

International Journal of Technology and Management

Adopting Technology in the Management of Human Resources (e-HRM) in Higher Education Institutions (HEIs): A Paradox IJOTM ISSN 2518-8623

Volume 1, Issue 1 pp. 1- 10, June 2016 email: ijotm@utamu.ac.ug http://ijotm.utamu.ac.ug

Maria K. Barifaijo

Uganda Management Institute, Uganda Email: kaguhangirem@gmail.com

Abstract

This paper discusses the paradox of technology and human resource functions in higher education institutions (HEIs). The paper identifies areas where technology has enabled human resource as well as non-HR managers to have access to tools that have been found to ease communication as well as facilitating self-service. While the importance of technology is not disputable, there remain three important questions: (1) what are the benefits of e-HRM in the execution of HRM functions in higher education institutions? (2) What are the technology-related challenges faced by managers in these institutions? And (3) how can the human touch be maintained in the core HRM functions while using technology in these institutions? A qualitative method was augmented by integrative synthesis to collect data, through interviews, summaries from existing research literature, observation and personal experience. Results were analyzed using content and thematic analyses. Technology was found to be mostly used in instruction, advertisement, recruitments and payroll management. These institutions still employed a dual system of traditional HRM and e-HRM, but found technology very effective in accomplishing HRM functions. There were however, dependability and infrastructural technology-related challenges. The paper concludes that regardless of such challenges, technology was just a scarecrow, and did not pause any danger on human relationships.

Keywords: Human Resource Management, Human Touch, e-HRM, Higher Education Institutions, Human Relations, Technology

Introduction

The paper discusses how higher education leaders, academics and other staff deal with numerous challenges in managing human resources. The challenges include: balancing public interest and institutional autonomy; increasing dynamics in recruitment, and systemizing staff development; attracting a new generation of staff; bridging the gender gaps in senior management; managing diversity, developing competences in a long-term perspective; meeting short-term demands on productivity and societal relevance. Other challenges involve: coping with new features in remuneration systems and performance evaluation; solving conflict of interest in academic employment; creating work-life balance, and dealing with ethically-related issues. The author wonders how such critical and sensitive functions can actually successfully be handled by technology.

The paper investigated the influence of technology on the role of human resource management in higher education institutions (HEIs) and whether the automated dimension could have an impact, if the traditional HRM could be phased out. It has been acknowledged by (Bondarouk & Ruel, 2009), that the web-based technologies for human resource management practices and policies are maturing within organizational life. While much is claimed and expressed about the advantages of e-HRM, the scientific proof of these advantages is scarce and oftentimes conflicting (Ruel, Bondarouk & Van Der Velde, 2007).

Scholars (Marler, 2009; Haines & Lafleur, 2008; and Briner, 2007) have revealed that it is the consultancy firms, rather than academics, that have been behind the first attempts to investigate whether the efforts put into technology to manage people lead to the expected outcomes. Yet, the academia has remained silent on this matter. For example, the involvement of academia in this topic is more recent and has not yet yielded serious answers. Yet the adoption of technology to manage people as a topic is certainly not becoming obsolete, and its full potential is still anticipated. Therefore academic involvement and efforts in the topic is worthwhile and very much welcome. It is important to note that the vast literature on technology in HEIs rotates around the usage of technology in teaching, students' application and registration, course advertisement and the like.

Until the late 1990s, HEIs were very comfortable with the usage of "personnel departments", "personal sections", "personnel offices" which were manned by the "personnel managers/officers" (Briner, 2007). Basically, the function of a personnel manager was to supply information of the required manpower, planning, recruitment, payroll administration, attendance, records management and executing retirement programmes, including the packages for the retirees. In Uganda, for example, HEIs, embraced human resource directorates in 2005 (Makerere University Human Resource Manual, 2008). So what does this mean? Were there no human resources to manage in these institutions? Hardly a couple of years later, HEIs embraced technology to manage their human resources which automated the management of these peculiar resources – "the humans". So, are we or are we not losing the very essence of HRM?

Although there is a lot of excitement about the perceived importance of the usage of technology, it is still unclear in many institutions whether the adoption of technology to manage people fully contributes to the effectiveness of human resource management and its overall performance (Florkoswki & Olivas-Lujan, 2006). It is important to note that the fact that only two institutions were investigated, they provided some reasonable stance of what was perceived on the contribution of technology and its effectiveness in these institutions. The discussion begins by diving into the theoretical explorations of human relations that paved the way to human resource management. It proceeds to the advent of the usage of technology, its benefits, challenges and prospects. The author summarizes the developments in research on technology, conceptualized human resource management and its related technology terms; explores the theories and models of research; proceeds to the effectiveness of technology; describes the research methods, presents findings, draws conclusions and finally recommends.

