

# THE ACCEPTANCE OF VIRTUAL LIBRARIAN USING EMBODIED CONVERSATIONAL AGENTS (ECAS) TO AID COMMUNICATION, INTERACTION AND SOCIAL INTELLIGENCE AND INCREASE USER EXPERIENCE

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- Introduction
- Problem Investigated
- Justification of problem
- Method
- Finding presentation
- Recommendation



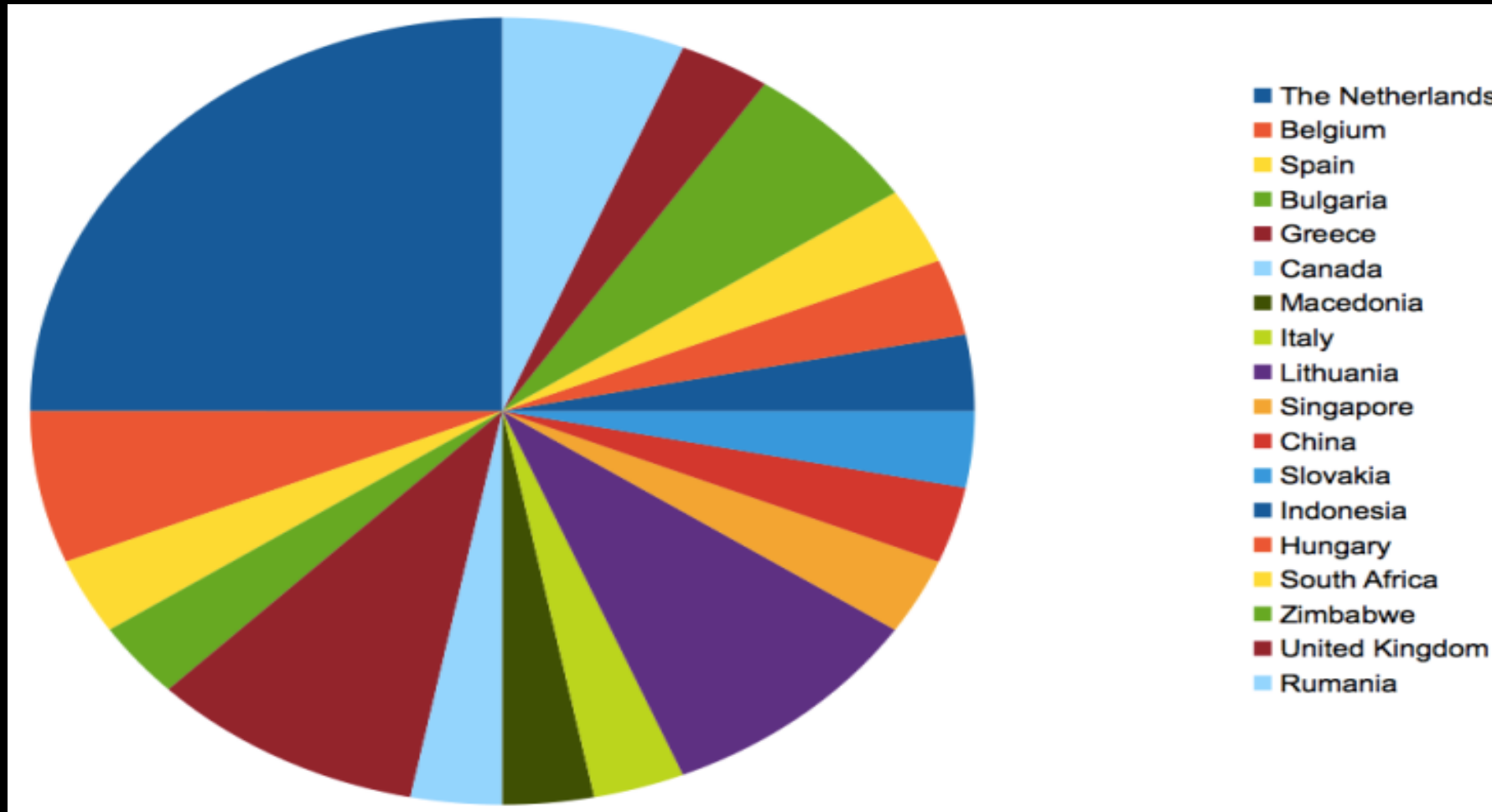
# INTRODUCTION

- This paper presents insight from the study conducted on Human-Computer Interaction (HCI), which is conceptually grounded empirically base on Embodied Conversational Agents (ECAs) implemented as a Virtual Librarian.
- The embodied conversational agent is capable of communication with human, and interact with the environment and other agents or people. This is an innovative
- However, measuring its acceptance in the field of Library and Information Science (LIS) provide an innovative ways of improving users experiences.

