

# Good technical training: enhancing ksas for it specialists research paper example...

[Business](#), [Employee](#)



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## **Introduction**

It is common knowledge that the success of any organization is hugely dependent on the KSA's (knowledge, skills and abilities) of its employees. Employees are the most important assets of an organization and without proper mechanisms of recruitment, selection and training, the organization may not acquire and retain most effective e employees. In addition, if the mechanism of recruitment, selection and training are not aligned with the organizations' missions and core values, the organization may ultimately collapse. Employees with high levels of knowledge, skills and abilities drive the organization forwards and propel it towards the achievement of its goals and objectives. The KSA's of the employees need to be reinforced periodically to ensure that they are par with the emerging environmental patterns as well the evolving needs of the organization. This is where training becomes important. Training is aimed at enhancing the knowledge, skills and abilities of the employees so that they can contribute even more towards the achievement of the goals of the organization. One

particular brand of employees that are important to the organization are IT specialists. Rapid advent of technology has seen many businesses adopt IT into their operations, and this has been accompanied by the employment of IT specialists to facilitate the smooth incorporation of information technology into business operations. Since information technology is a field that is constantly changing, there is a need in the organization to constantly enhance the knowledge, skills and abilities of the IT specialists in order to ensure that they can sufficiently tackle all the organization's information technology needs (Orlikowski & Gash, 1994). The best method to enhance technical KSA's of IT specialists is by creating an environment that allows for self-development. In addition, technical knowledge, skills and abilities can be enhanced by maintaining constant collaborations with outside parties and elements in order to share any new and emerging aspects of information technology.

## **Review of Literature**

Information technology is a rapidly advancing field. According to Orlikowski & Gash (1994), information technology is characterized by huge dynamism. Unlike other fields where the way of doing things remains relatively the same, this is not the case with the discipline of IT. New innovations and creations exhibit themselves in the IT field almost on a daily basis. In fact, people who studied information technology may find most of the concepts that they learned while in school to be highly irrelevant in the modern world. This is once again attributable to the huge dynamism of the field. Because of this, IT specialists in the organizations need to constantly enhance their

knowledge skills, and abilities in order to remain relevant and contribute towards the achievement of organizational goals (Orlikowski & Gash 1994). Unlike non-technical skills, technical skills in information technology can only be augmented and enhanced through interacting with IT tools and machineries and with fellow professionals where they constantly exchanging ideas about the emerging and new aspects of IT. This can, for instance, includes the development of new programs for performing business calculations and so on.

Most IT specialists are of graduates of various programs. However, according to Lawson & De Matos (2000), the amount of knowledge and information about IT that is disseminated to students during their education programs is rarely enough to meet the information technology needs at the workplace.

Most of the undergraduates who deem themselves as IT professional are usually overwhelmed once they set foot into the actual workplace. They find that most of the technical skills that learnt and acquired in college cannot be applied in the workplace in a direct manner (Lawson & De Matos, 2000).

These students need to be taken through orientation and training processes that enables them to utilize what they already have and align it with organizational needs. This process may be quite frustrating for them because in the course of their college education, they assumed that all the knowledge skills and abilities that they acquired in school would become immediately useful and indeed applicable to any to organization they became a part of. However, once they set foot in any organization, there is a realization that every organization has different IT needs and consequently, the knowledge skills and abilities of the IT professionals in this organization

have to be aligned with the IT needs of the organization (Lawson & De Matos, 2000).

According to Aubert, Caroli, & Roger (2006), in the last two decades, there has been an intensive emphasis on organizations to incorporate and adopt technology in the course of their business operations. It has also been argued that technology ultimately benefits the organization and helps in improving overall efficiency. Current, every high ranking organization has adopted technology as a key feature for running business operations and procedures. These organizations have then gone ahead and hired IT specialists who have been the forefront of technology implementation (Aubert, Caroli, & Roger, 2006). The persistent problem however, is that many of these organizations fail to realize that because of the dynamic nature of information technology, measures and methods are needed to enhance and augment the knowledge, skill and abilities of IT specialists as they continue with their jobs. IT specialists who were hired about five years ago maybe in possession of outdated and irrelevant technical skills that have already been replaced new skills and abilities have the probability of giving better results (Aubert, Caroli, & Roger, 2006)..