Conceptual Framework

Although numerous scholars have provided the meaning of HRM, most of whom point to its ability to provide strategic direction that integrates the human concern, Brand, Toft, Madsen and Madsen (2009) provide a more compelling definition of HRM as the strategic and coherent approach to the management of an organization's most valued assets - the people working there who individually and collectively contribute to the achievement of the objectives of the business. One widely used scheme to describe the role of HRM was developed by Briner (2007), using five fields for the HRM function: strategic business partner; change agent; employee champion; company champion; and administrative expert. According to Strohmeier (2007), electronic human resource management or e-HRM is the application of Information Technology (IT) for both networking and supporting at least two individual and collective actors in their shared performance of HR activities. Therefore, E-HRM is in essence the devolution of HR functions to management and employees.

There are three types of e-HRM- Operational, Relational and Transformational (Strohmeier, 2009). The author describes each of these. Operational e-HRM is concerned with administrative functions - payroll and employee personal data. Relational e-HRM is concerned with supporting business processes by means of training, recruitment, performance management and so forth while transformational e-HRM is concerned with strategic HR activities such as knowledge management and strategic re-orientation. An institution may choose to pursue e-HRM policies from any number of these tiers to achieve its HR goals (Boroughs, Palmer & Hunter, 2008). This depends on the context in which the organization is operating.

One of the goals of e-HRM is to offer the potential to improve services to HR department clients (both employees and management), improve efficiency and cost-effectiveness within the HR department, and allow HR to become a strategic partner in achieving organizational goals. Yet, traditionally, HR goals have been broken into three categories: maintaining cost-effectiveness, the enhancement of service for internal customers, and addressing the tactics of the business (Ruel, Bondarouk & Der Velde, 2007). With e-HRM, there is a fourth goal added

to the three categories and that is the improvement of global orientation of human resource management. Hence, HR functions of e-HRM assist with the transactional and transformational goals. Transactional goals help reduce costs and transformational goals help the allocation of time improvement for HR professionals so that they may address more strategic issues (Brill & Galloway, 2007). Overall, therefore, the goal of adopting technology to manage human resources is cost-effectiveness, efficient service delivery and internal controls. Electronic human resource management is viewed as managing employees with minimal physical interaction, reduced face-time, enhanced connectivity and effective communication.

In order to explain the existing paradox of technology and its potential disruption of the social interactions within organizations, Mayo's Human Relations Movement, was perceived to be very useful. This is because, the theory assumes a high correlation between social interaction, face-to-face communication and productivity. Consequently, two sets of theories to support the discussion were employed. The Human Relations Movement was intended to explain the development of the need to relate which has become known as the Hawthorne Studies. The theory assumes that human relations make workers develop a sense of belonging to something bigger than themselves (Briner, 2007). It also assumes that once there is two-way communication, then interpersonal relationships are strengthened. Hence, the emphasis is communication which promotes employee-supervisor interactions, peer-relationships and informal organizations (Brand et al., 2009). Specifically, the theory emphasizes the power of working in teams and free expression at more personal level with their supervisors. Hence, given the significance of the human touch, the departure from traditional HRM that emphasized human relations, to the usage of technology (E-HRM) to execute most human resource functions, was feared to disrupt the social interaction, consequently affecting productivity. Therefore, it was feared that traditional HRM that is concerned with the human element was becoming more automated, and more likely to plunge the very essence of human relations.

On the other hand, E-HRM, given its foreignness and abstract nature, was feared by users for numerous reasons, hence resistance. The Innovation Diffusion Theory by Rogers (1995) was adopted to explain why users were scared. Many scholars (e.g. Boroughs, et al.2008; Allen & Seaman, 2008) augment that technology adoption is a complex, inherently social, developmental process because individuals construct unique yet malleable perceptions of an innovation that influences their adoption decisions. Thus, the successful facilitation of technology adoption must address cognitive, emotional and contextual concerns – all at the same time. Researchers have picked interest in the adoption and diffusion of innovations (Allen & Seaman, 2008), but, most of their arguments expound that technology is pragmatic due to its occupation with material and practical gains; it is scientific because the laws of science are upheld as supreme; it is exploitive because nature's gifts have been used with nonchalance and ruthlessness; it is elitist because the progress has benefited very few at the expense of very many and at the expense of natural resources belonging to all (Brill & Galloway, 2007). Therefore, implementers of such innovation must be cognizant of the effects of adopting technology to manage human resources, whose values are embedded in social interaction, affiliation and closer ties.