# METHODOLOGY

- Mixed Method
- Living Lab
- Design of an ECA, Mapping of Images, Appearance Variations
- Deployment of the Virtual Librarian for Questionnaires online
- Measure the Acceptance levels to determine its usefulness in intelligence communication and social interaction
- Preliminary conclusion
- Recommendation (future refinements necessary)

# Bio stats of the Respondents



# AN EXAMPLE FROM A MOVIE?



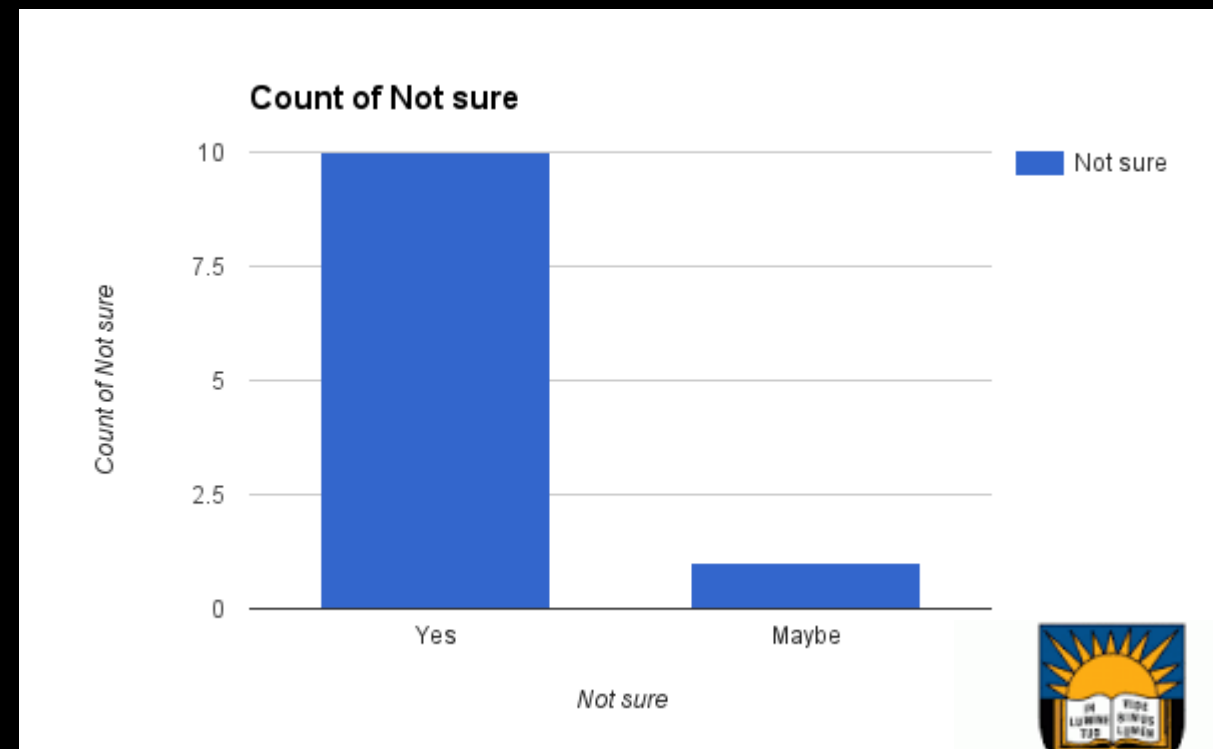
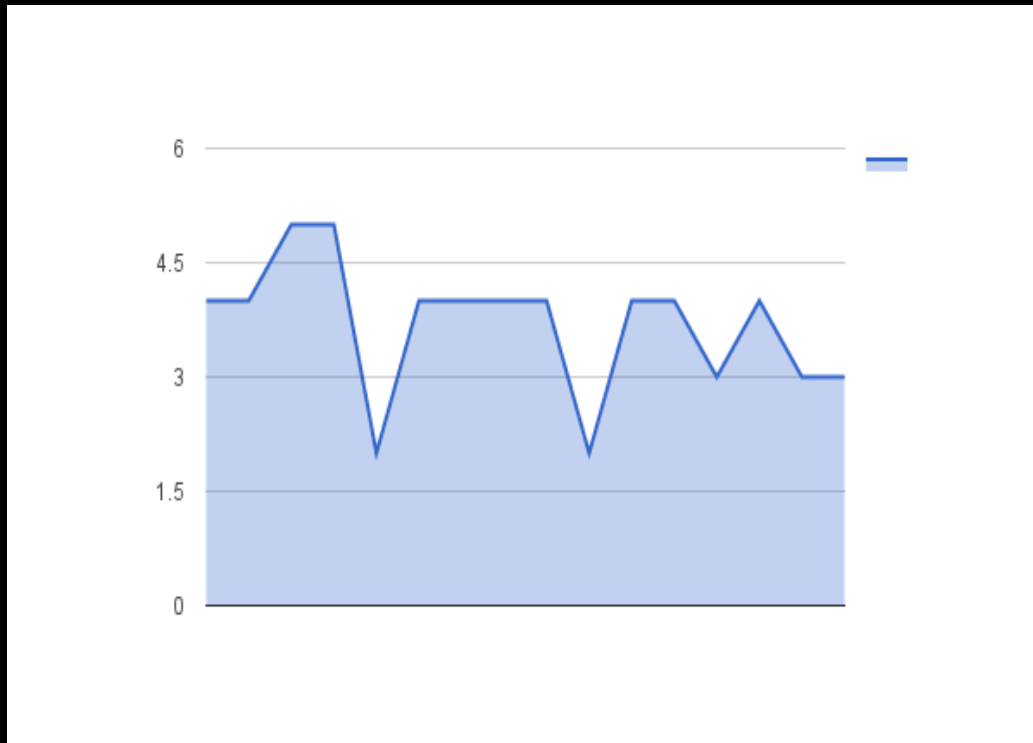
# PRESENTATION OF FINDINGS

