



KNOWLEDGE SHARING THROUGH VIRTUAL MODE: THE INFLUENCED FACTORS FOR KM DEVELOPMENT AMONG THE RESEARCHERS IN NUCLEAR MALAYSIA

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Abstract

Malaysian Nuclear Agency (Nuclear Malaysia) is a research and development (R&D) organisation, established in 1972. Until December 2013, Nuclear Malaysia has 851 permanent employees from different level of backgrounds. The biggest slice of pie is from the researcher position, with 335 people in total. As the main employees of Nuclear Malaysia, researchers contribute significantly to the growth of the organisation, especially in organisational core competency; R&D in nuclear science and technology. Researchers are in possession of high-knowledge-intensive and the determiners of organisational future development plan. Researchers' knowledge and expertise are vital to ensure the safety, security and safeguard of nuclear technology applied in the organisation and at national level. In ensuring competitiveness, the management of Nuclear Malaysia is strongly emphasises the practice of knowledge sharing as the subset of knowledge management (KM). Knowledge sharing is given a high priority and expressively stated in the organisational KM policy. Communication via knowledge sharing's virtual mode is the most preferred method in implementing KM in the organisation. In line with that, this study examines the influenced factors of the knowledge sharing through virtual mode among the researchers in Nuclear Malaysia.

Introduction

- **19 Sept 1972** - Established with the onus of introducing and promoting the use of nuclear science and technology in national development.
- **Jan 2013** - Launched Agency's KM Policy - strongly emphasises on knowledge sharing to ensure corporate memory are best kept .
- **335 researchers** of Nuclear Malaysia, identified to lead the process of; knowledge preservation, knowledge loss risk assessment, knowledge transfer in the organisation.

• This study is executed to analyse the used of virtual mode for knowledge sharing among the researchers in Nuclear Malaysia and in particular;

1. *Which virtual mode has direct relationship with researchers' knowledge sharing behaviour?*
2. *What are the significant factors in influencing researchers' knowledge sharing through virtual mode?*
3. *What are the attributes in virtual mode signify the influenced factors of researchers' performance expectancy?*

Methodology



The respondents are researchers of Nuclear Malaysia.



Questionnaire was mailed to the 335 researchers, and a total of 60 researchers responded.



Data were collected using self-administered questionnaire.

Key Constructs

Knowledge Sharing (KS)

“deliberate act that makes knowledge reusable by other people through knowledge transfer” (Lee & Al-Hawamdeh, 2002).

“in which an individual imparts his or her expertise, insight, or understanding to another individual or generalized other . . . with the intention that the end recipient may, ideally, have that knowledge in common with the sharer” (Ford, 2004)

KS is the central focus because as a R&D organisation, the synergy of knowledge, expertise and human resources is the major determinant of Products and services innovate By Nuclear Malaysia.



Virtual Modes (VM)

“virtual communities can be defined as people or users who collaborate and communicate regularly in an organized manner via online or virtual medium, such as bulletin board and newsgroup”. (Chen & Hung, 2008).

NM foster an open and enabling forum for the communication of thoughts, ideas, concepts, and information throughout the agency,

NM has facilitated access to the open online platform and encouraged social interactions among researchers

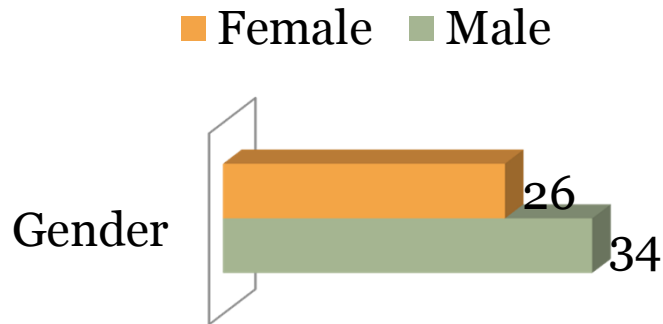
VM developed by NM: Sharepoint, Shared Folder, Intranet, E-Jurnal Sains Nuklear Malaysia (e-JSNM), e-client, MyAsset, Helpdesk, Training System, ILMU System)



