

Culture and Heritage Knowledge Management Case Study:

# A Digital Atlas

Peter Woods  
Knowledge Management Centre  
Multimedia University  
Malaysia

We are very careless with old things

Old buildings, old people



Causeway Bay



gwulo.com



My Memory 35 years ago

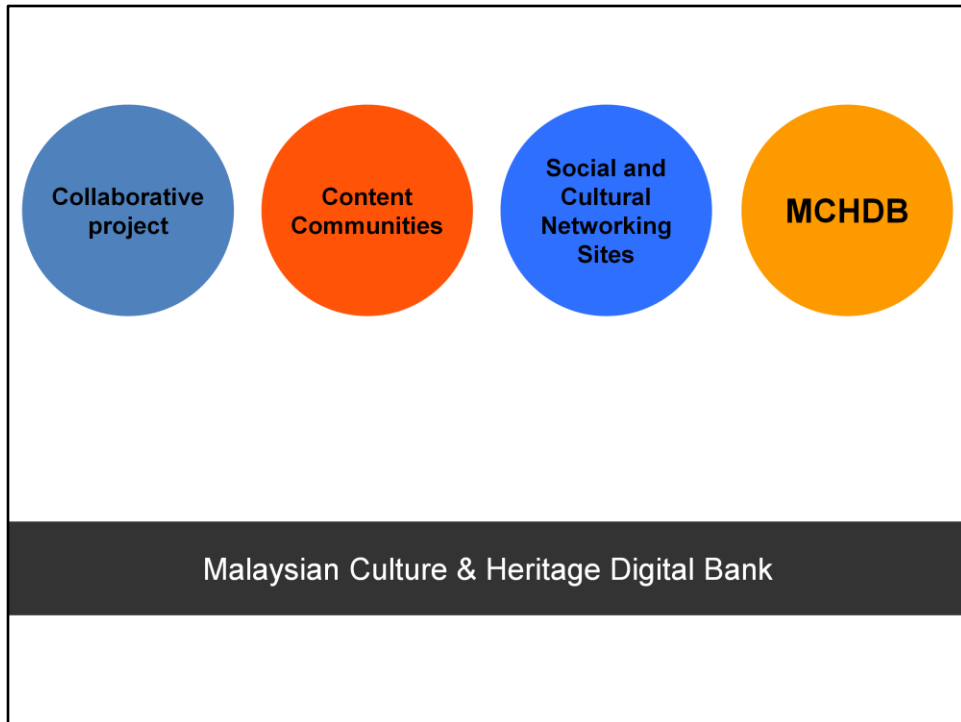
## Place names – myths & legends



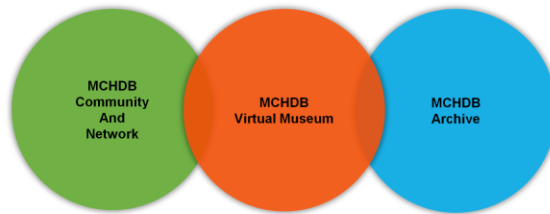
## Layout / Interface

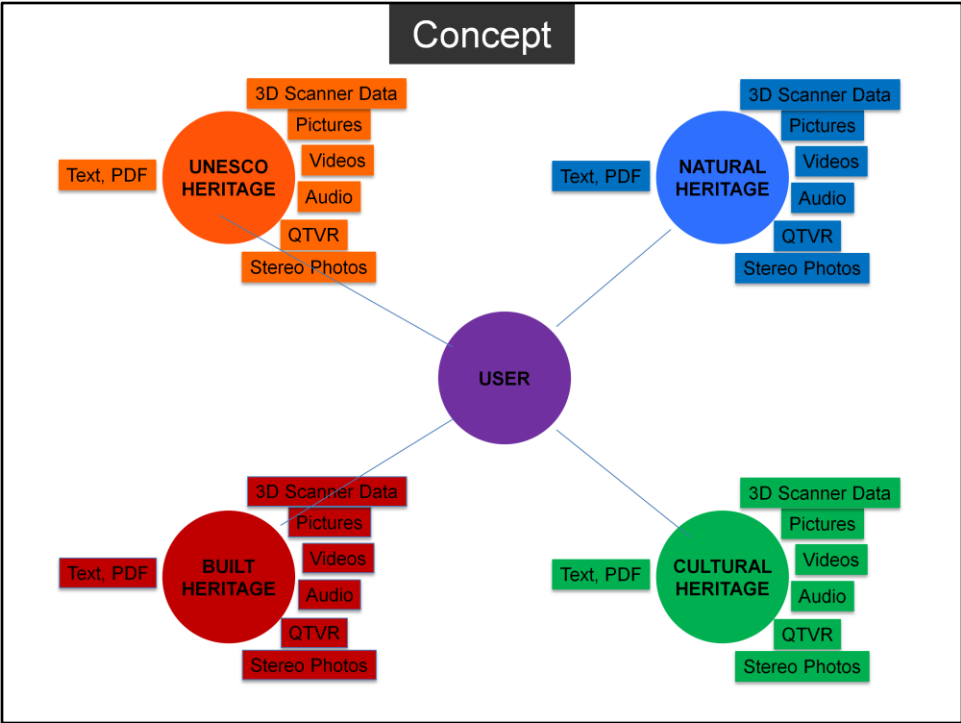


- Introductory montage and fully-interactive menu and maps (district as well as counties) for easy navigation



- Made by both professionals and public.
- Items have all metadata plus other opinions and information from MCHDB Community..
- It helps other museums to make a virtual and web-based museum,
- It helps e-tourism based on trustable content and true stories
- It helps academics, organizations, and whoever works to preserve Cultural Heritage.







## The Vanishing Heritage



The Suleiman Courts (1958 - 1986) - First High-Rise Flats in Kuala Lumpur

## The Vanishing Heritage



The Pekeliling Flats (1967- 2015) - Second High-Rise Flats in Kuala Lumpur

## Digital Archiving of Architectural Heritage

- Organizations still don't appear to focus on the end users, the distribution or how the public can benefit from a new type of archive (Dunne and Lerkenfeld, 2010)
- One first step to be taken before making any decision about digitization of a cultural heritage is to define its importance, purpose of digitization and prospective audiences.

