

**EVALUATING LOCAL HERITAGE KNOWLEDGE REPOSITORY  
SYSTEM BY IDENTIFYING FACTORS INFLUENCING INDIVIDUAL  
IMPACT USING THE IS SUCCESS MODEL**

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# INTRODUCTION



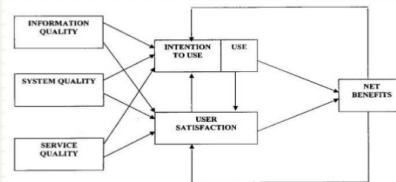
- This article evaluates the local heritage knowledge repository system
- Identifying the factors which influences the individual impact using the IS success model.



LOCAL HERITAGE  
KNOWLEDGE  
REPOSITORY SYSTE

individual  
impact

Updated D&M IS Success Model  
(2002)



# BACKGROUND , PROBLEM STATEMENT , OBJECTIVE



- LHKRS have been available to the public for many years in Malaysia
- Exist in hard copy document & digital form (Audio, Video, Text & Images)
- **Information under utilized.**
- To increase the information value & effective utilization, the data was synergized into a information system. *Ref Article (Mohd Azam Osman, 2016)*
- Hybrid search method to provide a **focused set of information** to the users.

It only focuses on the **information quality dimension** from the IS Success Model

In this article a holistic approach is taken identify the factors which influences the individual impact

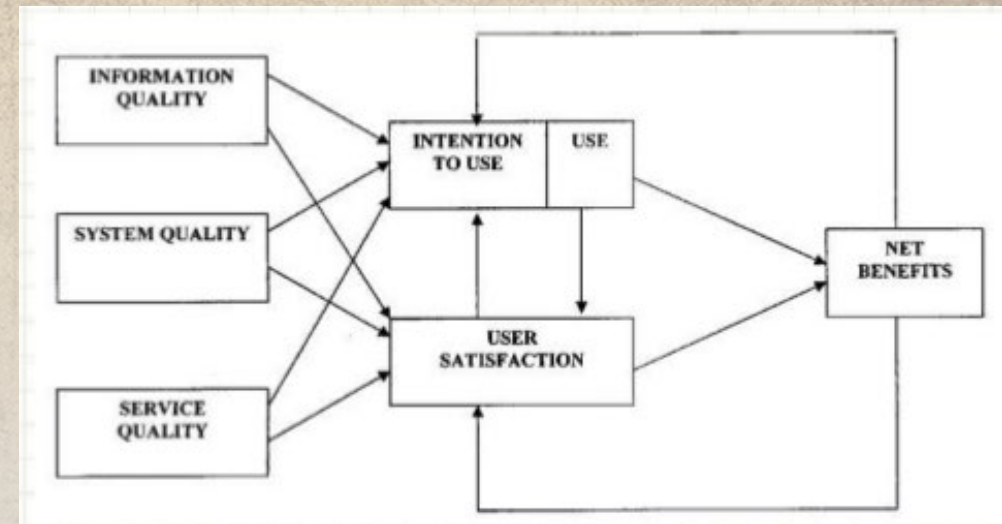
# UNDERLYING THEORY

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- Delone & Mclean IS Success model as the guiding principles for this article

- Seven Dimension

- System Quality : [System Usability & Performance](#)
- Information Quality : [Accurate Information](#)
- Service Quality : [User support & training](#)
- Intention to Use : [Loyal of users @ Frequency of usage & duration](#)
- Use : [Predecessor dimension to intention to use](#)
- User Satisfaction
- Net Benefits / Individual Impact : [Fulfilling its objective & the values for the stakeholder](#)



# POPULAR KNOWLEDGE REPOSITORIES

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- Hp project profile repository
  - Stores the project knowledge. Chronology
  - Knowledgebase
- Europe train ticket provider, created a knowledge repository
  - To aid customers & travellers to obtain a full fledged navigation information
  - Auto suggestions
- UK Gov. knowledge repository about UK Gov
  - Quick glance & minimalist design