- The findings affirms the usefulness of Virtual Librarian in self-service library operations
- The Embodied Virtual Librarian ability to communicate with multimodality characteristics increases its acceptance.
- The Virtual Librarian user-centred usefulness is high in the library services within an academic institution.

1. HOW WILL YOU RATE YOUR ACCEPTANCE OF A VIRTUAL LIBRARIAN ON THE LIBRARY HOMEPAGE?

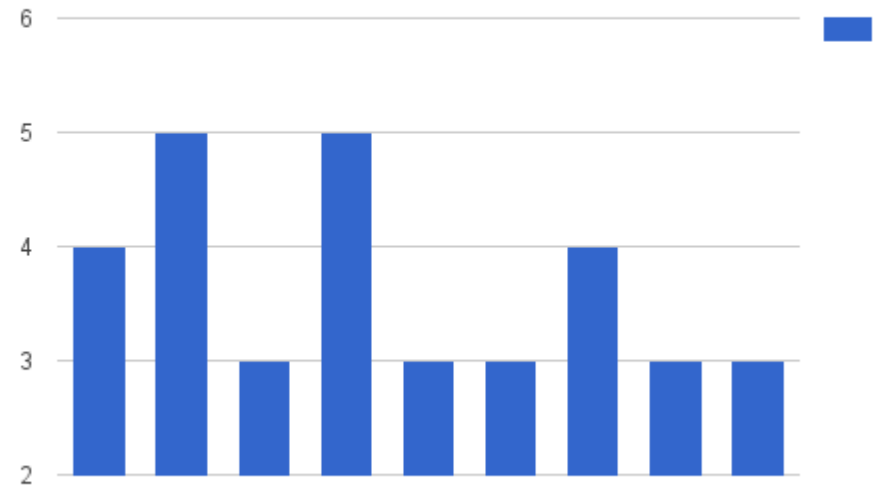
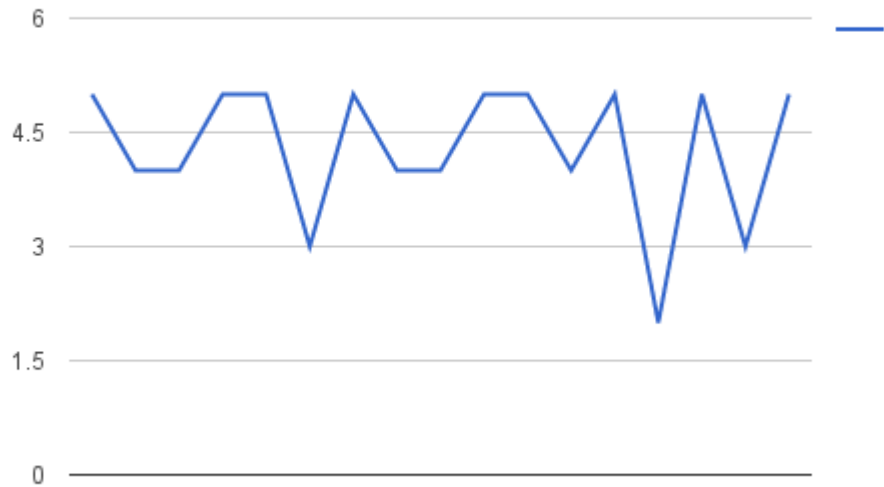
2. PLEASE INDICATE IF YOU WILL LIKE TO INTERACT WITH A VIRTUAL LIBRARIAN ONLINE INSTEAD OF A PLAIN LIBRARY WEBSITE?

