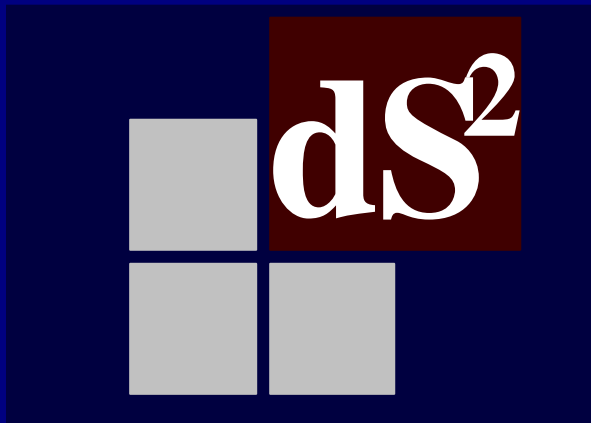


..  
FINANCIAL INFORMATION SYSTEMS CONFERENCE

**INFORMATION ARCHITECTURE  
AND DESIGN OF FIS :  
RENNIES GROUP LIMITED CASE STUDY**

**Kerstin Speer CA(SA) : Group Financial Manager**

**RENNIES GROUP LIMITED**



**Dr James A Robertson PrEng : Managing Director**

**DIFFERENTIATED STRATEGIC SOLUTIONS (Pty) Ltd**



# **INFORMATION ARCHITECTURE AND DESIGN OF FIS : RENNIES GROUP LIMITED CASE STUDY**



- **Introduction**
- **What Should FIS Strategy Entail**
- **Rennies Group Implementation Considerations**
- **Information Architecture & Design of RRS Master Chart of Accounts**
- **How Rennies Group has Integrated Existing Systems**
- **Benefits of Implementing FIS**
- **What has Rennies Group Limited Gained from FIS**
- **Conclusion**



# INTRODUCTION



- Strategically focused FIS defined by Robertson in 1994 : "***Identifying Your Key Business Objectives to Develop a Co-ordinated FMIS Strategy That Meets Your Specific Needs***" (Robertson 1994)
- Decided to introduce into "Rennies Reporting System (RRS)" as soon as possible



# INTRODUCTION

## RENNIES REPORTING SYSTEM



- Group wide consolidation and reporting system
- Uses Hyperion
- Consolidate information from approximately 220 operations in Group to Group Head Office
- Support Group Reporting Requirements and overall business strategy



# INTRODUCTION

## RENNIES REPORTING SYSTEM



- Commercial software
- Client-server database
- Emphasis in this paper is NOT technology

**THE ISSUE IS BUSINESS AND PEOPLE  
NOT TECHNOLOGY**



# INTRODUCTION

## RENNIES REPORTING SYSTEM



- The issue is business and people NOT technology
- This paper concentrates on business information architecture
- Focus attention on business design issues surrounding use of I.T. in general
- FIS in particular



# INFORMATION ARCHITECTURE AND DESIGN OF FIS : RENNIES GROUP LIMITED CASE STUDY

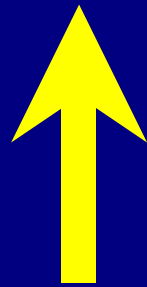


- Introduction
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# STRATEGY vs TACTICS : A DEFINITION



Different and better every day!