## The First Phase

The National Mosque of Malaysia and Dewan Tunku Canselor in University of Malaya, Kuala Lumpur, were selected for data sampling aiming to:

- Create on a theoretical framework
- Create a GUI prototype for future purposes mainly extending the Atlas
- Introduce a protocol for other archivists

## Two Early Targets



The National Mosque of Malaysia, Kuala Lumpur - 1965

## Two Early Targets



Dewan Tunku Canselor, University of Malaya, Kuala Lumpur - 1966

## Types of the Data

- Information about the buildings such as location, coordinates, materials, important dates, persons in charge, etc.
- Existing records such as old photos, newspapers, plans, technical drawings
- Captured materials by the capturing team including photos, videos, 3D laser scans, ambient sounds
- E-reconstruction including 3D modeling, visualization, virtual reality, serious games, and 3D printing

## Types of the Data



THE STRAITS TIMES, SATURDAY, APRIL 13, 1966



## Types of the Data

THE STRAITS TIMES SATURDAY, APRIL 13, 1966



A FLAT AN HOUR IN A  
\$13 MILLION PROJECT

# FASTER BUILDING WITHOUT BRICKS

**by Elizabeth Wong**  
KUALA LUMPUR.

**E**IGHT flats are being completed each eight-hour day at Malaysia's first prefabricated low-cost housing scheme in Jalan Pekeliling here.

Piling work began last July and work has been in full swing ever since.

Like its sister project at Rife Range Road in Penang, this is a building story told without bricks and scaffolding.