Literature Review

Literature on the effectiveness of electronic human resource management in the HRM function is quite abundant. However, its effect on how technology interrupts the social relationships in organizations is minimal. Nevertheless, numerous benefits have been found in the usage of electronic human resource management; in terms of efficiency, effectiveness and productivity (Dusek, 2006).

Academic involvement in technology or e-HRM started relatively late and is still trying to catch up with practice (Bondarouk & Ruel, 2009). Literature on e-HRM is growing; but despite these signs of a growing literature base, research on e-HRM is still in its "youth-phase" (Foster, 2009). The concept in itself is still a puzzle to researchers and scholars alike. The available literature, for example, has frequently presented fragmented empirical evidence, particularly on the effectiveness and implications of technology on the management of HRs and the overall contribution to organizational performance.

Empirical research especially by Brill and Galloway (2007), found that e-HRM is being treated as a complete approach for "doing HRM" yet, it is still in its infancy. Consequently, this paper, attempts to contribute to advancing e-HRM research and establishing its effectiveness and implication in HEIs, given its limitations to social interaction. Research by Brand, Toft, Madsen and Madsen (2009), found that HRM was limited to

recruiting job candidates and administering salaries. For this reason, its functions were seen as bureaucratic and leading to ineffectiveness, discrimination and inefficiency. Consequently, as a way of counteracting this experience, Briner (2007) expounds how HRM in HEIs was treated as a peripheral activity that mattered less to the world of academics.

Research by Voermans and van Veldhoven (2007), on e-human resource management suggests that organizations have greatly improved in their HRM functions, as the majority are using these systems to align HR practices with the company's strategic goals. Surprisingly, although there is conflicting information on the effectiveness and usefulness of e-HRM, Allen and Seaman (2008) and Strohmeier (2009) found that e-HRM actually reduced administrative costs, streamlined HR processes, supported talent management systems, and improved HR service to employees and managers. In fact, evidence has shown that e-HRM systems have the potential to increase the efficiency and decrease the costs associated with HR processes (Dusek, 2006). Despite these exciting benefits, there has been relatively little academic research on these systems in the fields of Human Resource Management (Ruel, Bondarouk & Van Der Velde, 2007).

Institutions have bespoken e-HRM to tackle strategic issues such as performance management, compliance-oriented training and succession planning (Pearce, 2010), hence still on the right path for people management. However, since HRM is historically a field that has been inundated with paperwork and bureaucracy, Strohmeier (2007) contends that e-HRM came in to bridge this gap. Hence, we do not deny that the integration of IT in the organization of work has brought certain benefits which have led to new conceptions about work relations, but not about work itself. Institutions therefore are advised to learn to "e-manage" their human resources, as opposed to simply "manage" them, in order to survive in today's digital environment (Stone, Stone-Romero & Lukazweski, 2006; and Strohmeier, 2009). Literature on e-HRM suggests that there are three overall goals of e-HRM that include: cost reduction, improving HR services, and improving strategic orientation (Stanton and Coovert, 2004). Some of the empirical findings add globalization to these goals, seeing it as an e-HRM driving force in large international organizations (Allen & Seaman, 2008). However, it has been argued that these goals are not clearly defined in practice, and that e-HRM is mostly directed towards cost reduction and efficiency increases in HR services, rather than aiming to improve the strategic orientation of HRM (Alleyne, Kakabadse & Kakabadse, 2007).

Scholars (e.g. Brill & Galloway, 2007) are in agreement about the importance and benefits of e-HRM in many business-oriented companies. It is also acknowledged, for example by Alleyne et al (2007), that e-HRM is very efficient since it reduces the bureaucratic tendencies and paperwork which many times tend to derail activities. Further evidence on the effectiveness and efficiency of e-HRM in HEIs and supported by Boroughs, Palmer & Hunter, 2008) has shown that although, in practice, e-HRM types tend to be mixed, establishing a good basis for e-HRM at the operational level seems to be an essential prerequisite for relational and transformational e-HRM; and that this requires changes in the tasks of HR professionals. This leads to less paper-based administration, more e-communication with employees and acquiring skills for operating IT. In fact, Dusek (2006) reiterates how positioning companies by their e-HRM types does not necessarily imply judging them; and it is not about better or worse e-HRM types.

