# Muslim Heritage in the Golden Age, the House of Wisdom and the Knowledge Management in Enhancing the Competitiveness of Public Universities in Malaysia

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Abstract: The rapid change in the market needs had represent a challenge and request more work and adaption from the educational organizations to this change by changing their plans, strategies and curriculums in order to be able to sustain and graduate students who have the skills and knowledge that make them able to compete in the whole world. Actually, this challenge was facing all the universities worldwide especially the Islamic universities which has a special and different vision and goals based not only on the scientific knowledge but in the holistic development of the students. For this, this empirical analysis was done to prove the efficiency of having the knowledge management as a tool in addition to the knowledge legacy from the Islamic golden age as a way to improve the Islamic universities performance. Also, how we can make link between the current universities and the old Islamic universities such as house of wisdom to extract lessons and learn from this successful pattern which was the main point of creativity, innovation and the place where most of the inventions which are the base of our modern world was invented in that university or academy. This research was based on empirical findings conducted from interviews with a number of professionals who had experience of work in Islamic universities and who came from different background and levels.

Keywords: Knowledge management, house of wisdom, Islamic heritage, Islamic universities, innovation, Islamization, sharing knowledge.

# 1. INTRODUCTION

In fact, many barriers can prevent the evolution of some educational organisations such as the unclear strategy, the increase of bureaucracy, the lack of a culture of sharing knowledge and communication among workers and different part of the university for this there is many initiative and approaches have been adopted by the successful one to enhance the share of knowledge, the debates and open discussions, support the researches and researchers, the providing of a suitable environment for innovation, the use of current technology to contribute and help in the development, the combination of different knowledge management strategies the codified and personalized due to the recognition of the importance of each member role in the organisation to get the better result and achieve the organisation goal.[1]Thus, This can be done by learning, understanding, and analysing the past and plan for future to have a better present real results and this can be considered as the main focus of having the integration of knowledge management in the organisation .[2]

# 2. BACKGROUND

As a matter of fact, ancient Muslims were always searching and developing the knowledge that they have in order to live a better life and in suitable situation and environment. That's why they were an innovative and creative people who are searching to continuously develop their environment, knowledge, and to understand the creation of Allah and the miracles

in every little detail in the earth. Actually, they had learn from the people before them, and they was giving a great value to the science and learning. From that way of thinking, scientific academic was created to make the research and knowledge well managed and shared among scholars and students to spread it all over the world. [3] They were working with commitment and passion to learn, create and innovate. Likewise, they were sharing the knowledge that they have by communication, teaching, conferences and debates to ensure the spread of this knowledge to the large possible number of people. Furthermore, unfortunately many wars and fights has taking place and the first thing that was destroyed was the scientific academic, because they understand that to kill a nation, kill its knowledge [3]. But, the knowledge because it was shared and spread, many scholars and Scientifics had use it to invent and re-new it in the way to create new innovation that are what constitute our modern world. [4]

### 3. PROBLEM STATEMENT

Before more than 1100 years the first scientific academy "bayt el hikmah" or house of wisdom was created in Baghdad by the Abbasid caliph and this huge academy contained more than million book in the time of Caliph Haroon el Rashid. [5]This period of history house of wisdom represented a lighthouse for sciences, researches, innovation, creation in a very civilized and sophisticated environment of harmony and share of knowledge among scholars and students from all over the world from different religions and cultures.[6]Actually, if we look in this successful academy activities and plans we will see that there was a well use and management of knowledge that they had by the good employment of people, processes and the technologies that they had in that time to share, re-use, create and innovate new knowledge. During this golden age of the scientific renaissance under the management of caliph and Muslim scholars, the foundation of our current modern world was created by the most important innovations of Muslim scholars in science, math, physics, and astronomy.[7]Unfortunately, over the years Muslims had been left this rich significant heritage which had been used and involved to be the foundation of the European scientific renaissance, then the industrial revolution until creating the modern world that we are living in.

However, in the current time were Muslims are considered as absent from the global world image of creative and innovative peoples and nations[8], the reality is that all the new technologies and sciences that we have come from the Muslim heritage created in an academics such as bayt el hikmah in the golden age that has been well used and managed there after by European to build the new modern world.[9][10]As Muslims, with this rich history of innovations, creations and as shareholders in the development of our world, we need an awakening and recognize that we have not managed the knowledge that we have to keep this heritage and develop, reuse and share it. Thus, as Muslim nation there is an important need to do many changes and transformations, in Muslims priorities and how they can use the knowledge management to take benefit, re-use and innovate to contribute in the world development. Furthermore, as the basic of changes start by the education, sothe Islamic universities should be the flame breakthrough to start integrating the new awaking of people by educating them and through the well use of knowledge and technology to be able to back to be leaders and back to the golden age inventions and contribution to develop our world.