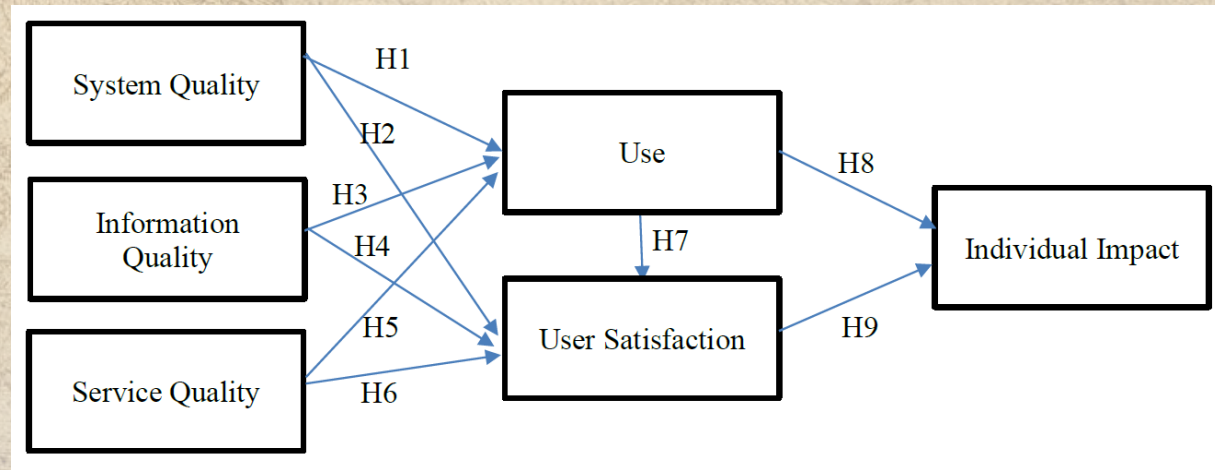
# PREVIOUS STUDIES ON EVALUATING THE IS USING THE IS SUCCESS MODEL

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- Study conducted by Adebowale gauge a hospital information system.
- Musdansar from Lund University to validate the Swedish e-Tax systems.



# CONCEPTUAL MODEL & HYPOTHESIS DEVELOPMENT



- H1 : System quality will positively affect use of the LHKRS.
- H2 : System quality will positively affect user satisfaction of the LHKRS.
- H3 : Information Quality will positively affect use of the LHKRS.
- H4 : Information Quality will positively affect user satisfaction of the LHKRS.
- H5 : Service Quality will positively affect use of the LHKRS.
- H6 : Service Quality will positively affect user satisfaction of the LHKRS.
- H7 : Use will positively affect user satisfaction of the LHKRS.
- H8 : Use will positively effect individual impact of the LHKRS.
- H9 : User satisfaction will positively effect individual impact of the LHKRS.

# RESEARCH METHODOLOGY

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- Quantitative
- Online Questionnaire
- Population & Sampling
  - Malaysians, Gen-Y
  - Sample Size for PLS structural modelling : 100 and Above
- Analysis Tools
  - SPSS by IBM
    - Demographic data
    - Data Clean-up before importing into Smart PLS
  - Smart PLS 3
    - Used when research objective as below
      - Predict factors which contributes to research target
      - Has a underlying model framework
      - Sample size is small
      - Ability to gauge the strength and direction of the relationship among the variables.



# ANALYSIS - SPSS

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- Total respondents : 186
- Valid respondents : 168
- Gender
  - Male : 54%
  - Female : 46%
- Education Level

Education Level		
	Frequency	Percent
Bachelor's Degree	86	0.51
Diploma/Advance Diploma	37	0.22
Doctoral Degree	2	0.01
Master's Degree	17	0.10
Others	7	0.04
PMR	3	0.02
SPM	8	0.05
STPM	8	0.05
<b>Total</b>	<b>168</b>	<b>100.0</b>