Other available research evidence by Brown, et al. (2008) suggests that, in many organizations, e-HRM has led to a radical redistribution of the work that HR managers used to do. Many of the reporting type activities previously performed by HR professionals can now be performed online by managers and employees. On their own desktops, line managers can perform appraisals, evaluate employee costs, generate HR reports and determine turnover and absenteeism, process training requests and oversee competence management. Summarily, employees have access to everything they need to change and manage their personal files, plan their development, process financial documents and apply for career growth or promotion (Dusek, 2006). Hence, the various goals of e-HRM, and the different types of e-HRM, are believed to result in outcomes that include more efficient HRM processes, a higher level of service delivery and better strategic contribution (Bondarouk & Ruel, 2009).

Research by Florkoswki & Olivas-Lujan, (2006) suggests that e-HRM effectiveness progresses predicts strategic outcomes, although there is further evidence that strategic HRM predicts e-HRM outcomes and that the relationship appears context-dependent. To counteract this image, Martin, Alexander and Pate (2006) reiterate that e-HRM was specifically intended to help streamline core HR processes, reduce costs, and improve

efficiency. However, although there has not been sufficient research in the area of higher education, the result of these improvements are expected to transform HRM in order to take on a more strategic role in institutions (Alleyne, Kakabadse & Kakabadse, 2007). Yet, Marler, Fisher and Ke (2009) question how such improvements are measured in order to ascertain the acclaimed positive change in technology on HRM. Marler et al (2009), therefore, doubt whether moving into a more strategic role has ensued in many organizations, because, whereas, there is some agreement that technology has helped the field progress, there is not sufficient empirical evidence to confirm this claim.

Despite the numerous benefits, e-HRM cannot go unchallenged. Pearce (2010), for example, argues that e-HRM poses a challenge that is especially significant for human resource management; it lacks the personal touch of face-to-face communication. More so, less administrative and paperwork tasks may mean less HR personnel needed, thus casting e-HRM as a blessing and a curse at the same time (Ruel, Bondarouk & Van Der Velde, 2007). For example, intranets have inherited from Web parenting the low cost, inexpensive fees, scalability and excellent support advantages, but these will only come out if they are properly designed and managed (Strohmeier, 2009). This means that the Internet's interactivity and real-time interaction collude with the advantages of having the information on HR systematization, allowing for most efficient decision-making. Pearce (2010) explains how e-HR may simplify training in a wide scope, from an application to request courses, to e-learning and e-mentoring processes. It is also argued (e.g. Voermans, van Veldhoven, 2007) that e-training contributes to organizational effectiveness by managing knowledge repositories and creating social and intellectual capital. Whereas a lot has been discussed in the field of usage of technology on HRM, the bulk of research has been done in for-profit companies, and only scanty information on higher education institutions. Consequently, as academic involvement in e-HRM progresses, a lot needs to be done and strategies put in place to ensure that there is acceptance by the academia and that technology does not unseat the original purpose of human relations.

Concerns have been raised by human relations proponents (e.g. Briner, 2007) that there is a danger that HR departments will leave their 'human' element behind as they get swayed by the use of technology, thereby abdicating human relations functions. It sounds logical that electronic systems can solve many institutional problems such as: recruitment, organizational communication, time management, payroll and performance management (Foster, 2006). Nonetheless, they may not provide solutions to all human resource functions because, not all new developments are viewed by employees as beneficial to them. Consequently, employees can only embrace new technology if it makes their job easier, provides security and they are assured of not being judged for failure (Dusek, 2006). It is also feared that lack of human interaction will most likely affect authentic communication in the work place.

As Marler et al, 2009) postulate, while institutions are excited about the use of technology, the latter might limit interpersonal interactions and present communication challenges. As such, employees might continue to disintegrate for lack of human contact, for being kept away from interacting in more personal settings. In view of the fact that today's communication focuses mostly on the latest and greatest technical gadgets, employees are perhaps lacking the very thing that makes for authentic communication in the work place - the human touch. Hence, while we embrace technology, institutions should keep in mind the goal of human relations.

Methodology

A qualitative investigation was carried out to find answers to the research questions. This approach was augmented with integrative synthesis which is an acceptable evidence-based methodology to summarize the existing research literature and observed behaviour, personal experience and artifacts. Integrative synthesis involves the collection and comparison of evidence involving two or more data collection methods. Kothari (1999) supports this approach because it investigates patterns across primary research studies, compensating for single-study weaknesses in research design to improve the internal and external validity of the various research findings. From a practical perspective, documents such as: human resource manuals and specific technology-related policies were reviewed and analyzed to answer the central question that brings about the paradox of e-HRM.