Instead two giant cranes have to hoist in large quantities of steel and concrete from farther afield, says Larkin (owner), technical adviser, Mr. L.A. Norman.

When showing the factory site, proximity to the Kuala Lumpur and central Malaya markets, was an important consideration, so was the presence of a large pool, overlooking the conventional building industry, pre-arranged the owner's staff to be a costly competitor, compensating rather than adding the growth of the industry.

The cost of each flat is about 10 per cent of the cost of a conventional flat, and the development, piling and interior work is not even done — about 10 per cent more than with others.

time will not find it profitable to any extent, but building for private flats, or that the more complete under way in Penang, says Kuala Lumpur.

The construction, says time to give off part of the building, capital, capital — which will capitalise what time and cost be profitable this is capital, not, then, to building the conventional flat way.

**Cheaper**

"But this is not a thing to worry too much about, as the flats, and we are sure, will make the building."

THE STRAITS TIMES, SATURDAY, APRIL 13, 1966

## Types of the Data



Calligraphy exhibition, Dewan Tunku Chancellor - 1970

## Types of the Data



The first drive-in restaurant in Malaysia, (A&W PJ Drive-in) – Tagged for demolition

## Types of the Data



Visualization of A&W PJ Drive-in by the visualization team

## Types of the Data



Aerial videography by the digital capturing team

## Types of the Data

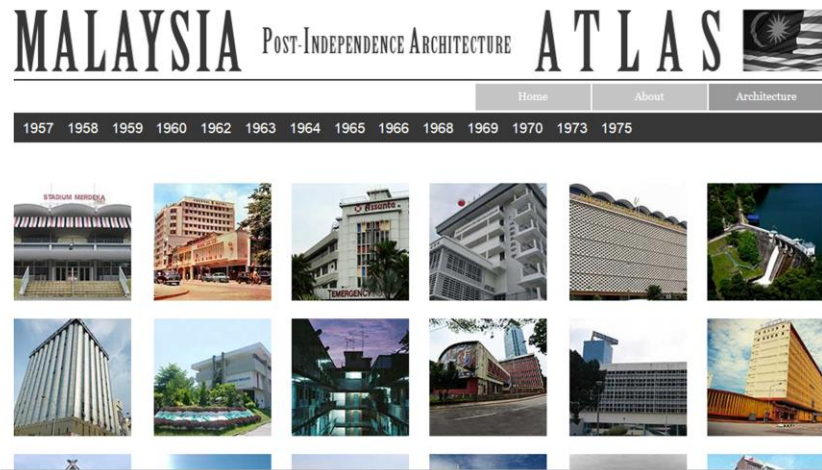


3D laser scanning by the digital capturing team

## Codification of the Data

- Core Data Index
- Historical Records
- Digital Capturing
- Virtual Reconstruction
- References