This research and empirical analysis aim to identify the necessity of knowledge management as tool which combine people, processes and technology to directly or indirectly influence and play a role to improve the performance in Islamic universities. In addition, this research make the linkage between the knowledge management, the Islamic heritage in golden age, and compare the current Islamic universities with a successful ancient Islamic academy such as house of wisdom to extract lessons, learn and know what are the weaknesses and the lack in the current Islamic universities and how it can be optimised by analysing and understanding the successful example of house of wisdom.

# 4. METHODOLOGY

# 4.1 Research design and sample of the study:

In fact this study is purely qualitative research to go in depth meanings and facts with professional people from a long work experience who are coming from different countries and universities and who are currently working in Islamic universities, to understand the current situation of Islamic and public universitiesespecially in Malaysia by analysing and studying the case of two universities and to study in depth how and if the knowledge management can play a role to improve the situation in the universities especially the Islamic universities and the challenges that this kind of universities

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are facing,in addition to the possible linkage and lessons that can be learned from the previous successful educational organisations such as house of wisdom.

Variable	value	percentage
Gender	Male	80%
	Female	20%
Age	>30 and <50	70%
	>50 and <65	30%
Education	PHD degree	20%
	>PHD degree	80%
Position	Lecturers	100%
Work experience	>10 years and <15 years	60%
	>15 years and <35 years	40%

# 4.2 Data collection:

Actually, there is many methods that can be applied to collect data, but in this research two methods were conducting interviews and observation. Firstly, conducting interviews with people who had experience in the education field and who have awareness on knowledge management and it's a very important method and useful to get detailed information and full understanding. Each interview was conducted for the duration of one hour of discussions. Furthermore, interview questions were prepared beforehand and were presented to the interviewee during the interview session. Some impromptu questions were also asked based on the interviewee's response to the original interview questions. By the end of the interview session, we had acquired detailed information about the values of Islamic university, their vision, the application of knowledge management, the challenges facing those universities and understanding the possible linkage between the current Islamic universities and the old educational organisations such a house of wisdom.

The interview questions was concerning the university values, priorities and vision in addition to questions related to the knowledge management role and strategy and how this mix between the previous heritage of Islamic universities in golden age can be used in today's Islamic universities. (Appendix 1)

Secondly, observation is another useful technique that allows the gathering of first-hand information about how things currently work at an organization. However, observation may also give a distorted view of how things really work. We employed the observation technique to understand if the values of the university are applied in the real ground in addition to the important points in knowledge management strategy to improve the university situation. We did not inform the staff that we were observing them.

## 5. DATA ANALYSIS AND DISCUSSION

After conducting the interviews with 10 professors and the observation of real ground work and activities as methods to collect data, we have analysis the data of each professional to see what are the common points and results and we have found that the majority of ideas about the Islamic universities, the knowledge management and the linkage between the successful old Islamic universities and current Islamic universities was:

# 1. The positive points in the Islamic universities in relation with knowledge management are:

- ✓ Even with this miss-communication the situation of some Islamic universities regarding to the collaboration and communication still better than many other universities.
- ✓ Since short time ago it start to have some change and movement to apply the knowledge management strategy

- ✓ there is always an analysis of the measurable factors in the university such as the international students rates, the
- ✓ The universities are trying to optimizing its curriculums.
- ✓ There is an expansion of the university international relations and interactions.

students publications to assess the improvement of the university status

- ✓ There is currently a lot of workshops to share knowledge in the university internally and externally.
- ✓ There is a lot of formal meetings conducted continuously in the university, and the percentage of this formal meetings are very high in comparison with this of informal meetings.
- ✓ The environment initially was a very positive and motivated environment.
- ✓ There was a real and right Islamic behaviours in the whole university.
- ✓ There is new initiatives and steps such as the distribution of books in some Islamic universities about the guidelines and policies and the meaning of islamization and how each member in the university apply it from its position, this step is in order to increase the awareness of staff about the university values and principles.
- ✓ There is some training for the new staff by the retired people and the university keep the key people in the organisation to have a continuous and sustainability of this idea and goal and the new staff learn from the experience of previous and professional staff.

