

An Exploratory Study on Knowledge Management (KM) in the Maltese Pharmaceutical Sector

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Introduction

The pharmaceutical sector can be considered as a key player in the world's economy. This is also the case for Malta's economy where the pharmaceutical sector is considered an important business sector. Till October 2021, the Maltese Pharmaceutical Sector exported €353 million worth of pharmaceutical products making up approximately 13% of total exports for Malta (National Statistics Office, 2021).

Nowadays we hear a lot about 'a knowledge-based economy'. Globalisation has brought an organisation's knowledge assets into focus - knowledge is being more and more recognised as a valued asset in competitive environments and "is increasingly at the heart of modern enterprises" (Ho et al., 2014, p. 734). Therefore, in these uncertain and challenging times we are living in, organisations, in particular, knowledge intensive organisations such as those operating in the pharmaceutical sector must make the best possible use of their knowledge-based activities in order to maintain a competitive advantage (Valaei et al., 2017). Knowledge Management (KM) has been recognised as providing the key to organisations to attain organisational effectiveness (or related aspects such as organisational performance) by making the best use of their knowledge resources (Zack et al., 2009)



Literature review

Researchers have voiced concerns on the lack of studies reporting the impact of KM on organisational performance. Heisig et al. (2016) emphasise this worrying state of affairs by stating that “this issue is considered as the prime gap in the existing knowledge on KM” (p. 1170). KM is about organising people, processes and technology in order to get the most out of an organisation’s knowledge resources and therefore enhancing organisational performance and effectiveness. Thus, many researchers in the KM field have stressed the importance of evaluating and exploring KM enablers, KM processes and organisational effectiveness in order to understand the successes and failures of any KM initiatives undertaken by an organisation (Lee, 2017; Singh, 2018).

KM enablers such as IT support, organisational strategy, organisational structure (formalisation and centralisation), organisational culture (trust, collaboration and learning), intrinsic rewards, people skills and leadership are “critical factors that put KM concepts into practice in order to achieve KM effectiveness” (Ho, 2009, p. 101). KM processes such as knowledge creation, knowledge application, knowledge sharing and knowledge protection are considered as core processes that facilitate KM and thus help an organisation to produce valuable knowledge and to leverage knowledge assets (Singh, 2018). Organisational effectiveness is “the degree to which an organization realizes its goals” (Daft, 1995 p. 98).

This state of affairs in the KM field has provided the impetus for this study coupled with the fact that research on KM in the Maltese Pharmaceutical Sector is practically non-existent.

Research Questions

In order to study the state of affairs regarding KM in the Maltese Pharmaceutical Sector, the following five research questions were explored:

1. *What is the uptake level of KM initiatives in the Maltese Pharmaceutical Sector? Is there a focused KM strategy as part of the organisational business strategy?*
2. *What is the status of KM enablers in the Maltese Pharmaceutical Sector? Are they perceived important in promoting KM initiatives?*
3. *Is the Maltese Pharmaceutical Sector making the most of its knowledge assets? Are these knowledge assets being adequately protected?*
4. *Are the effects of initiatives geared towards improving organisational effectiveness being measured?*
5. *Is KM perceived to have a future role in the Maltese Pharmaceutical Sector?*

Method

20 structured interviews were carried out. The participants were 8 females and 12 males, and the age range was from 34 to 50 years with an average age of 43.5 years (SD = 3.99 years). The number of years working in the pharmaceutical sector ranged from 8 to 26 years with an average of 19.8 years (SD = 5.80 years). The number of years employed with their current organisation ranged from 2 to 24 years with an average of 9.9 years (SD = 7.28 years).

Template analysis was used to organise data and extract themes according to their relevance to the research questions described above. Template analysis allows flexibility in the coding structure, format and style of the template produced (Brooks et al., 2015). The Final Template for the structured interviews is reproduced below.

