worrying about funding. Such collaborations are indeed, essential in fostering sought after growth. The changing funding landscape is in fact, resolved through public-private-partnership (PPP). The PPP avail a framework of shared resources, reduction in concentration risks, and an expansive shared experience which help generate sustainable innovations which would otherwise not have been possible. In addition, confidence levels are higher when collaborating and terms of service and targets are well laid out with close monitoring for deviations.

Christensen, Raynor, and McDonald (2015) stressed the power of disruptive innovation by warning large companies on how they may be overtaken by small firms if they don’t introduce innovative products. A look at recent partnerships in Kenya show success stories in banking and telecommunication. Commercial Bank of Africa (CBA) through M-Shwari product moved number of deposits in the bank to new levels making CBA second to only Equity Banks (Ngigi, 2013). The success of CBA is attributed to the power of innovation achieved through partnership with Safaricom. KCB Bank and Safaricom Limited partnered in 2015 to deliver a new success story in innovation through

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partnership. The partnership was a collaboration to deliver innovation to the two entities. KCB M-PESA was formed and in less than one year, the results of the innovation are mind boggling. KCB-MPESA delivered KES 5.2Million new accounts which transacted KES 7.8Billion. KCB~MPESA innovation has delivered the same number of accounts KCB Bank has had in the one hundred years of existence. The collaboration is an attestation of success delivered through partnerships. KCB had 5 million accounts before the partnership but the partnership managed to double the account numbers at KCB within one year (KCB Bank, 2016). The power of innovations delivered through partnership can also be seen in the partnership between KCB Bank and the Government of Kenya (National Treasury) where citizens have been enabled to make government payments through an automated payment process. Citizens visit www.ecitizen.go.ke to access government services and payments are made through Card (VISA/MasterCard), M-Pesa, Airtel Money, MobiKash and Agent. This innovation saves the citizens from traveling long distances to seek government services such as renewal of driving license, business searches, company registration, application for entry Visa, Passport application, stamp duty payments, county revenue collection for specific counties and motor vehicle registration among others. For the one year this service has been in operation (April 2015-April, 2016), citizens have made 1.7 Million applications valued at KES 2.7 Billion.

Although partnerships are beneficial towards bringing innovation,Holzmann, Sailer, and Katzy (2013) argue against partnering just for the sake of it. Instead, they support the need for matchmaking between innovation seekers and innovation makers. They posit that in any collaboration, there must be an innovation maker and an innovation seeker and these two firms must match to avoid conflict.Safaricom and Equity Bank developed a solution (M-Kesho) which failed dues to disagreements as a result of a mismatch between Equity and Safaricom model. Nissen, Evald, and Clarke (2012) affirm that public private partnerships are intuitively valuable since public sector have perennial budgetary constraints, increased demand for service as well as increased demand for professionalism and as such face what they refer to as innovative incompetence. They argue that the cure for this innovative incompetence is as a result of partnerships through the PPP. Public-Private Innovation Partnership (PPIP) is the sure cure for the lethargy seen hindering innovativeness in the public sector.

Studying this concept of collaboration to empower innovation through PPIP calls for outlining PPIP concepts in the Kenyan context. To start with, Universities have benefited a great deal in starting up innovation hubs through business incubation services sponsored through private companies. A good example is the Chandaria Business and Innovation Centre Plaza at Kenyatta University where Chandaria has full filed it CSR mandate and at the same time, the University has acquired a new facility with funds to support its innovations. Moi University has equally benefited from the donor funded facility of information sciences at the main campus which was put up by the Dutch. The UoN has also benefited through PPIP in various ways notable mention is the Confucius facility put up by the Japanese government.

A Review of Students Enrollment Process

A review of international University application requirements call for, statement of purpose, need to append or send test scores (various tests – GRE, or GMAT & TOEFL or IELTS among others), letters of reference, curriculum vitae/resume, and the need to pay an application fee among other requirements. The focus of this study was to evaluate how the student's enrolment process at the UoN has been beneficial to the stakeholders. Notable partners in this collaboration were, the UoN, KCB Bank, and KNEC. As an innovation seeker, the UoN has been looking to making the process of enrollment simple and straight forward. This way, the University is guaranteed increased numbers. There were resource constraints which the university found itself in, such that without the input of able partners, the UoN would not have managed to reengineer the enrollment process. As a leading ICT institution, the University had no issue with creating systems which would address its application needs. However, there was the need to collect money as well as the need to validate degree certificatesat a touch of a button which. The UoN had no capacity to deliver this expectation therefore forcing it to collaborate.