# 2. The points that need to be improved in the Islamic universities in relation with knowledge management are:

- ✓ The Miss-communication between different parts and departments in the university and the Miss-management of knowledge.
- ✓ The knowledge management strategy and plan in addition to the values and principles are not applied in the real ground it steal on papers and theory only.
- ✓ The wrong application of the Islamic values had affect negatively the result of work and lead to the insufficient appreciation of knowledge and scholars.
- ✓ There should be more focus on research and development but sometime the problem of lack of funding can be a barrier.
- ✓ The trend now is to Islamise the knowledge, it started with positive intention but maybe it's done in a wrong way which make it controversial and cause many debates and difficulty to take the right decisions about it.
- ✓ There should be a transform of the abstract and theory ideas and plans to a practical and real ground work.
- ✓ There is need to redefined the conception of islamization, a spread and raise of the staff awareness on the real meaning and goal of the islamization, and make the difference between the islamization of knowledge and the islamization of human knowledge in order to go in the right way.
- ✓ The mix and matching between the knowledge and the islamization is not sufficient there should be a focus on the innovation.
- ✓ A step such as the book distribution is not sufficient, there should be another steps and the conducting of conferences from the management to discuss with staff and make them better understand.
- ✓ There should be less bureaucracy in the university, to be able to better share knowledge, innovate and communicate.
- ✓ In the current situation there is no sufficient motivation to make people stay in the university.
- ✓ Muslims should not be consumers but creative and innovative people as they were in the golden age.
- ✓ We have to change the way we use knowledge and go more toward the innovation.
- ✓ The bureaucracy should be decreased by the application of the right Islamic rules of communications without having barriers where the prophet Mohamed (PBUH) was opening his door to meet any one in any time and he accept the others ideas and discuss with them.

- ✓ There is no sufficient documentation and codification of the knowledge in the university, even when an event, conference or workshop happen there is no sufficient documentation of this events and thus the rate of share of this knowledge will be low. That's why the documentation and registration of each event, conference or workshop officially from the university can be a good way to share knowledge continuously.
- ✓ Capturing the broadcast of any event in any kulliyah and post and share it live with other kulliyah can be a way to make this important knowledge shared in all the parts and kulliyah of the university.
- ✓ There should be more knowledge systems to support the knowledge management and provide a continuous learning environment.
- ✓ The technology and tools that we have today and were not present previously can support significantly the use and share of knowledge.

# 3. The role that the knowledge management can play is:

- ✓ The knowledge management can help to make a plan to overcome the funding and financial problems in the university but it is not sufficient or the only solution.
- ✓ The knowledge management can play a very important role but indirect to enhance the situation of the university and creating and rising the culture of sharing knowledge.
- ✓ There should be a mix of the two knowledge management strategies in each university the codified and the personalized to get better results.
- ✓ The knowledge management can play a role in helping the university to well collect, reuse and share the knowledge from the golden age sciences and knowledge and order to take experience and earn from it.

# 4. The linkage between the successful academy such as the house of wisdom is demanded to:

- ✓ One of the main difference between the previous Islamic academy such as bayt el hikmah and the current Islamic universities that bayt el hikmah gives a lot of importance and appreciate the value of knowledge and scholars in that time which was encouraging and motivated them to work and innovate.
- ✓ Now there is insufficient appreciation of knowledge and scholars in some Islamic universities in comparison with the old ones.
- ✓ It's a good idea to make the linkage and comparison between house of wisdom and the current Islamic universities to understand, learn and extract the reasons of their success before and which are not applied now in the current universities.

# 5. Other important points regarding Islamic universities are:

- ✓ What make the Islamic universities in a bad worldwide ranking, is not those universities are not able to compete but because those universities follow criteria's which are different than those of world universities criteria's, for instance the Islamic universities had a part for zakat, provide pilgrimage and other activities which are not take into consideration in the international and worldwide ranking, and those values are priorities and are from the main vision and mission of some of Islamic universities which cannot be neglected.
- ✓ We can consider that the students who are graduated from Islamic universities from different specialities are able and have the skills and knowledge to compete worldwide.
- ✓ From one of the professionals point of view concerning the international ranking mention that yes the Islamic universities criteria and way of working and values are different but" yes you can be different, but you cannot isolate yourself". In this a demand to make a convergence between the values and principles of Islamic universities and the worldwide criteria's to evaluate the universities.
- ✓ the issue in comparison with western countries nowadays there is no sufficient support and motivated environment to innovate and create in some Islamic universities due to different reasons such as the lack of funding's.

- ✓ What make people still seek and go to Islamic universities yes there is weaknesses and may be is not the ideal situation but it still a very comfortable environment for work and communicate and share knowledge and experience with others.
- ✓ Before many years there was a holistic development of the students in the Islamic universities more than now and the cause is the growth of challenges that face this universities.