1. Uptake level of KM and focused KM strategy

1. Understanding of the term KM

1. Explicit knowledge within the organisation
2. Tacit knowledge within people
3. KM processes
4. Linking People, IT, KM processes and organisational effectiveness

2. Status and perceived importance of KM enablers in the Maltese Pharmaceutical Sector

1. IT support

1. Adequate hardware support
2. Tailor made software packages
3. Timely and adequate IT personnel support

2. Learning

1. Mentoring/internal training
2. External training

3. Trust and Collaboration

1. Relationships between employees, management and organisations
2. Trust and collaboration going hand in hand

4. Formalisation and Centralisation

1. Importance of rules and regulations for the pharmaceutical sector
2. Balance between decentralisation and centralisation of authority

5. Intrinsic Rewards

1. Double-edged sword?
2. Official vs unofficial use of intrinsic rewards by HR

6. People skills

1. Matching skills with tasks assigned to employees

7. Transformational Leadership

1. Characteristics of leaders (charismatic; inspirational; considerate)

3. Utilisation and protection of organisation's knowledge assets

1. Best possible utilisation of knowledge assets
2. Knowledge organisation
3. Protecting knowledge assets

4. Measuring initiatives geared at improving organisational effectiveness

1. Measurement of outcomes of initiatives geared at improving effectiveness

5. Perceived future role of KM

1. Future of KM in the Pharmaceutical Sector?

Figure 1 - Final template construed from the structured interview data





Results

In order to provide answers for research question 1, interviewees were explicitly asked about any **KM initiatives currently being undertaken by their organisation**. Most of the participants (16) were hesitant at first but then they either replied that no ‘official’ KM initiatives were undertaken by their organisation or if any ‘initiatives’ were taken, these were certainly not proposed as KM initiatives by their organisation. On introducing a simple definition of KM, the participants were then able to identify initiatives taken by their organisation that although related to KM, were not described as such by the organisation. Such initiatives included IT initiatives

related to knowledge repositories, initiatives related to KM processes and initiatives aimed at tapping the tacit knowledge of the employee. Participants were then asked whether a **focused KM strategy was part of the business strategy** of their organisation. To this question, the participants replied with a blunt ‘No’

In order to explore research question 2, participants were asked about various KM enablers namely: **IT Support**, Learning, Trust and Collaboration, Formalisation and Centralisation, Intrinsic Rewards, People skills and Transformational Leadership. For IT Support, the participants had some reservations

with regards to IT personnel support. They were not happy with the software support, mostly the provision of tailor-made software packages specifically customised for their day-to-day work requirements.

With regards to **Learning**, the majority (13) agreed that some form of mentoring was done but expressed some concerns on this, namely that sometimes work pressure places mentoring of new recruits on the back burner. Also, some participants wanted to see a more structured training program in place since most of the mentoring is done ‘out of goodwill’ without any formal strategy. With regards to external training, although most

of the participants (13) acknowledged that this was offered, they complained that most of the training offered was not tailor made for their needs and that training abroad was rarely offered.

For **Trust and Collaboration**, all the participants agreed that lack of trust/collaboration is a big barrier to any KM initiatives. Most of the participants (16) agreed that the most difficult to get is trust between different departments and at inter-organisational level. Participants were also keen to point out that it is important that management instils a culture of trust in the organisation so as employees feel trusted by that organisation. Lack of trust could lead to knowledge hoarding and to difficult work collaborations.

When asked about **Formalisation and Centralisation**, all the participants agreed that formalisation – having set rules, regulations and procedures and striving to follow them is vital to success in the pharmaceutical sector since this is a highly regularised sector with numerous rules and regulations tied to upholding quality when dealing with pharmaceuticals. The participants did not agree with having a centralised organisation but believed that a balance between centralisation and decentralisation is a must for a healthy organisation. Participants claimed that policy, strategy and vision of the organisation must be handled by centralised authority whereas day to day operations, professional decisions and micromanagement in general should be decentralised so as not to stifle creativity and efficiency.

The participants agreed that **Intrinsic Rewards** would promote KM by incentivising employees to share

their knowledge. On the issue of official vs unofficial introduction of intrinsic rewards by HR of their organisation, the majority of the participants (18) responded that these were not officially in place and due to the subjective nature of intrinsic rewards, they had reservations on their introduction as an official policy, stating that this could act as a double-edged sword where praising someone officially might cause division amongst employees due to envy.

When asked about **People skills**, the majority of the participants (14) thought that their organisation was not making its utmost to match the skills of the employees with the tasks assigned to them. The reasons cited by the participants were a lack of skill profiling by their Human Resources department, recruiting people ‘just to fill the vacancy’ without proper screening at interview stage and a lack of a properly defined skill requirement structure.