Face-to-face interviews and observations were made on the way technology was being used in the management of employees in two HEIs. Existing research reports, articles and books were reviewed to establish the current

agreement on the challenge of combining technology and the traditional role of human relations. Two human resource directors, deans and directors, heads of departments and other heads of non-academic units were interviewed. Results from these interviews were compared and collaborated. Both thematic and content analyses were employed to generate answers for the research questions (Borg, 1994).

Results and Discussion

Results on the first question were in congruence with the existing literature. However, the effectiveness of technology in managing people was mostly found in business companies as outlined by Haines and Lafleur (2008). On the other hand, research on the use of technology to manage human resources was somewhat conflicting as the bulk of the literature concentrated mostly on instructional methods (Brill & Galloway, 2007). Although the notion of productivity as an outcome of technology investment has been a popular theme in general IT research, most scholars (e.g. Florkoswki & Olivas-Lujan, 2006; Haines & Lafleur, 2008) focused on how technology allows members of organizations to do more productive work as a result of its introduction -- meaning that the concern was more like for Scientific Management times, rather than the concern for human relations.

Foster (2009b) counteracted the above conclusion, arguing that such claims were based on an assumption that management productivity was synonymous with the flow of information and that greater information leads to greater productivity. To conclude that technology yielded high production without considering the process is a shallow analysis. Such conclusions have led to a debate in the technology literature about the 'productivity paradox' (Bondarouk and Ruël, 2009). In the same vein, Dusek (2006) in his "philosophy of technology" argues that despite large investments in technology over many years, it remains difficult to identify exactly where the return on investment has occurred and by what mechanisms.

Although this finding was useful in determining productivity improvements, it was silent on the effectiveness of e-HRM on organizational performance. Certainly, there has been evidence about the benefits of technology. For example, technology has made it possible for marketing and advertising academic programmes, application and registration of students, instructional delivery, distance learning, teleconferencing, performance reviews, time management and distance learning. The effectiveness of technology has also been found in time management, examination assessment and time-tabling. Nevertheless, to a large extent, technology has not been found to be significant in the object of this discussion. It was found that majorly, technology was handy in the areas of communication; such as exchanging views via intra-nets and other social media avenues. Martin, Alexander and Pate (2006) cast doubt on the effectiveness of technology on organizational communication, arguing that this was a wrong assumption. They dispute this claim saying that technology – much as it sometimes tends to be efficient, is not a hundred per cent reliable.

Surprisingly, whereas there were some academic works on e-HRM, many respondents tended to confuse all the technology-related terms and especially, academic registrar's information systems (ARIS) used for students records. Yet, the current researcher was so keen about technology used in the management of HRs. Nonetheless, Payne et al (2009) found that e-HRM undoubtedly contributed to the overall business, customer satisfaction, effectiveness in meeting business goals and business improvement. Still, this was concerned with business and they too found that measuring the linkage between technology and productivity was difficult. Several studies have attempted to examine the wider impact of technology on overall business performance. While some have been able to identify links between technology and overall firm performance, evidence remains inconclusive. Scholars (e.g. Ruel et al, 2007) found a correlation between usage of technology and profitability, which they compared to competitors; while others found evidence that high-performing organizations invest a significantly higher proportion of revenues in technology investments than companies with lower performance.

Equally, although HR professionals in the two HEIs seemed to mix technology-related terms, Brill and Galloway (2007) found effectiveness in using technology in university instruction, but remained silent on its usefulness on management of the "core" resources – the people. This led to researchers (e.g. Boroughs, Palmer & Hunter, 2008) to conclude that the benefits of technology were ultimately intangible and qualitative in nature. Unlike Briner (2007) who argued that managers who are the end users intuitively believe that the benefits of technology on managing people are intangible, the author found that HEIs were not in position to measure its effectiveness as well. On a more shocking revelation, while HR professionals have oftentimes applied

technology in most HRM functions, they were adamant to discuss the actual benefits. Yet they were fast to recognize the importance of technology in view of students' services and service providers. One respondent explained how technology improved customer service, yielded better products, led to higher levels of service quality and better flexibility. He had this to say:

"...it was a nightmare to track down the record of part-timers and other temporary workers. Registers would always disappear, and information on who taught? What did they teach? When did they teach, etc, technology, it is smooth..."