## GUI and Navigation Samples





# GUI and Navigation Samples

1957 1958 1959 1960 1962 1963 1964 1965 1966 1968 1969 1970 1973 1975 BACK TO TOP

## 1966

---

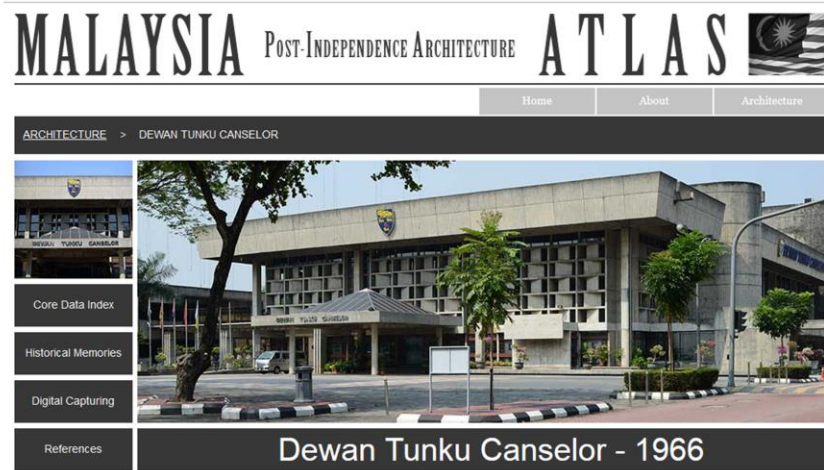


Dewan Tunku Canselor (University of Malaya) - 1966

Was built between 1965-1966. The building was officially opened on 25th of June 1966 by Tunku Abdul Rahman Putra Al\_Haj, the first prime minister of Malaysia. It's located in University of Malaya, Kuala Lumpur.

[More...](#)

