

# What I learned from doing my Masters

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## There is more to life than computers

## Time management

- Kiss your monkey goodbye.

- Thinking is working
- Get organised!

## Doing research

- Look for authoritative research
- Do plenty secondary research
- Combine it with primary, hands on research to add authority
- Make it you own, **never ever cut and paste**
- Get the format right
- Be critical
- Be original
- Get published

## Be Original

- Take the stuff that's already there and create something new
- For example.....

## A Table

Purpose	Recommendation
Prompting tone	If the users are getting confused about when they have to provide input to the application/service, prompting tones could be used to indicate to the user that it is their turn to speak or provide input.
Turn-taking tones	Unique tones to indicate that it's the user's turn to speak/interact.
Disabled barge-in	During messages such as legal notices when barge-in is temporarily disabled, it is useful to play a unique tone/prompt in the background.
System busy audio	When the application is busy fetching contents/documents
Logolearcon	Unique tones can be used for branding purposes or as auditory cues to identify with an application or portion of the application.
Confirmation tone	Short tones to convey to the user that the input is valid and has been accepted.
Error tone	In case of errors.
Help tone	Unique tone used when about to present help messages (global vs. local help could also be differentiated by unique tones).
Emphasis tone	Consider changing volume or pitch.
Miscellaneous	Unique tones to indicate secure transactions (just like displaying locks in the PC and wireless world).

## Framework

- Decision support tool
- Evaluation tool

Phase 7: Maintenance and Monitoring									
Question	Weight	Response			Score				
1. Are application metrics and data being collected, analysed and used to enhance recognition accuracy for the first few months subsequent to launch?	.1	⊕	-2	-1	0	1	2	⊖	-0.2
2. Are high error rates being analysed by the sex and demographics of the callers that generated the errors?	.1	⊕	-2	-1	0	1	2	⊖	-0.2
3. Is the system being enhanced with new data periodically?	0	⊕	-2	-1	0	1	2	⊖	0
<b>Weighted Total:</b>									<b>-0.4</b>

## A Taxonomy/Ontology

```

graph TD
    A[Brand Communication Mechanisms] --> B[Dialogue]
    A --> C[Non-Dialogue]
    B --> D[Grammar]
    B --> E[Prompts]
    B --> F[Speaker]
    C --> G[Background music]
    C --> H[Earcons]
    C --> I[Tagline]
    F --> J[Ethnicity]
    F --> K[Age]
    F --> L[Sex]
    G --> M[Sex]
    G --> N[Tone]
  
```

## Roadmap

- Usually a time based plan, with phases

```

graph LR
    1[1. Requirements & Planning] --> 2[2. Prototype Development]
    2 --> 3[3. Prototype Use]
    3 --> 4[4. System Implementation]
    4 --> 5[5. Testing]
    5 --> 6[6. Deployment & Integration]
    6 --> 7[7. Monitoring & Maintenance]
    3 --> 2
    5 --> 4
  
```

## Lifecycle

- Show how something leads to something else


## Model/Map

- A diagrammatic representation of something

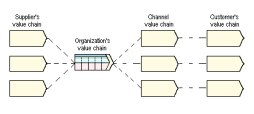
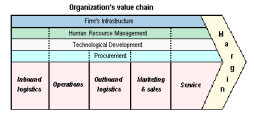
## Capability Maturity Model

*CMM - Capabilities/Maturity Model*


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## Value Chain

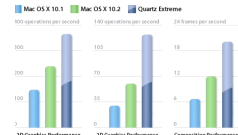



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## Measurement

- Metric
- Index
- Calculation
- Graph
- Statistics




Metric	Mac OS X 10.1	Mac OS X 10.2	Quartz Extreme
2D Graphics Performance (Windows Movie)	~100	~150	~200
2D Graphics Performance (Windows Movie)	~100	~150	~200
Compositing Performance (Windows Game Adventure)	~100	~150	~200




## How to...

- Guidelines
- Best practise
- A specification
- Critical success factors
- Methodology



## Or maybe even...

- Write a program!



## Research areas

- Choose something that will interest you
- Something original
- Not too esoteric
- Write a paper (or two) in the area
- Do some investigation before you get into it
- Some ideas...



## Aligning business & IT

- Different goals
- Measures of success
- Surveys - Online part




### Privacy

- 9/11
- Biometrics
- Hacking
- Cookies
- RF-ID Tags
- Smart cards




### Web services

- XML based web services
- UDDI
- SOAP
- Next big thing (for the last few years!)




### Gadgets

- 802.11
- PDA's
- Ubiquitous computing
- J2ME
- The next big thing (also for the last few years)
- Implants & Cyborgs



### Open Source Software

- Linux
- Apache
- PHP
- MySQL



### Programmers

- Methodologies
- XP
- Motivation
- A spiritual dimension?



### Computer Games

- Gaming industry in Scotland
- University of Abertay
- GAA






### Green issues

- Moore's Law
- Recycling



### Women in IT

- <http://www.womeninit.net/>
- <http://www.fis.utoronto.ca/phd/marton/webstudy/>




### Outsourcing

- India
- Microsoft
- IBM




### Digital Rights Management

- IP
- P2P
- WMP
- MP3
- iPod
- Zen



### Computers, society and the internet

- Email
- Online chat
- Dating
- Webcams
- Text messaging



Good luck and Enjoy it!