Table 3 Education Level of valid respondents

# ANALYSIS - SMART PLS – MEASUREMENT MODEL

	Items	Loadings <sup>a</sup>	AVE <sup>b</sup>	CR <sup>c</sup>	Rho_A <sup>d</sup>
System Quality	SQ1	0.925	0.828	0.95	0.933
	SQ2	0.94			
	SQ3	0.927			
	SQ4	0.844			
Information Quality	IQ1	0.917	0.775	0.932	0.906
	IQ2	0.905			
	IQ3	0.846			
	IQ4	0.85			
Service Quality	SERQ1	0.894	0.73	0.915	0.897
	SERQ2	0.894			
	SERQ3	0.815			
	SERQ4	0.811			
User Satisfaction	US1	0.874	0.774	0.932	0.908
	US2	0.854			
	US3	0.886			
	US4	0.904			
Use	USE1	0.927	0.835	0.938	0.91
	USE2	0.93			
	USE3	0.884			
Individual Impact	II1	0.935	0.88	0.957	0.936
	II2	0.94			
	II3	0.94			

Table 6 Measurement Model

## BENCHMARK MATRIC

Measurement Item	Benchmark Value
Loadings	> 0.5
Average Variance Extracted	> 0.5
Composite Reliability	> 0.7
Cronbach Alpha	> 0.7

# ANALYSIS - SMART PLS – HTMT

	Individual Impact	Information Quality	Service Quality	System Quality	Use	User Satisfaction
Individual Impact						
Information Quality	0.83					
Service Quality	0.695	0.723				
System Quality	<b>0.905</b>	<b>0.957</b>	0.684			
Use	0.874	<b>0.904</b>	0.658	0.895		
User Satisfaction	0.897	<b>1.009</b>	0.757	<b>0.988</b>	<b>0.946</b>	

*Table 9 Heterotrait-Monotrait (HTMT)*

indicators measured higher than the benchmark which is 0.85

latent constructs in the questionnaire created an overlapping perception among the respondents

# ANALYSIS - SMART PLS – BOOTSTRAPPING ALGORITHM (5000 SAMPLE SIZE)

Hypothesis	Relationship	Std Beta	Std Error	P Value	t-Statistics	Decision
H1	System Quality -> Use	0.454***	0.109	0.000	4.041	Supported
H2	System Quality -> User Satisfaction	0.357***	0.078	0.000	4.564	Supported
H3	Information Quality -> Use	0.389**	0.117	0.001	3.359	Supported
H4	Information Quality -> User Satisfaction	0.349***	0.091	0.000	3.996	Supported
H5	Service Quality -> Use	0.053 <sup>n.s</sup>	0.076	0.415	0.815	Not Supported
H6	Service Quality -> User Satisfaction	0.098*	0.038	0.010	2.565	Supported
H7	Use -> User Satisfaction	0.222**	0.076	0.006	2.75	Supported
H8	Use -> Individual Impact	0.366**	0.134	0.008	2.642	Supported
H9	User Satisfaction -> Individual Impact	0.516***	0.133	0.000	3.991	Supported

*Table 10 Bootstrapping result with path coefficient & p value*

\*\*\* indicates that the item is significant at  $p < 0.001$

\*\* indicates that the item is significant at  $p < 0.01$

\* indicates that the item is significant at  $p < 0.05$

+ indicates that the item is significant at  $p < 0.1$

<sup>n.s</sup> indicates that the item is not significant ( $p > 0.1$ )

# ANALYSIS

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- Factors which positively influence the individual impact are
  - System quality
  - Information quality
  - Use
  - User satisfaction

# MANAGERIAL ,THEORETICAL & PRACTICAL IMPLICATION

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- Identified that system quality, information quality is the key starter which results in influencing the individual impact
- From this research, a knowledge repository requires huge focus on the system quality and information quality to have a positive impact.
- service quality has a partial positive impact on the user satisfaction. Therefore a simple support model is best attached in the knowledge repository environment.