## GUI and Navigation Samples

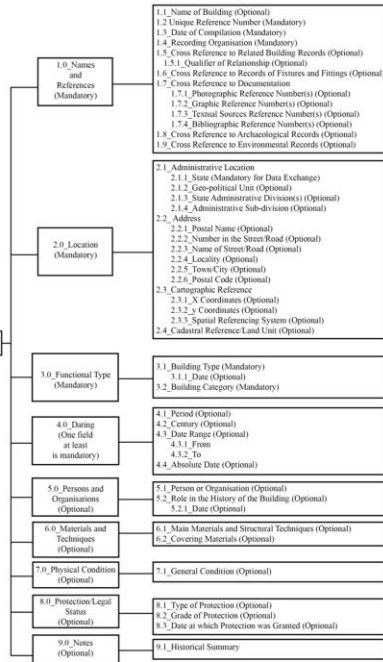


## GUI and Navigation Samples




# Core Index

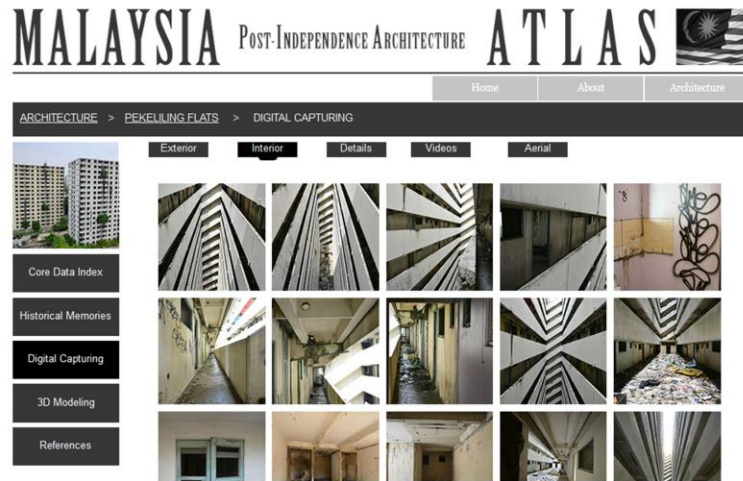
## Core Data Index



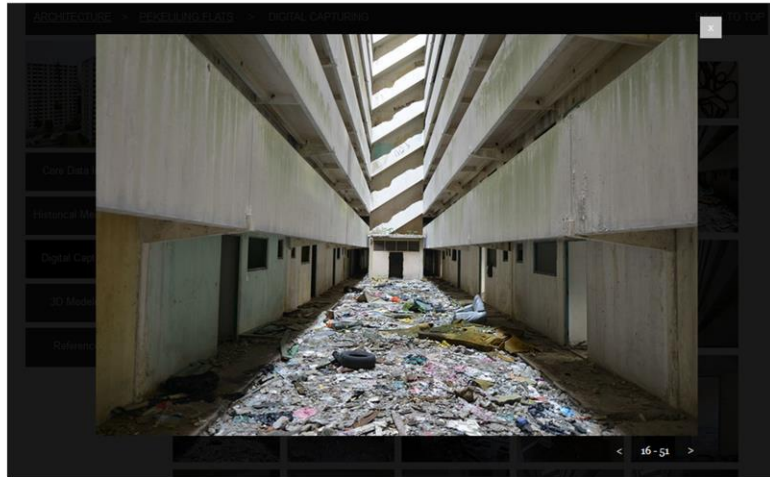
# GUI and Navigation Samples

ARCHITECTURE	>	ANGKASAPURI	>	CORE DATA INDEX	BACK TO TOP
				4.0 Dating	
				4.4 Absolute Date	
				Event	Date
				Malaysia Broadcasting Centre was named Angkasapuri (Construction started)	1st January, 1966
Core Data Index				-Completion	1st January, 1968
				-Opening	17th January, 1968
Historical Memories				-Opening of The 1st stage of the Wisma Televisyen	6th November, 1969
				Radio Malaysia became Rangkaian Nasional (nation's first 24-hours radio station)	1st January, 1971
Digital Capturing				-Opening of the 2nd stage of the Wisma Radio to public	9th May, 1972
				-Televisyen Pendidikan Malaysia was officially opened to public	19th June, 1972
References				-First color television signal on TV1	31th December 1978
				-First color television signal on TV2	7th May, 1969
				-First color programs for Sabah and Sarawak	31th August, 1980
				-Introduction of full-time colour television	1st January, 1982
				-Raising the giant flag	1st January 1988
				-Opening of Media City	20th March, 2012
				-Opening of Wisma Berita RTM	6th June 2012
				5.0 Persons and Organizations Associated with the History of the Building	
				6.0 Building Materials and Techniques	