- Levels of Acceptance





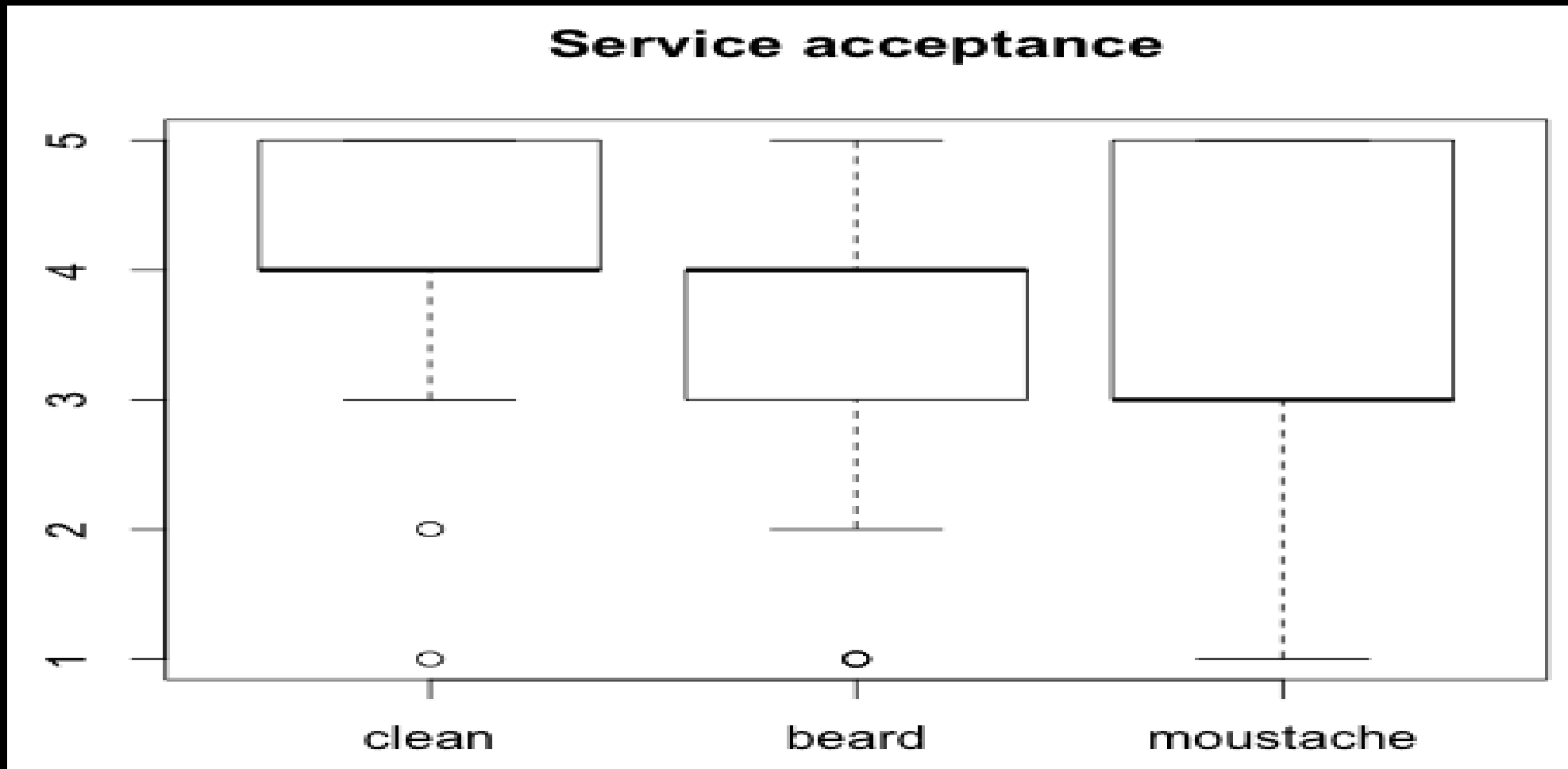
1. WILL YOU BE SATISFY WHEN A VIRTUAL LIBRARIAN HELP YOU LOCATE BOOKS IN THE LIBRARY DATABASES?
2. WILL YOU BE SATISFY WHEN A VIRTUAL LIBRARIAN HELP YOU LOCATE BOOKS IN THE LIBRARY DATABASES?