From this different and various points of view, we can see that the Islamic universities has their own specifications and different goal and missions which allow a holistic development of the human on knowledge, sciences, research, communication, interaction and in ethics. But, those universities are facing a lot of challenges and it need a lot of improvement to prove their competence to compete in an international level. For this, the knowledge management can be a tool to help the university firstly to collect and take benefit from the previous experience of successful universities such as "Bayt el Hikmah" to extract the differences and learn and see what should be rectified and improved. In addition, nowadays the technology can be a way that contribute with the knowledge management to codify and share knowledge I all the university levels. Also, the concept of Islamization is a very positive approach adapt in Islamic universities but it should be a better understanding from the staff of this concept and know how to apply it in order to optimize the university situation.

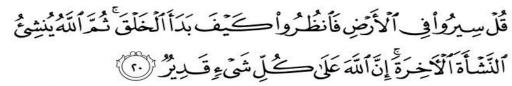
# 6. RESEARCH FRAMEWORK

In fact, if we look in the world-wide successful organisations, or those which are working to optimize their situations, we will see that there is a huge focus on the integration of knowledge management in the organisation as a tool to well manage the intellectual capital and all the resources. It's because, those organisation start to recognise that any change should start by the people and human, then the knowledge and innovations of this human can be well used by some processes and technologies. In fact, when we did the comparison and projection of what makes the best universities all over the world now successful, is that they really know how to apply knowledge management and it's well guided. Furthermore, from another side we can see how "Bayt el Hikmah" before a thousands of years had an open environment for innovation, creation, discussions, and sharing of knowledge, and a very high importance and appreciate the value of knowledge and scholars that's why it as the place where must of scientific inventions had been created.

From this come the idea, to try to resolve the problem of the slow development and improvement in Islamic universities and their retreat in the international universities ranking.

By doing the mix between the Islamic heritage and inventions and as a reference the successful academy of "Bayt el Hikmah" which can enrich and help to do improvement in the current universities to be better, and also the employment of knowledge management by focusing on the three principals of people, processes and technology. Thus, we believe that this mix between the Islamic heritage and the successful examples in that period with the application of knowledge management can help and cause a radical transformation in Islamic universities because they share and adopt the same vision and goal as house of wisdom which is the creation, innovation, the appreciation of knowledge and the holistic development of human and to have a positive contribution and add value to the world.





Sahih International

Say, [O Muhammad], "Travel through the land and observe how He began creation. Then Allah will produce the final creation. Indeed Allah , over all things, is competent."

In this Ayah from Surat the spider, Allah want us to think, innovate and research from all what has been done and created before until today to take lessons and better understand, thus we will be able to better act and develop our self and situation.

In the figure1below, we see the proposed framework and model<sup>[11]</sup>to achieve and attain the target of successful Islamic university, by taking as a foundation the criteria and base of success of house of wisdom, golden age heritage and the

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features of the most successful universities worldwide in our days. Then, Analyse those criteria and features, add and combine it with the three principles of knowledge management which are the people, processes and technology to achieve and result a successful Islamic university that can be able to compete educationally and scientifically worldwide especially with the focus of raising sharing culture and innovation.

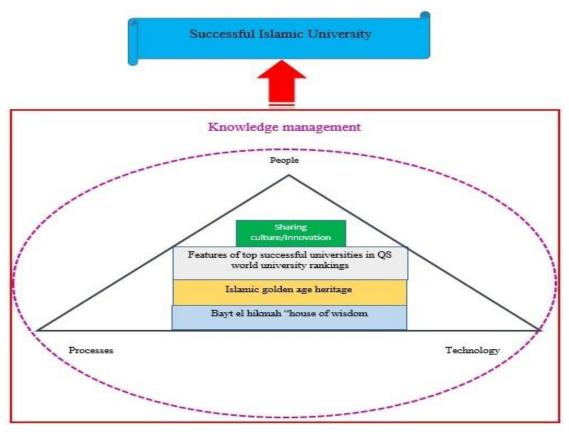


Figure 1

# 7. CONCLUSION AND FUTURE WORK

In order to understand the significance of knowledge management to enhance the performance of organisations and universities especially the Islamic universities. In fact, this empirical analysis has found that it's significant to apply a mix of knowledge management strategies the codified and personalized in a university. In addition, the presence of a leader who guide and motivates the people in the organisation to innovate and create such as the case of Caliph in bayt el hikmah who was a leader and make all his long term strategy in a real applicable fact and he gives reward to scholars to motivate them and because he know the value of knowledge. Likewise, the culture of sharing knowledge is very important and need to be created and rising in any university for its success and sustainability, and this was also applied in "Bayt el Hikmah "by the open environment of sharing ideas and the seminars of debates between scholars to raise the critical thinking and create w new knowledge and ideas by sharing the knowledge that they had, and that's why we need to study and extract values and lesson from this successful examples which had create the Islamic golden age and richest the world by the most important inventions. Actually, the knowledge management today can lead to a better results with all the technologies and tools that can be gathered together to share knowledge.