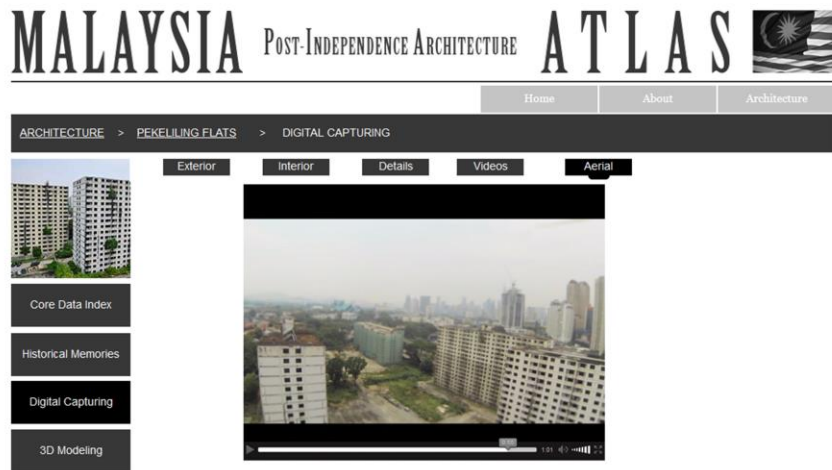
## GUI and Navigation Samples



## GUI and Navigation Samples

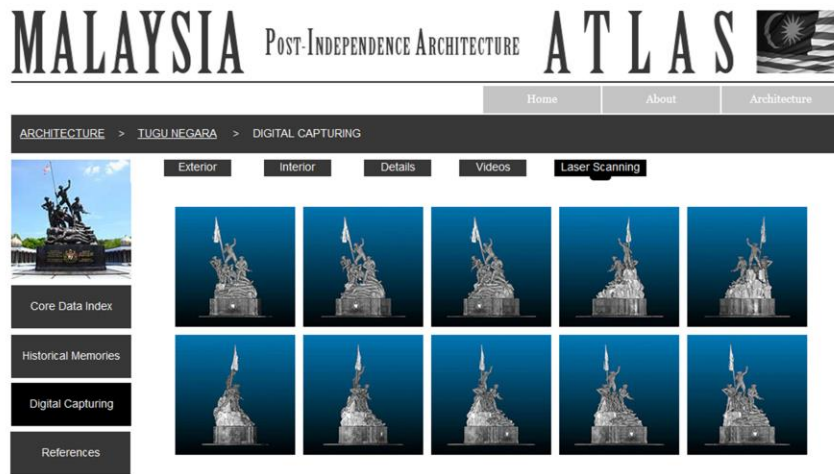


## GUI and Navigation Samples





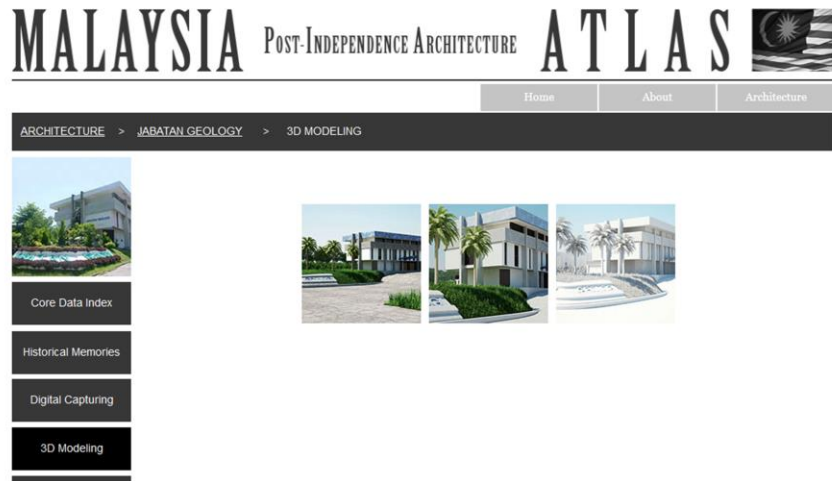
## GUI and Navigation Samples



## GUI and Navigation Samples



## GUI and Navigation Samples




## GUI and Navigation Samples



# GUI and Navigation Samples

ARCHITECTURE > ANGKASAPURI > REFERENCES

BACK TO TOP



Core Data Index

Historical Memories

Digital Capturing

References

### References

- [1] The Architecture of Malaysia by Ken Yeang
- [2] The Encyclopedia of Malaysia: Architecture by Chen Voon Fee
- [3] Chronicle of Malaysia: Fifty Years of Headline News, 1963-2013
- [4] The Straits Times, 21 December 1976, Page 21
- [5] The Straits Times, 20 October 1968, Page 13
- [6] Panoramio, Angkasapuri. Retrieved June 12, 2014 from: <http://www.panoramio.com/photo/14483310>
- [7] skyscrapercity.com,Angkasapuri. Retrieved April 10, 2014 from <http://www.skyscrapercity.com/showthread.php?t=438753&page=88>
- [8] skyscrapercity.com,Angkasapuri. Retrieved April 10, 2014 from <http://www.skyscrapercity.com/showthread.php?t=438753&page=125>
- [9] skyscrapercity.com,Angkasapuri. Retrieved April 10, 2014 from <http://www.skyscrapercity.com/showthread.php?p=112976465>
- [10] eresources.nlb.gov.sg. Retrieved May, 18, 2014 from: <http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19681020.2.70.3.aspx%3F5/5/2014>
- [11] The Star Online, Monday May 23, 2011 MYT 5:03:00 PM, Rais: Proposal to corporatise RTM submitted to National Economic Council. Retrieved May, 18, 2014 from <http://www.thestar.com.my/story.aspx?file=%2011%205%2023%20nation%2020110523171422&sec=nation>
- [12] The Star Online, Published: Tuesday March 20, 2012 MYT 12:00:00 AM Updated: Saturday May 25, 2013 MYT 6:23:02 PM : Work to redevelop Angkasapuri to begin this year. Retrieved May, 18, 2014 from <http://www.thestar.com.my/News/Nation/2012/03/20/Work-to-redevelop-Angkasapuri-to-begin-this-year/>
- [13] New Straits Times onlineOnline: Flash flood hits Angkasapuri tunnel. Retrieved May, 18, 2014 from <http://www.nst.com.my>