The meaning of this is that if informational technology is to play a critical role in the achievement of organizational goals and objectives, the IT specialists will require to be extremely competent in regard to their knowledge skills and abilities (Dewett & Jones, 2001). These individuals are usually at forefront of implementing IT tools into the organizational operations and if they are somehow deficient in terms of knowledge, skills and abilities, the end result might be the improper and indeed the inadequate implementation

of it into the business operations. Inadequate and improperly implemented systems in the organization may ultimately have disastrous effects. It may result in poor business performance (Dewett & Jones, 2001). It may also lead to huge errors to certain business processes.

For instance, an inadequately skilled employee may develop IT programs for performing and calculating organization budgets that are defective. A program that gives incorrect budget outputs may lead to the loss of organization capital. This may also be the case when it comes to other business operation elements such as resource allocation (Dewett & Jones, 2001).

If information technology is being utilized to facilitate the resources allocations process, this must be done appropriately and at par with the current needs of the organizations. An IT specialist whose IT knowledge, skills and abilities are not properly augmented and who is tasked with this role may not be able to fulfill it in line with the organizational needs (Dewett & Jones, 2001).

Eason (2005) states that the current methods and strategies used by organizations to enhance the technical skills of IT specialists are often shallow minded. Most of them do not acknowledge the dynamism of the IT field. Once again, efforts aimed at enhancing the technical skills of IT specialists should not just revolve around aligning these skills and abilities with organizational needs (Eason, 2005).

IT specialists should be encouraged to be creative and innovative and consistently build on their knowledge, skills and abilities so that they are not only at par with the current business needs, but that these skills can actually

be used to project the future of the organization, particularly its future IT needs (Bell, & Kozlowski, 2002). IT specialist needs to be taught how to self-develop their skills and abilities.

## **Implications of Literature**

One standout implication from the literature review above is that IT is a hugely dynamic field and that keeps of changing on an almost a daily basis and for IT specialists to remain relevant, they have to augment their knowledge, skills and abilities (Orlikowski & Gash, 1994). This has to be done on a fairly consistent basis.

Another standout implication from the literature is that there is a significant gap between technical KSA training at the college level and the actual KSA's required at the workplace (Lawson & De Matos, 2000). In fact, the KSA training that students undergo can be considered to be quite basic. This leads to a scenario in the workplace whereby IT specialists find it hard to integrate and adapt effectively and they have to be taken through an extensive orientation and training process (Lawson & De Matos, 2000).

The implication of this is that the enhancement of the technical knowledge, skills and abilities of IT specialists should commence at the school level. Most of the knowledge, skills and abilities that are imparted on the IT professionals do not extend beyond the basic level of competency. Clearly, this is something that needs to change.

The change can be facilitated by shifting from theoretical abstraction and move towards more practical endeavors. The professors in schools should not shy away from using technological devices especially computers

to relay knowledge, skills and abilities to the learners once one (Lawson & De Matos, 2000). In addition, students must be adequately exposed to all the elements in of IT that are involved at the workplace. This will ensure that they will not be overwhelmed even when they are the workplace. It will also not ensure that no much time and resources are wasted in the orientation and training processes in regards to the technical knowledge, skills and abilities that are required for efficient working in a particular organization. Perhaps the greatest implication in the literature is in regards to the strategies and methods adopted in enhancing the technical knowledge, skills and abilities of employees at the workplace. Literature indicates the current methods have relatively not worked.

Here, a deficiency is also noted when it comes to literature. Although literature acknowledges that the current methods and strategies of enhancing the technical skills of IT have not been effective, there are no suggestions whatsoever about how to go about it. There is very little information in literature detailing how organizations can best enhance the technical knowledge, skills and abilities of IT specialists within these organizations.

Most of the focus is placed on the faults and the inadequacy of the current methods. This is one of the areas that requires more research. More researchers need to come out and identify some of the most essential methods and strategies that can be adopted when it comes to enhancing IT knowledge, skill and abilities.