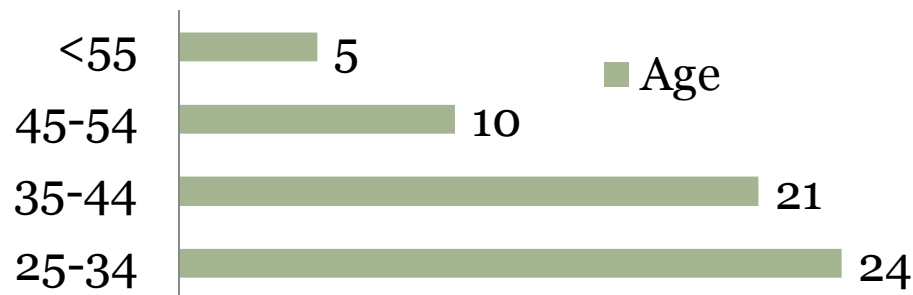
Findings & Discussions

I. Demographic Profiles

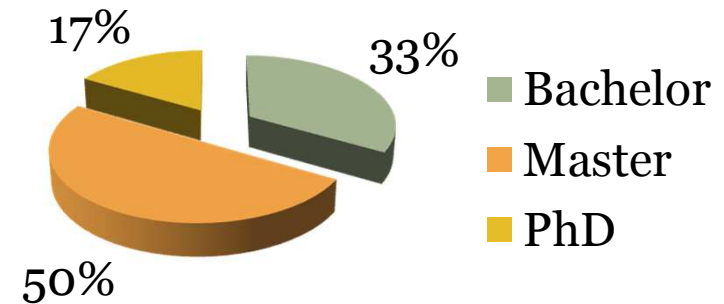
Gender



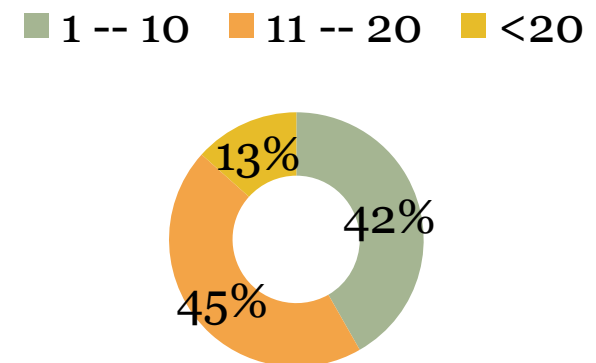
Age



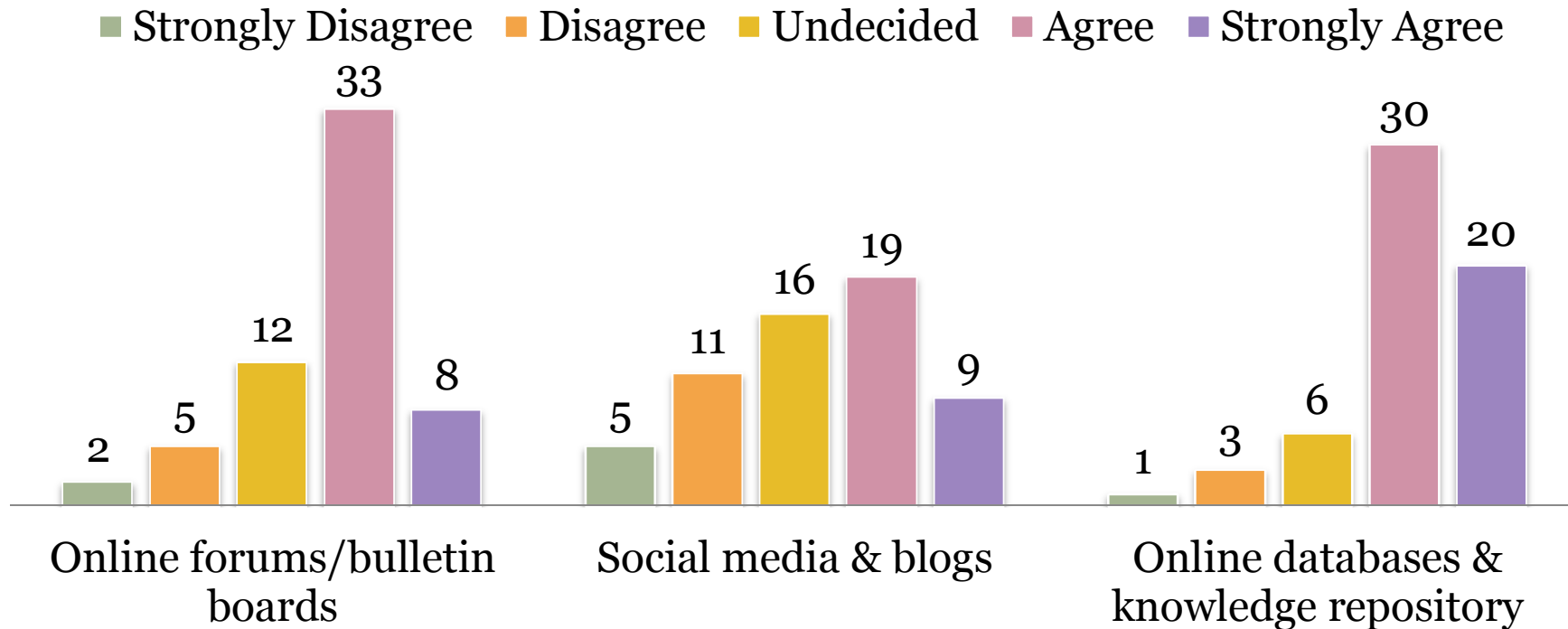
Educational Background



Years with Agency

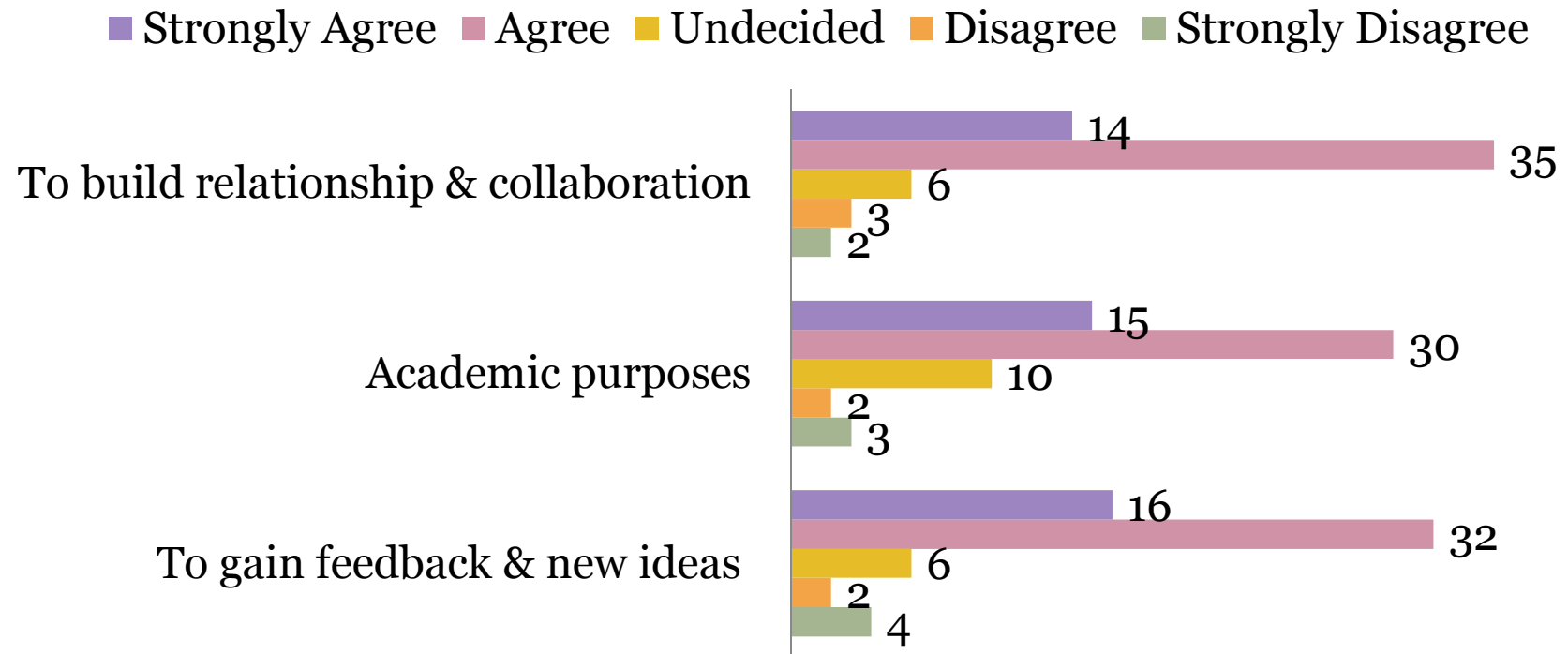


II. Preference Platforms for Knowledge Sharing



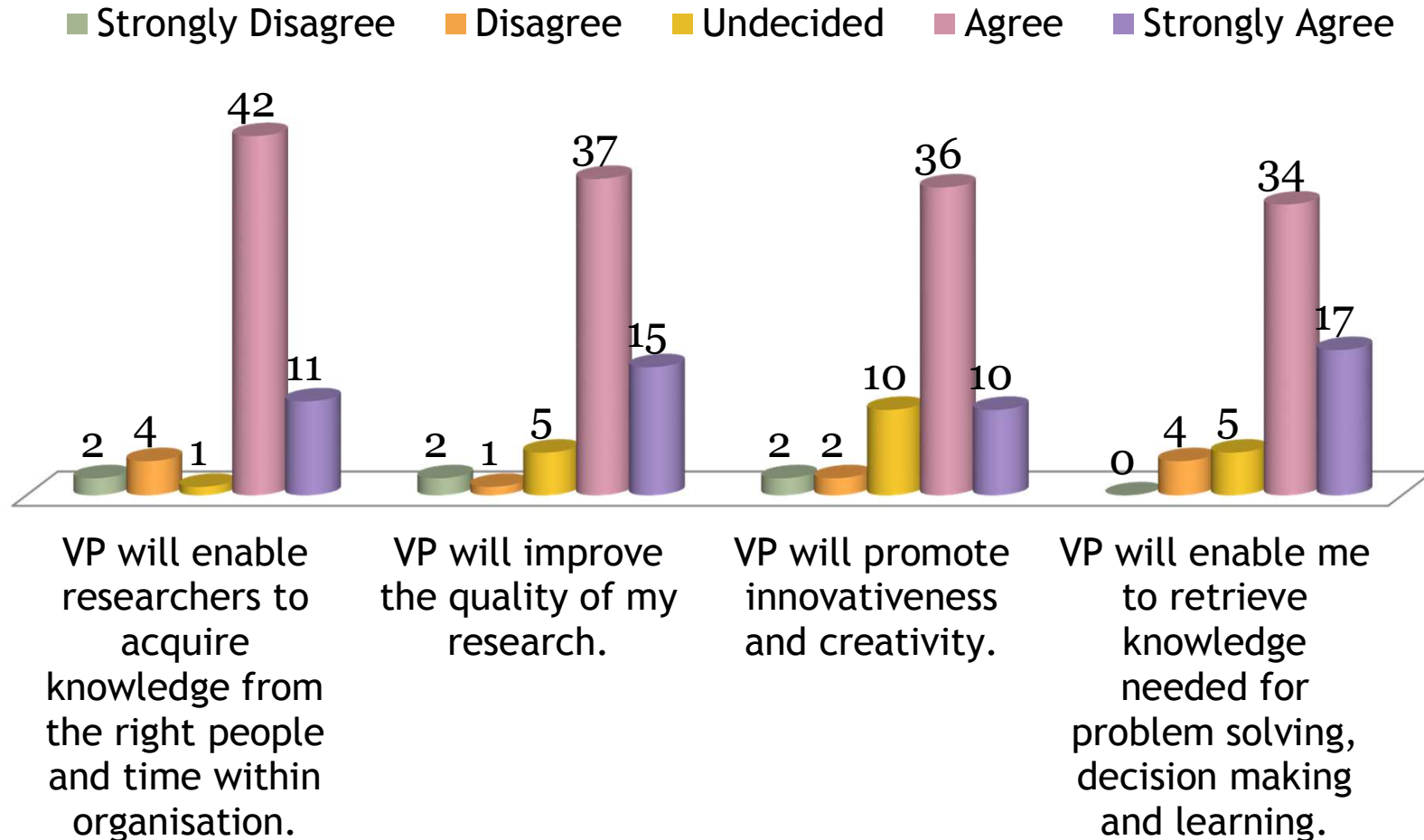
Result shows that online forum/bulletin boards (33=55%) and online database & knowledge repository (30=50%) are popular platform for knowledge sharing. As for social media/blogs, it generates mix reactions, 19 (37%) agree, 16(27%) undecided and 11(18%) disagree.

II I. Factors for Knowledge Sharing



The most significant factor in influencing researchers' knowledge sharing through virtual mode is to build relationship and collaboration.

IV. Performance Expectancy



Results show that all the items contribute significantly to their performance expectancy.

Conclusion

- The primary contribution of this study is to assess the influence of virtual mode as a KM medium in Nuclear Malaysia.
- Direct relationship between the researchers and the used of virtual mode in the knowledge sharing process.
- Finding reveals that virtual mode contributes significant factors in influencing researchers' knowledge sharing behaviour.
- The findings from the study may be used by the management of Nuclear Malaysia to improve or enhance the capacity of virtual mode provided by the organisation.

Appendix

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