To conclude, from the different ideas of professionals who had working in universities we can say that the smart Islamic university is the learner one that take lessons and experience from the past and mix it with the development, the technology and new ideas of presence. Thus, the contribution and mixture between the sciences, successful experiences from Islamic golden age with good application of knowledge management by using this heritage and the last developed techniques can be a solution to rise and optimize the situation of Islamic universities worldwide. Thus, there should be more attention giving in the way of application of knowledge management in organisations especially universities. In addition to the continuous analysis of the current situation at universities to compare and extract where are the weaknesses

that can be improved by applying the mixture proposed in the framework. Also, this analysis has proven that how much can help and be important to do a detailed research about the organisational and operational functions of the successful academies such as house of wisdom in the golden age and others to take it as a pattern and model that Islamic universities can learn from it.

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## **APPENDICES**

# **Appendix 1: Interview questions**

The questions conducting during the interviews with the professionals were:

- 1. Is there a clear KM strategy in the university? Is it codified or personalized?
- 2. Do you think that the current strategy can help the university to improve its competitiveness?
- 3. Is creativity and innovation a basic value in this university?
- 4. Is there any new innovative ideas to promote and inculcate the culture of sharing knowledge in the university?e.g. the knowledge café in some organisations?
- 5. How Doesthe University support the researches and researchers, and create a conducive environment for innovation?
- 6. What did the university do to develop the students' skills and give them the opportunity to innovate and be creative?
- 7. How does the university enhance the sharing of knowledge, the debates and open discussions?

- 8. How does the university integrate the use of current technology to contribute and help in the development of innovation and creativity?
- 9. What are the priorities of the university?
- 10. Is this university a learning and smart organisation that learns from its previous mistakes and avoid it?
- 11. Is the staff encouraged to share their professional knowledge and experience with the new employees?
- 12. Does the university adopt the suggestions and new ideas that come from the staff or students?
- 13. There is any other way to discuss and share ideas and communicate beside the formal meetings?
- 14. There is any assessment of the improvement of the university situation?
- 15. There is any relation and communication between the different parts of the university?
- 16. What are the steps that you see that it can help to improve the situation of the university? What is the lacking?
- 17. Do you feel loyal to this university? And why?
- 18. Do you feel appreciated and valued in this university? Is there recognition of the importance of each member role in the organisation?
- 19. Why you have choose to be a member of this organisation despite the problems that the university is facing now? Especially the funding problems.
- 20. What are the steps that the university can take to attract more customers and retain the human resources that they have such a professional lecturers and students?
- 21. What is the value that this university delivers and differentiates it from other universities?
- 22. Is there any extension in the international partnership and relationships?
- 23. Do you think that the curriculums' in this university are sufficiently updated and aligned with the market needs and provide the students with the sufficient skills to compete in the market?
- 24. This university as an Islamic university and it adopt the Islamization as its foundation so how it apply the Islamic values in all the levels of the university?
- 25. Do you have an idea about the Islamic heritage in the golden age and how it's the foundation of our modern world today?
- 26. How can we take the lessons from a successful example such as bayt el hikmah and apply it to promote the situation of the university?
- 27. Organizing conferences, debates was initiated by bayt el hikmah since many years then it was used by many scientific and educational organizations to promote the share of ideas and innovation why this Is not applied in Islamic universities today?
- 28. Why the university does not collaborate and make their students, staff and lecturers to participate in different events such as the 1001 inventions to encourage them to innovate and create and learn from the Islamic heritage?
- 29. How do you think that the House of wisdom and the Knowledge management has play a role in transferring the Muslim heritage in golden Age as a foundation of modern world?
- 30. Ahouse of wisdom or "Bayt el Hikmah" represented a lighthouse for sciences, researches, innovation, creation in a very civilized and sophisticated environment of harmony and share of knowledge among scholars and students from all over the world from different religions and cultures, So do you think what is missing points and practices in the current Islamic universities that prevent them to achieve this cusses of house of wisdom?
- 31. The mix of knowledge management, Islamic heritage, and learning from successful examples such a "Bayt el Hikmah" is it a way to help in the success of the current Islamic universities?
- 32. Is there anything that you like to add?