Brill and Galloway (2007) found that one thing technology has done in higher education institutions is to transform the way value activities are performed and the linkages between them had a powerful effect on competitive advantage in either efficiency or differentiation. The author, however, found that institutions typically resorted to technology solutions as a response to increased competitive pressures and internationalization of higher education, given the globalization and the loss of monopoly in the education sector. Conversely, although Brill and Galloway (2007) found that the integration of e-HRM in HEIs has brought certain benefits that led to new conceptions about work relations, there was no evidence of benefits about work itself.

An isolated study on e-HRM by Sanchez and Aguayo (2007) found that, inevitably, academicians encourage the use of intranet than time-wasting face-to-face meetings. This finding was in agreement with this current study regarding perceptions of the usage of technology as opposed to human relations: One of the respondents retorted:

"We don't have time to waste or entertain things like visits by the HR professionals, meetings.

Briefings... sijui... what... I don't like those monthly meetings where the head of the institution just wants to attack some workers. Personally, I prefer an email."

By implication, although it was premised that the usage of technology would detach supervisors from employees, clearly, these academicians prefer technology to time wasting face to face meetings. There was greater willingness by the HR sector to embrace technology, except that some applied it unconsciously. In response to a question that inquired whether the institution used e-HRM for its HRM functions, one respondent said:

"We use intranet for communication and the university's website for job advertisements and recruitments. Now days we even conduct performance reviews and career progress tracking using technology. I am not sure whether that is e-HRM."

This confirmed what Strohmeier (2009) had alluded to. He found that with the advent of technology, many use applications they do not understand because they lack training in the areas of technology. He argued that provided the user understands the instructions and manages to use the system, the rest is irrelevant. One particular area that has been highlighted is the increasing deployment of self-service components is self-assessment and performance evaluation. Yet, Voermans and van Veldhoven (2007) found how scorecard used for time management had been abused in many organizations, claiming that many manipulate the system and others circumvent the process. The study found another interesting part of e-HRM to be employee self-service which gave employees access to details about their payroll and pension information from their desks but limited their ability to change information in these institutions. On the other hand, Haines and Lafleur (2008) found that self-service for job-related functions allowed employees to see what jobs were on offer and could be extended to external applicants who could identify open positions and send in their curriculum vitae online and then forward to a centralized pool for the recruiters to evaluate. Although not so common, this system was found by the current researchers to expedite the recruitment process.

The study found that with greater appreciation of the value of adopting technology in HRM – as well as, critically, the balance that must be maintained between IT and the human touch – human resources have reached a new automated and efficient step in its development. Hence, in support of this finding, Bondarouk, & Van Der Velde (2007) found that today's HR technology is encouraging the evolution of labour procurement processes and sourcing mechanisms. They argue that even evaluation tools are rapidly advancing to help align the need for talent with the overall business plan. Hence, organizations are becoming more agile, able to adapt more easily based on the availability of data from such areas as headcount and performance.

To accentuate the beauty of technology in managing people, Kar and Bhattacharya (2009) have singled out mastery of HR technology as one of the five competence domains for HR, along with strategic contribution, personal credibility, HR delivery and business knowledge. The author found that, increasingly, the effective use of HR technology also supports the development of each of these other competence domains, and it occurs for several reasons. To begin with, technology is fully embedded in so many aspects of university management that understanding the use of technology in all areas of the core business, and particularly in relation to human and organizational capital, enables HR professionals to speak the language of business in an environment that is increasingly technology-driven. Second, the implementation of technology often leads to new ways of collaborating, organizing work, building teams and developing new knowledge and skills, and this can further help build organizational and human capital. The question that kept coming up was: "Will increasing automation cost departments their 'human' element?

The study did not have any significant impact, because like other scholars (e.g. Strohmeier, 2009; Ruel, Bondarouk & Van Der Velde, 2007) observed, technology is deployed to manage areas such as internal mobility, appraisal management, succession planning, package review and personal development, which by implication, increases productivity. Therefore, e-recruitment and performance management software may also help to dramatically improve HR's ability to carry out effective people relationship management, and have significantly reduced operational costs. The second significant question regarding relational implications was: "Will technology success come at a price for some HR organizations? It was obvious the world of academia did not find any specific attachment to human relations – possibly because they did not conceptualize the term "human relations".

