

# Knowledge Management Guidelines for TUT

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## Introduction

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These guidelines are written to assist staff to appreciate and understand knowledge management, its goals and understand why we do knowledge management at Tshwane University of Technology.

These guidelines are a result of research being done and best practices in the business world out there.

There are many different views in the implementation of knowledge management in an organisation. The scope of these guidelines is not to abide by a specific implementation approach, but to present the issues clearly and give helpful advice without being too prescriptive.

These guidelines is an attempt to answer the key questions such as 'what is knowledge management?', 'why is it important for TUT to do this?' and so on.

## What is Knowledge Management?

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**Knowledge can be defined as** information in context to produce an actionable understanding.

It is generally accepted by commentators in field of Knowledge Management that there are two types of knowledge: - Explicit knowledge and tacit knowledge.

Charles West Churchman said in his pioneering work, *The Design of Inquiring Systems*, three decades ago: "Knowledge resides in the user and not in the collection of information ... it is how the user reacts to a collection of information that matters." With reference to Nonaka and Takeuchi and their best seller, *The Knowledge-Creating Company*, Malhotra states that information, as gathered, stored or generated by computer systems, "is not a very rich carrier of human interpretation for potential action, knowledge resides in the user's subjective context of action based on that information", while the computer acts merely as the tool in the knowledge creation process. [6]

**Explicit knowledge** encompasses the things we know that we can write down, share with others, and put into a database. One example would be the steps used to register students on the University's ITS system.

According Borghoff UM, Pareschi R, 1997 to explicit knowledge is formal knowledge that can be packaged as information and can be found in the documents of an organization: reports, articles, manuals, patents, pictures, images, video, sound, software etc. [5]

Explicit knowledge may be articulated through

- speech
- writing
- drawings
- patents
- computer programs or mathematical relationships

**Tacit knowledge** is what we do not know that we know.

It includes know-how, judgment, rules of thumb, experience, insights, skill, and intuition. An example of this would be to know that it takes a certain time of say 4 minutes on average to register a student on the ITS system.

Tacit knowledge is personal knowledge embedded in individual experience and is shared and exchanged through direct, eye to-eye contact. It is elicited through the response to or interactions with other people in a specific context.

Tacit knowledge is therefore practical knowledge that is key to getting things done, but has been sadly neglected in the past.

**Knowledge management (KM)** focuses on how an organisation **identifies, creates captures, acquires, shares, and leverages knowledge**. [4]

Knowledge should be thought of as a strategic asset which is an essential organizational component. The strategic nature of knowledge means that it must be part of the decision making process during the management of change.

To fail to account for knowledge during managed change can lead to serious problems. Unless one is managing knowledge, one is very probably not managing change.

Knowledge Management is the pulling together of knowledge from several sources and in several formats into a shared focus and language for a particular set of objectives and activities. [1]

Knowledge Management is primarily focused on knowledge possessed by people.

Therefore, we view knowledge management at a strategic level - a level which does not require precise detail but which can provide decision support during the management of change.

## Knowledge is more than information

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Databases can store records of facts, figures, data, rules, patterns and connections (statistics). At present, they have limited power to create anything new or to innovate, they are therefore not enablers in the process of decision making.

## Knowledge is more powerful

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Knowledge is potential for action. It enables a person to innovate. Possession of knowledge enables people to create actions and also new knowledge. This is what distinguishes knowledge from information.

Karl Wigg, a consultant and practitioner of Knowledge Management in the USA, sums it up in a few words by saying

*'Information describes circumstances, situations and problems whereas knowledge enables people to handle problems and to solve them.'* [2]

According to Dr. John L. Gordon and Colin Smith, an individual possesses his or her knowledge: it is loaned to the company or group only if the individual wishes to make it available. An individual can share knowledge and can co-operate with others to use knowledge only if that person is motivated to do so. [1]

## **Why is Knowledge Management important at TUT?**

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One of the challenges we face today is the vast amount of information and knowledge that resides within the minds and personal files of staff members within an organisation. This information is often not known or shared with others within the organisation.

An organization's working knowledge is one of its most precious assets. When these intangible assets of an organisation are lost through the resignation/loss of its staff members, the tacit and explicit knowledge that they have acquired are often lost.

The systems (human and computerized) of an organisation are expected to effectively meet the needs and expectations of its customers, our students at TUT. Not fulfilling in these expectations, the organisation will not retain or entice customers, as they will naturally find other alternative organizations to comply with their needs and expectations.

Keeping working knowledge of these systems of an organisation is thus of utmost importance for the survival of TUT in the new business environment of today.

The wide variety of tertiary institutions, locally and globally that is available in various types of access methods (distance education, telematic education and other) to prospective and current students make it ever more important for us to adhere to student needs and expectations.

Having superior actionable knowledge to seamlessly satisfy the student's needs will make TUT globally competitive, increase productivity & prolong the existence of our university.

## **Why Practice Knowledge Management at TUT?**

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Knowledge Management has always been practiced in one form or another. People have been appointed for their knowledge, expertise or potential.

People have been promoted for their abilities in handling complex problems. Staff turnover is high in our competitive business world today.

Technology and information systems develop very quickly. Knowledge of their potential application and their operation has to develop in step with these improvements.

In the merger of the 3 previous Technikons into the new Tshwane University of Technology, the structures within TUT has dispersed the articulated knowledge around the company.

Consequently the deep knowledge about our organisation (the tacit knowledge) is less strong, and the explicit knowledge can be diminished and weakened.

With regard to knowledge, we need to 'know what', 'know how' and 'know who' in order to mobilize resources to meet our students needs more efficiently.

Increasingly, we will need to 'know where' the sources of knowledge reside in our distributed organisation in order to fulfill business requirements.

## Introducing technology in the deployment of Knowledge Management at TUT

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We are currently implementing Microsoft SharePoint Portal Server software containing a huge database of document images. All student documentation will be available electronically as all student information will be imaged (scanned) and indexed for quick retrieval and usage by staff. Note that very strict security measures are placed on such retrieval. A great advantage here is that authorized staff members can view the same student file at the same time. Obtaining and sharing information and knowledge will thus be made easy. Through this software that will be available to staff, sharing information, documents, ideas, links, mail, etc. is as easy as a click away. It is a web enabled system, which will be part of the MyPortal on the intranet.

This software is a component of our Knowledge Management Strategy that we are implementing and the system has been baptized as **iKnow**. The system will provide staff the opportunity to be part of specific Communities of Practice and similar interest groups regarding TUT.

It will give staff the capability of retrieving student and other information seamlessly and fast. The system will support the automation of current business processes, i.e. the student application/selection/registration processes. The benefit will be speedy access to student information to support decision making and other workflow activities.

### Bibliography

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