As shown, the major fault in the current methods and strategies adopted towards enhancing the technical skills of IT specialists is the lack of the



realization that unlike non-technical-skills, technical skills can only be enhanced through exposure to technical IT machinery as well as fellow IT specialists (Eason, 2005). This is quite different from the enhancement of non-technical skills that include written communication, business awareness, teamwork, management and organizational skills, problem-solving, decision making and so. These are skills that can be taught from a variety of organizational stakeholders. In addition, they are skills that can be acquired naturally as one navigates through the processes and operations of the business.

## **Conclusion**

The conclusion that be drawn for the literature and the implications of this literature is that he best method to enhance technical KSA's of IT specialists is by creating an environment that allows for self-development. In addition, technical knowledge, skills and abilities can be enhanced by maintaining constant collaborations with outside parties such as fellow IT professionals in order to share any new and emerging aspects of the IT profession

In regards to self-development, it refers to the giving of freedom to IT specialists to interact with various IT machinery at the workplace. When interaction with IT tool and machinery at the workplace is unlimited, there are high chances of IT specialists discovering, for instance, new ways of doing things (Bell & Kozlowski, 2002). For example, an organization may be using certain IT formula for a certain section of its business operations but an IT professional who has been given the mandate to have free interaction with this system and make observations, may in the long run come to

establish that another IT formula can be adopted and ultimately used to provide better outcomes for the process. In addition, by interacting with certain IT systems, the employee will be able to observe the process of working of these systems that they may not have been familiar with previously.

In terms of knowledge, the employee is able to master new facts and information on how IT systems work in the organization. This is in contrast with an organization whereby IT specialist are not given much freedom with tools of IT and the rules for using them are strictly laid out and specialists have to follow them to the letter without deviating even by a little margin. When employees are given the freedom to interact with tools of IT, their technical skill are augmented in terms of proficiency and expertise. An employee who is, for instance, allowed to interact with organizational budgeting programs freely becomes proficient and expert in that particular element of IT. Their ability to use such systems are also augmented or enhanced at the same time.

Freedom to interact freely with IT tools and machinery at the workplace also leads to creativity and innovation which is in itself a form of KSA enhancement.

Technical knowledge, skills and abilities can be enhanced by maintaining constant collaborations with outside parties in order to share any new and emerging aspects of the IT profession (Bell & Kozlowski, 2002). The organization should allow employees to attend and even, in fact, hold regular IT seminars where the specialists meet and learn from each other about emerging things in the IT sector. As mentioned earlier, IT is a very dynamic

field, and new things are constantly springing in. In order to enhance their knowledge of IT, specialist need to constantly interact their peers and trade opinions as well news on things relates to the profession.

## References

Black, S. E., & Lynch, L. M. (2001). How to compete: the impact of workplace practices and information technology on productivity. *Review of Economics and statistics*, 83(3), 434-445.

Aubert, P., Caroli, E., & Roger, M. (2006). New technologies, organization and age: firm-level evidence. *The Economic Journal*, 116(509), F73-F93.

Orlikowski, W. J., & Gash, D. C. (1994). Technological frames: making sense of information technology in organizations. *ACM Transactions on Information Systems (TOIS)*, 12(2), 174-207.

Eason, K. D. (2005). *Information technology and organizational change*. CRC Press.

Dewett, T., & Jones, G. R. (2001). The role of information technology in the organization: a review, model, and assessment. *Journal of management*, 27(3), 313-346.

Bell, B. S., & Kozlowski, S. W. (2002). Adaptive guidance: Enhancing self-regulation, knowledge, and performance in technology-based training. *Personnel Psychology*, 55(2), 267-306.

Bartel, A. P., Ichniowski, C., & Shaw, K. L. (2005). How does information technology really affect productivity? Plant-level comparisons of product innovation, process improvement and worker skills (No. w11773). National Bureau of Economic Research.

Lawson, R., & De Matos, C. (2000). Information technology skills in the workplace: Implications for Bachelor of Arts degrees. *Australian Journal of Educational Technology*, 16(2), 87-103.