## VIRTUAL LIBRARIAN APPEARANCE

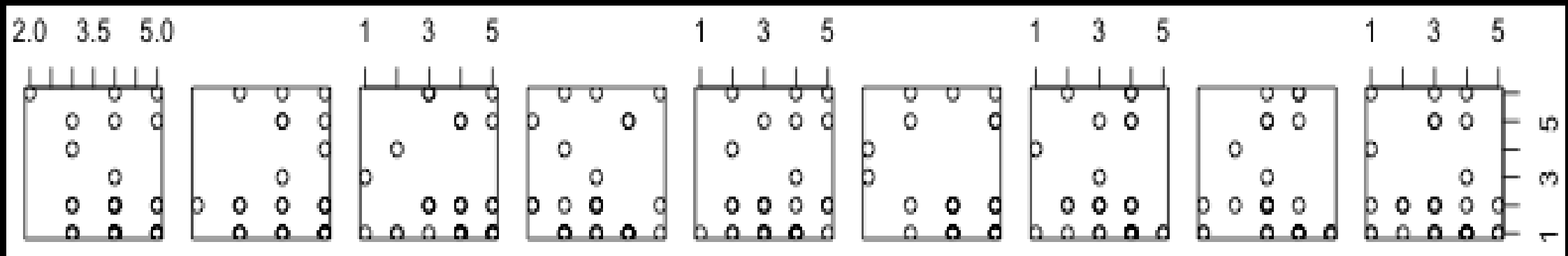
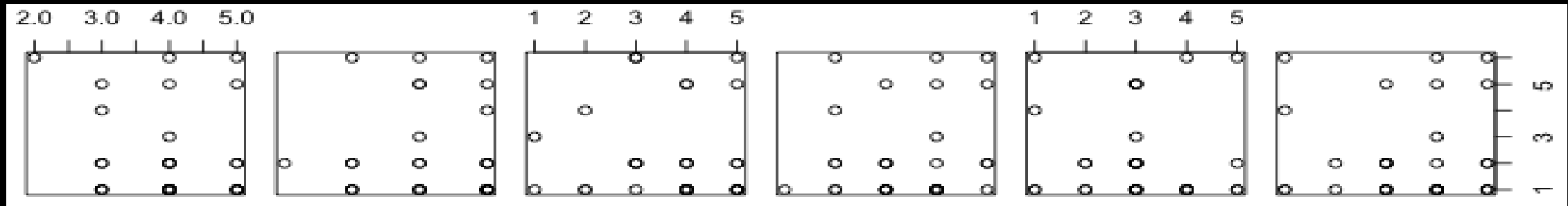


## PRELIMINARY FINDINGS



- To answer the research question, the questions were divided in three sets; **one set was designed to investigate the acceptance of the e-Library service after the introduction of the virtual librarian.**
- The findings revealed that users are willing to accept the Virtual Librarian e-library services, base on its perceived helpfulness, and ability to interact base on the users request or inquiries
- **The other set; was designed to investigate the acceptance of the virtual librarian himself.**
- The findings revealed that the Virtual Librarian acceptance was very high and this is based on the perceived intuitive communication capabilities and perceived usefulness in an online environments
- **The final set was designed to measure the usefulness of a Virtual Librarian in an academic environment:**
- However, the respondents perceived that the Virtual Librarian will be useful as a virtual assistant when searching for materials especially when the title or call number is not known to the users

1. Box Plot of Services Acceptance
2. Box Plot of Virtual Librarian Acceptance



- The internal consistency of the six categories, on which the Likert answers have been divided based on the version of the ECA and the kind of questions, has been shown to be acceptable
- The clean version scored on average a higher acceptance than the other two versions
- Virtual Librarian acceptance was very high based on the communication capabilities and users perceived usefulness.
- The users believe the Virtual Librarian is useful as a virtual assistant/guide when searching unknown materials.

- The use of a Virtual Librarian as a means of enhancing users experiences in an online platform should be encouraged as way of improving library users' HCI.
- The Virtual librarian capabilities should be further tested on a large scale using a living-lab research methods
- The influence of a Virtual Librarian on the users acceptance should be further tested in South African Context



THANK YOU

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