Tactics

Doing Things Right



Strategy

Effectiveness



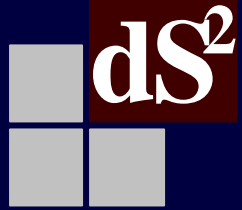
Doing The Right Things



## STRATEGY vs TACTICS :

THERE IS NO POINT  
IN EXECUTING A PERFECT LANDING  
ON AN AIRCRAFT CARRIER  
THAT IS ABOUT TO HIT AN ICE BERG

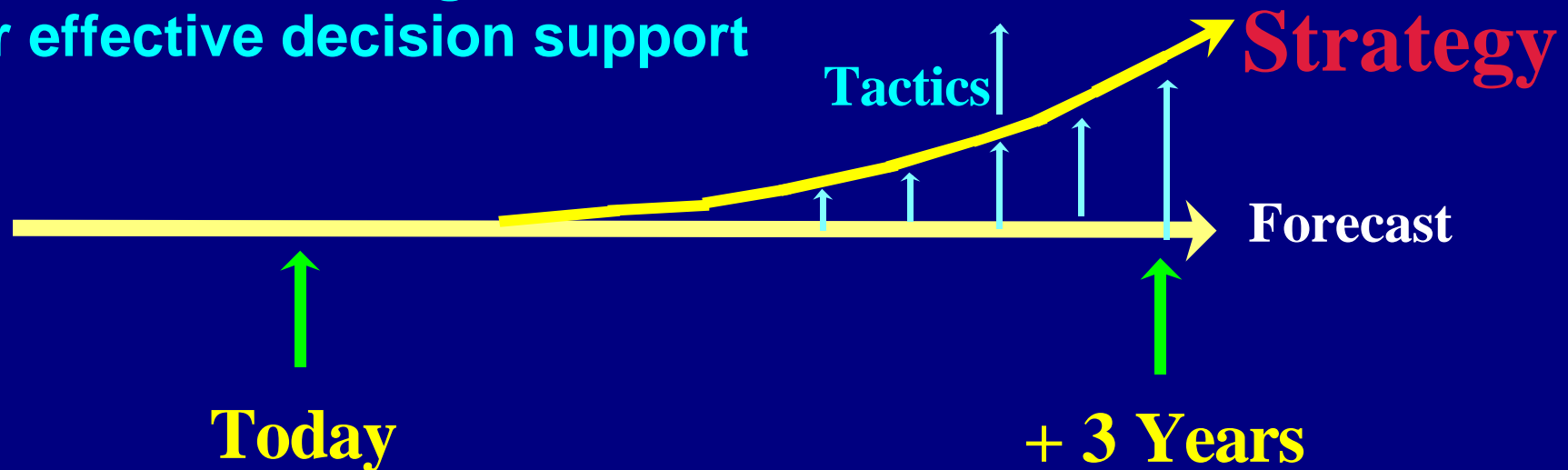




# WHAT IS THE STRATEGIC PLANNING PROCESS ?

Effective Information Systems  
are vital to delivering information  
for effective decision support