The final KM enabler discussed was **Transformational Leadership**. On asking about the characteristics of their leaders, most of the participants confirmed that their top management was charismatic, inspirational and considerate. Only a few participants (5) considered their top management as not considerate. The participants however acknowledged the fact that the pressures of work could be responsible for this lack of consideration.

In tackling research question 3, participants were asked if their organisation makes the **best possible use of knowledge assets**. The participants wanted to see an improvement on this, mostly by tapping more the





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knowledge within people and improving knowledge sharing/dissemination which are very important for knowledge creation. The participants were also asked if **knowledge resources were kept updated and accessible**. Many participants (12) suggested that the enrolment of a knowledge officer would be of an asset to their organisation as there would finally be someone dedicated to the upkeep of the organisation's knowledge resources. Finally, the participants were asked about how their organisation goes about **protecting knowledge assets**. The participants were satisfied with the level of knowledge protection provided by their organisation mostly through a robust IT system. The only reserve that some participants had was that they would like their organisation to emphasise more promotion of knowledge protection amongst employees

To provide an answer for research question 4, the participants were asked if their organisation performed **measurement of the outcomes of initiatives taken to improve effectiveness**. Half of the interviewees (10) responded that they have some form of metrics in place. The other half of the interviewees confirmed that they do not have any form of metrics in place and that they would like to see them introduced by their organisation.

Is there a **future role for KM in the Pharmaceutical Sector?** - This question was specifically asked to address the final research question. All the participants enthusiastically replied that they felt KM has a future and that they wished their organisations invested more in KM in the next five years. The participants wished that top management was made more aware of KM so as KM strategies could be synched with the business strategy of their organisation.

Recommendations

From the results above, the following recommendations can be garnered:

- Management could help promote an official KM strategy that caters for codification (e.g., organise and store knowledge in knowledge repositories/ databases for easy retrieval) and personalisation (e.g., shadowing/mentoring initiatives; external training) knowledge strategies that are in line with the business/competitive strategy in order to create a sustained competitive advantage and increased effectiveness.
- Emphasis needs to be made on providing more responsive IT personnel support and customised software for the day-to-day work requirements of the employees.
- This study has found that metrics are lacking or boil down mainly to simple financial metrics. It is therefore important that top management introduces such metrics (e.g., knowledge stock, flow and utilisation indicators; patent-based performance metrics; intellectual capital metrics) that would allow new knowledge initiatives, which can be very expensive, to be gauged so as it can be determined whether they are contributing or not to an increase in the effectiveness of the organisation.
- Managers need to establish a proper mentoring/ shadowing programme aimed at preventing loss of tacit knowledge and experience. Management could also provide more opportunities for employees to be exposed to training abroad together with locally provided tailor made specialised (in-house and external) training in an attempt to meet the exigencies of the employees.
- It is recommendable that management praises and recognises employees for contributing to dissemination of knowledge within the organisation. Having said this, management must use caution when implementing intrinsic rewards officially since this might cause discern amongst employees within the same organisation due to envy.
- Leaders must try their best to be highly considerate towards the employees' needs and also strive to find ways of stimulating employee creativity when tackling and solving problems. It is imperative for organisations to recruit leaders with the skills, attributes and capabilities needed to be transformational leaders. As Neal (2016) puts it, such leaders should be "innovators who like to look at the business from a different perspective and warriors who aren't afraid to constantly challenge conventional wisdom"



Conclusion

Globalisation and the knowledge economy have increased the pressure on knowledge intensive sectors to remain competitive. The leverage of an organisation's knowledge and therefore the role of KM have taken centre stage for modern management.

In my career as a pharmacist, spanning over twenty years, and where I have occupied important managerial positions in different pharmaceutical areas such as procurement, wholesale dealing and distribution of medicinal products, I have witnessed, on several occasions, problems associated with the leverage of knowledge. These problems were always to the detriment of the quality and effectiveness of the service to our patients.

I hope that through this study, besides contributing to the KM domain in general, I have also contributed to the Maltese Pharmaceutical Sector by providing insights to policy makers and stakeholders on how to better manage their knowledge assets thus helping organisations in the Maltese Pharmaceutical Sector to reach their financial targets, and ultimately the goal of:

'Delivering a pristine pharmaceutical service to our Maltese and Gozitan patients'





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