The last question was to establish how to maintain the human touch amidst technology. Stone, Stone-Romero and Lukazweski (2006) in their attempt to balance the two, affirm that the best of all worlds is a holistic solution that combines technology with the human element to facilitate putting the right person in the right job at the right time. This argument supports the finding that some members of staff had started feeling the impact; and one member had this to say:

"Before the advent of technology we knew each other even if you worked in different faculties but belonged to the same profession. Personally, I am vexed because if we start to view hiring and managing people like purchasing office equipment, we'll end up sacrificing quality."

This is supported by Ruel et al (2007), who caution organizations to maintain the balance so that technology does not usurp the human qualities so central to organizations, and in line with numerous advocates of human relations such as; Maslow, Herzberg, Aldefer McClellan and others. Hence, automation should be in position to facilitate the requisition and search process so that the human element can be introduced into the interview, selection and review processes, where it adds the most value - this way, there will continue to be human interaction within HR processes. The benefit of technology is that it provides the employer with a simple way to quantify, document, store and distribute data for future reference – therefore, it leaves more room for the human. One respondent who reassured how technology cannot interrupt the human touch had this to say:

"At least HR staff no longer spend their time chasing paperwork, and instead can use their professional skills doing more succession planning and staff development. more time these days is spent with employees on personal development and also help in aligning employees with the objectives in the institution...because there is need for coordination in order HR needs to evolve as human capital and leveraged within the organization."

Voermans and van Veldhoven (2007) conclude the debate arguing that with today's fast-advancing technology, communication has never been more prevalent, let alone efficient. Therefore, there is all the evidence that actually technology is more attaching than detaching because in a blink of an eye, a person is able to communicate with another person halfway around the world without even moving a foot. And while many of today's technological tools are a great way to keep in touch with relationships, be they personal or professional, there is one significant piece of the communication puzzle that is missing, and that is: today's communication lacks that all-important element humans so desperately need - the human touch. Hence, communication is vital for people to build relationships and to form a better understanding of one another, while clearly

establishing roles and identities along the way. Nonetheless, the "detaching-yet-attaching" concern remains logical especially where communication is about the human need for interpersonal interactions, to be able to reach out and touch another human being. And it is that human desire to build relationships that fuels such high-tech advancements in communication, though not always for the betterment of the relationship itself. Humans are born with an innate need for the human touch. From infancy, touch is vitally important to emotional and physical health and well-being. And considering that communication plays such a vital role in everyday relationships from birth, it makes sense that the human touch would also play an important role in our means of communication in organizations.

There is much evidence to suggest that emerging technologies could be a perfect partner for human resources – and could even improve the human element (Ruel et al, 2007). This was also re-echoed by respondents in these institutions under investigation where actually automation improves the HR operations and should allow for greater human interaction where it should occur.

Conclusions and Recommendations

Although the author premised technology to diminish social interaction, higher education institutions do not seem to fancy face-to-face interaction given their differentiated disciplines and roles. Consequently, although there can never be technology solutions for human relations, its presence was not significantly felt. Yet, both the variety of 'people' challenges that organizations face and the complexity of the human psyche need the human touch and not technology. Accordingly, organizations cannot begin to think of treating people like equipment or some sort of inanimate commodity, because the danger of using technology in place of the human element will be the loss of quality talent, which might lead good talent to be treated like office supplies. Nevertheless, although technology had been perceived as a threat to the human touch, it was found instead to bring down HR costs and administrative burdens, along with the opening up of the HR space to non-HR professionals through the use of technology. However, it should not be taken for granted because although there has been wide acceptance of e-HRM, adoption of technology has remained a mayhem to many. It is therefore hoped that the increasing usage of technology in managing human resources will most likely influence the way people in HEIs look at the nature and role of HRM.

It is also important to note that technology (e-HRM) research is still an immature field and research is now developing beyond exploratory definitions of e-HRM functionality, and the concept of technological frames is potentially a valuable tool for analyzing and categorizing stakeholder attitudes. An investment in e-HRM requires major commitment of time and resources, because the most powerful benefits almost certainly lie in wider organizational outcomes such as improved people management and developing strategic capability. Hence, simply adopting technology to manage people as a way of reducing HR costs seems to ignore the real potential of technology and might represent a lost opportunity.

Ultimately, the adoption of technology will mirror the development of people management in an organization. If no value is placed on good people management, then little value will be placed on the usage of technology. There are many simple and effective solutions to incorporating the human touch into today's communication, beginning with setting aside the technical gadgets. Considering that communication is such a vital element in maintaining healthy relationships, it should certainly begin and end with both big and small and very personal gestures that give communication a more human feel. Hence, although technology might play miracles in addressing HR challenges, the human touch and teamwork remains superior.

