The Landscape of Management Support

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Management Information Systems

- 1960’s
- Total, integrated systems
- Flushed by operational systems success
- Computers widespread
- Focus on efficient data processing
Ford Motor Co. (Aust) 1969

• “Management information systems... should exist for only one prime purpose - to support the decision making processes of the organisation”

• “With so useful information captured ... we have attempted to make this as freely available as possible to sections of management that can use the information effectively. Past approaches, where special one time programs written by the Systems Department programmers (if they could get time) .....”
MIS Assessment

- MIS = business computing
- From a management support perspective an abject failure
- Technology and methods couldn’t deliver
- Poor understanding of management and decision making
- Managers disillusioned
Management Information Systems
Decision Support Systems
Decision Support Systems

- Early 1970’s
- Radical alternative to MIS
- Small scale
- Philosophy of support
- Evolutionary development
- Focus on effective decision making
The Decision Support Icon

- USER
- SYSTEM
- ANALYST

- User learning
- Personalised use
- Methods
- Requirements
- Pressure for evolution
- Evolution of system function
DSS Assessment

- It worked
- Personal support, evolutionary development
- Diluted by end user computing
- The largest area of management support
- Still not well understood by IT professionals
Decision Support Systems
Executive Information Systems
Executive Information Systems

• Mid 1980’s
• Enabled by improvement in hardware and software technologies
  – Personal computers
  – Client/server
• Multi-dimensional modelling, OLAP
• Managers more computer literate
Holos Client Software on Executive’s PCs

- Ethernet carrying TCP/IP and IPX (Novell)
  - Axil 320
    - Holos Server Software
    - Multi dimensional models
  - EIS Data-base, Oracle 7
  - Data transfer via NetMaster

- Sun Sparc Station
  - Oracle Financials
  - General Ledger data via SQL*NET

- PC-based Data Server running NetMaster

- Novell Server (File and Printer Service)

- Mainframe-based Applications
  - Oracle Financials

Multi dimensional models
EIS Assessment

- Mixed success history
- Shred out to justify costs
- Greatest effect lower in the organisation
- Experience and better methods
- Products matured
Executive Information Systems
Data Warehousing
Data Warehousing

• Mid 1990’s
• Infrastructure for management support
• Enabled by technology improvements
• Time variant, non-volatile, subject oriented, integrated
• Issues
  – Justification (benefits)
  – Design (data modelling)
  – Operation (data quality)
  – Scale
A Data Warehousing Architecture

Internal Legacy Systems

Special Purpose Data

External Data

DATA WAREHOUSE

EIS

DSS

Query System

EIS Client

EIS Client

DSS Client

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Data Warehousing Assessment

• Too early to tell
• Evangelism and contagion
• “Words” similar to MIS
• Management vs technical tension
• Monash - Melbourne U. Research Programme
Data Warehousing
Other Management Support Approaches
Organisational Decision Support Systems
Management Support 1967 to 1997

- Management Information Systems
- Decision Support Systems
- Executive Information Systems
- Decision Support Systems
- Data Warehousing
Five Lessons from the Past

- The past is always with us
- Don’t use OLTP methods
- Start small and evolve
- Support people not positions
- Focus on judgement not technology
The End