# LIMITATION OF THE STUDY

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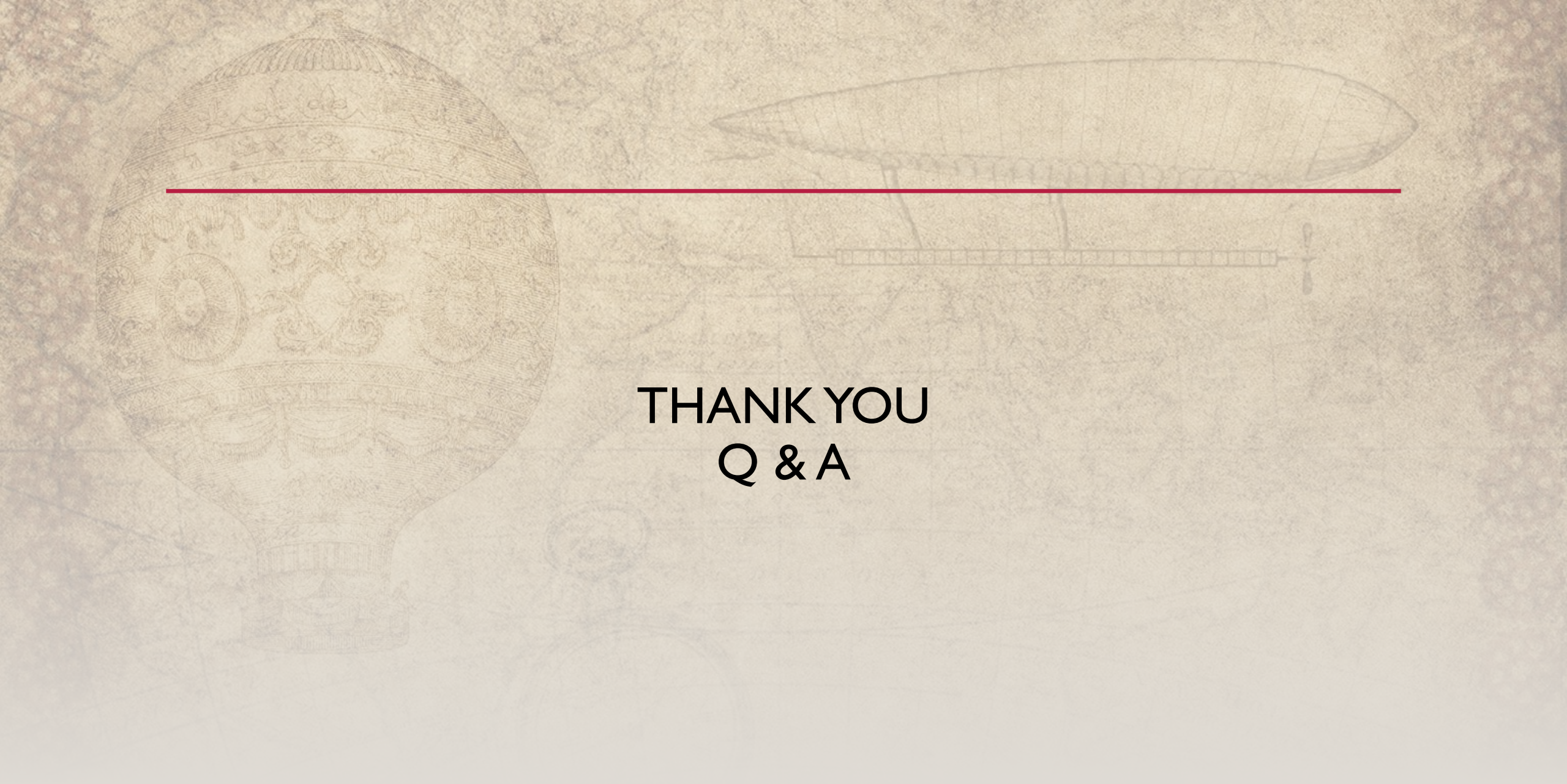
- Measurement model of the HTMT indicates the latent construct fail to distinguish among each other
- Only on Gen-Y

# CONCLUSION & FUTURE WORK

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- The system quality and the information quality are important for a successful local heritage knowledge repository system
- The service quality holds a partial positive effect on the overall model
- Conceptual model used in this study is able to benchmark the dimensions from the updated IS success model to fit the research objective.
- The LHKRS can be further enhanced to provide higher individual impact than current
- Future projects on knowledgebase and knowledge repository can use this research article to better plan and prioritize the project plan for a more impactful information system.



The background features a detailed pencil-style illustration on aged, textured paper. On the left is a large, ornate hot air balloon with a decorative basket. On the right is a long, slender blimp or airship with a tail. A thin red horizontal line spans across the upper portion of the page, positioned above the text.

THANK YOU  
Q & A