Given the significance of technology, Higher education managers should be encouraged to appreciate that adoption of technology to manage human resources is critical. Otherwise, lack of awareness might affect the attitude of HR professionals, towards their jobs and profession. This might lead HR professionals to resist the adoption of the latest technology if they perceive that technology lessens status. Finally, managers of HEIs should not be too optimistic using technology to manage people, because many employees might consider the dark side of this technology when implementing new technology systems, policies and practices, but could selectively adopt specific models that will make a difference in the management of people.

References

- Alleyne, C., Kakabadse, A. & Kakabadse, N. (2007). Using the HR Intranet: An exploratory analysis of its impact on managerial satisfaction with the HR function. *Personnel Review, 36* (2), pp. 295-310.
- Boroughs, A., Palmer, L., & Hunter, I. (2008). HR transformation technology: Delivering systems to support the new HR model. Aldershot, England: Gower.
- Brandl, J., Toft Madsen, M. & Madsen, H. (2009). The perceived importance of HR duties Brighton.
- Brill, J. M., & Galloway, C. (2007). Perils and promises: University instructors' integration of technology in classroom-based practices. *British Journal of Educational Technology*, 38(1), 95 105
- Briner, R. (2007). Is HRM evidence based and does it matter? Institute of Employment. London: Blackwell
- Brown, S. A., Massey, A. P., Montoya-Weiss, M. M., & Carey, J. W. & Gelaude, D. (2008). Systematic methods for collecting and analyzing.
- Dusek, V. (2006) Philosophy of Technology. Malden, MA, Blackwell.
- Florkoswki, G. W. & Olivas-Lujan, M. R. (2006). The diffusion of human resource information technology innovations in non-US firms. *Personnel Review*, 35 (6), pp. 684-710.
- Foster, S. (2009b). Making sense of e-HRM: Transformation, Technology and Power Relations. Hampshire, Palgrave Macmillan.
- Foster, S. (2006). A high tech future. Payroll Manager's Review, November 2006, pp. 38-40.
- Haines, V. Y. & Lafleur, G. (2008). Information technology usage and human resource roles and effectiveness. *Human Resource Management*, 47 (3), pp. 525-540.
- Kar, A. & Bhattacharya, S. (2009). E-Recruitment and Customer Satisfaction: An Empirical Study in and Around Kolkata. *ICFAI Journal of Management Research*, 82 (34-54), pp.
- Marler, J. H. (2009). Making Human Resource strategic by going to the net: reality or myth? The International Journal of Human Resource Management, 20 (3), pp. 515-527.
- Marler, J. H., Fisher, S. L. & Ke, W. (2009). Employee Self-Service technology acceptance: A comparison of preimplementation and post-implementation relationships. *Personnel Psychology*, 62 (2), pp. 327-358.
- Martin, G., Alexander, H. & Pate, J. (2006). Using technology to transform the future of HR: an illustrated model of e-HR. In Academy of Management Annual Conference, Atlanta, August 12-16, 2006
- Payne, S.C.; Horner, M.T.; Boswell, W.R.; Boswell, W.R., Schroeder, A.N.; Stine-Chayne, K.J. (2009). Comparison of online and traditional performance appraisal systems. Journal of Managerial Psychology, vol.24, no. 6, pp. 526-544.
- Pearce, N. (2010). A study of technology adoption by practices on operational performance: recognizing country and industry differences. Journal of Resource Management, International Studied Management and Organization, 29 (4), 6-23.
- Ruel, H., Bondarouk, T. V. & Van Der Velde, M. (2007). The Contribution of e-HRM to HRM effectiveness: Results from a quantitative study in a Dutch ministry. *Employee Relations*, 29 (3), pp. 280-291.
- Sanchez, J. & Aguayo, M. (2007). An approach to the satisfaction of Human Resource Information Systems (HRIS): analysis and empirical contrast. *International Journal of Human Resources Development and Management*, 7 (2), pp. 177-214.
- Stone, D. L., Stone-Romero, E. & Lukazweski, K. (2006). Factors affecting the acceptance and effectiveness of electronic human resource systems. *Human Resource Management Review*, 16 (2), pp. 229-244.
- Strohmeier, S. (2009). Concepts of e-HRM consequences: a categorization, review and suggestion. The International Journal of Human Resource Management, 20 (3), pp. 528-543.
- Voermans, M., van Veldhoven, M. (2007): Attitude towards E-HRM: an empirical study at Philips. *Personnel Review*, vol. 36, no 6, pp. 887-902.