KCB Bank came in handy to address the eCommerce requirements of the University where money was involved. As a valued partner who is a leadingfinancial provider, KCB Bank brought into place the Online Card Acquiring capabilities through VISA and MasterCard. In addition, KCB Bank through its partnerships with Safaricom also delivered a Paybill Number for M-Pesa affiliated payments. Lastly, KCB Bank also offered all its branches regionally for any walk-in customer (prospective student) to make payment. The branches were to take care of any physical cash deposit requirements. The University through its ICT arm developed a fantastic interface on which prospective students could apply for courses and upload degree certificates, photos and transcripts. As an impediment, the University was unable to complete the application process and accept the student's choice without the application fee. By reaching out to KCB Bank, the UoN is able to take forward its innovation. KCB Bank therefore came in to plug the payment gap using what it is best at doing (banking). Through integration, the UoN and KCB Bank connected their two systems (through Application Program Interface -API). The working teams tested the systems and confirmed that the requirements for the innovation was achieved. The UoN further integrated with KNEC and confirmed that all the test were in accordance with expectations. A launch was therefore done under the leadership of the Vice Chancellor which saw the birth of a new innovation - University of Nairobi Online Application System.

The above process is not complete since there is need for any application to have the degree certificates validated for genuineness. KNEC was brought on board to seal this loophole thereby making the students application process complete. The application process is done online globally, prospective students make payments through cash (at any KCB Bank branch), using

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Mobile Money (M-Pesa) or using Card (VISA or MasterCard) at the comfort of their homes. Once funds are received at the bank, a notification is delivered to the University systems in real time. The University then commence the verification processwith KNEC on whether the degree certificates are genuine. If all is in order, the student is accepted into their degree of choice. The student then proceeds to print the acceptance letter and walks to the University on the date of orientation. This completes the innovation making the UoN one of the leading institutions in Africa to have adopted an online enrollment process of this magnitude(for more information on how the registration happens see https://application.uonbi.ac.ke/index.php/site/login).

Without any of the partners, KNEC and KCB Bank, the University would not have been in a position to reengineer its admission process as done. This collaboration therefore, is an attestation of how partnerships can drive innovation. Atkinson (2014) contends that teamwork is the fuel that allows common people to attain uncommon results by postulating that none of us is as smart as all of us. This collaboration makes the UoN an envy of the Universities in Kenya and Africa and thus positions the UoN as a lead innovative University a true reflection of the vision of the University *"to be a world-class university committed to scholarly excellence."* For the first time, a prospective student has managed to apply for a degree course at the UoN while in Zanzibar, Ghana, USA, and South Africa among destinations without the need to physically visit the country. Surely, this has savedthe cost of application and broken geographical barriers making the University a leader again.

Benefits of the Online Application System

There are remarkable benefits which will accrue to the University as a result of this innovation. One, is the opening up of student's reach beyond the borders. This solution is giving the UoN a head start among its peers. The university will be able to process student's applications seamless thereby increasing its recruitment numbers. The seamless integration of systems (UoN, KCB Bank and KNEC) will result into consistency therefore eliminating errors due to uniformity. Secondly, the University perception among the prospective students is going to change. Positive perception will mean that "likeability" of the university is going to rise higher than it was despite being ranked number one in Kenya. Thirdly, the innovation is going to save the university as well as the prospective students on cost. The cost cutting measure of this innovation is a welcome addition to the efficiencies that the university will find itself in while handling its students' applications. This may lead to new global recognitions and ranking among the agile institutions in the world.

In addition, the much needed income will increase as a result of this innovation – the university has in just 1 month of the launch (May, 2016 – April, 2016) received 2,300 applications valued at KES 7.6 M. With publicity on the automated application process, the numbers are bound to grow in leaps and bounds. In essence, simplifying the admission process will mean more students will come to the University hence improving the much needed income which

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will follow. In the current economic crunch coupled with shrinking government and donor funds to the university, this is a welcome initiative. The innovation will carry with it higher customer satisfaction. Satisfied customer tell other about your services therefore reducing the demand that the University has to put on advertising. Lastly, the innovation not only saves on time of the prospective students and the approving administrators but it adds to the much needed consistency. There will be no more mention of lost documents since a retrieval mechanism is availed both to the student as well as the University.

Conclusion

The study finds notable success having been achieved through partners in collaboration. In affirmation to the proponents of innovation, partnerships are good as they are the fuel on which innovation grows. Success of an institution can be accelerated through innovation. For firms to be innovative, it is necessary to involve many minds. The notion that innovation is left for the top leadership is a cultural phenomenon which has to be broken for the firm to remain competitive and sustain the competitiveness. It is necessary for firms to cultivate innovators within their companies and open up the discussion with like-minded organizations. The desire to innovate should therefore not be restricted internally. All organizations should seek to partner with like-minded organizations to deliver the much needed innovation. This way PPIP will deliver a win –win situation among the partners and the highest benefactors will be the students.

The study realized that partnerships are a sure way of bridging institutional gaps which hinder innovation. In addition, partnership can create the much needed urgency for driving innovation. The study therefore supports partnership driven innovations as it has been proved that they deliver the much needed value. For success in innovations to be a reality, senior management must allow subordinates to think freely. Until companies behave like barbers who put full attention and focus on the hair/head and the shoe shiners who keep their glare at the shoes of passers' by, it will not be easy to innovate. All efforts must therefore be put in place in an attempt to discover new ways of doing things and partnerships give this hope.

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