Objective

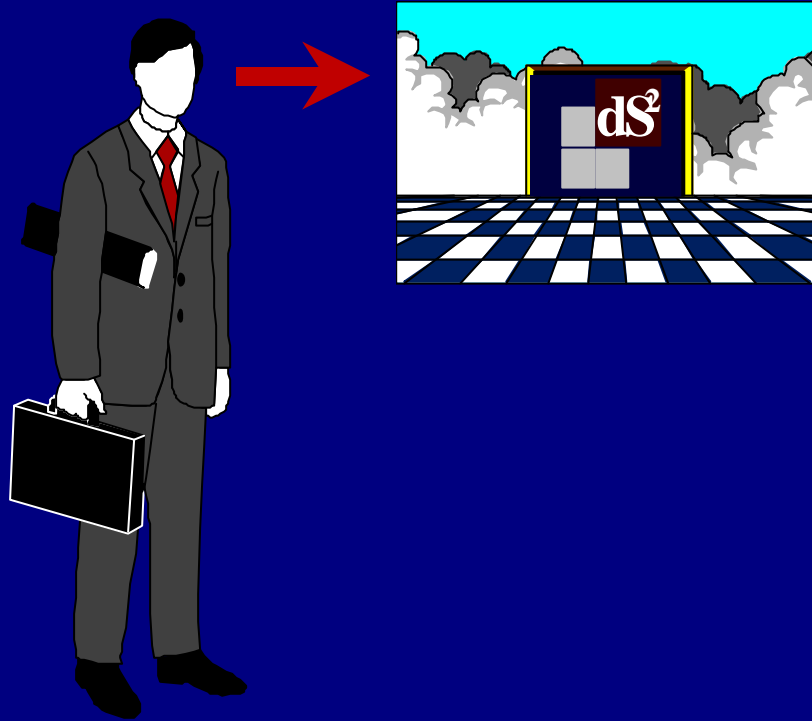


DESIGN RRS FOR THE FUTURE

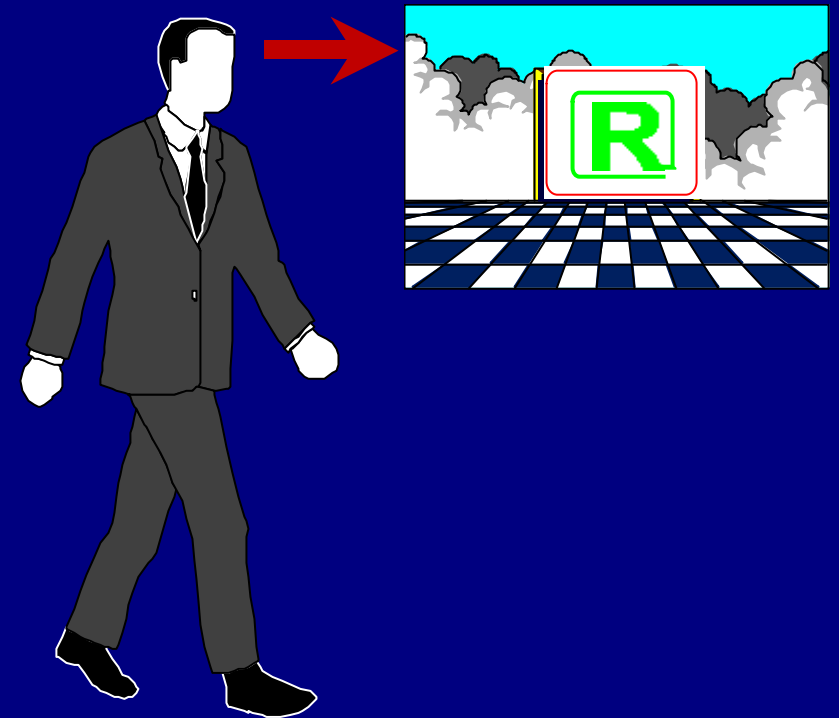


Invest in strength for tomorrow!

# Strategy is Determined by Looking to the Future



**With Vision**



**Design your IT systems for  
Tomorrows Requirements!**

# **BUSINESS STRATEGIC ALIGNMENT : DEFINE THE PICTURE**



**ASSIST MANAGERS TO CREATE AND SUSTAIN COMPETITIVE  
ADVANTAGE**

# THE KEY RRS DESIGN REQUIREMENT



## DESIGN RENNIES REPORTING SYSTEM FOR TOMORROW'S REQUIREMENTS

TOO MANY SYSTEMS ARE DESIGNED FOR YESTERDAYS  
REQUIREMENTS AND TO COMPLY WITH  
YESTERDAYS SYSTEMS!



Fast learning!



# FIS STRATEGY

(Robertson 1994)



- Determine business strategic objectives
- Determine financial information required to support strategic objectives
- Determine financially related business concepts to introduce (EVA, ABFM, IA, etc)
- EVA program with Stern Stewart already underway

**THE VISION OF RGL : HAS COMMITMENT OF MANAGEMENT**



# FIS STRATEGY

(Robertson 1994)



- Evaluate fundamental changes to current financial operating procedures & systems
- First principles analysis of:
  - Coding
  - Business model (ownership)
  - Up-stream & down-stream controls
- Implementation (system acceptance)

**THE VISION OF RGL : HAS COMMITMENT OF MANAGEMENT**



# FIS STRATEGY

(Robertson 1994)



- Evaluate need for:
  - Multiple linked ledgers (accrual)
  - Overlay ledgers
- Develop a culture of future focused management
- Consider the corporate command centre or paperless board meeting

**THE VISION OF RGL : HAS COMMITMENT OF MANAGEMENT**



# RRS STRATEGY

- Business model for smallest business entity
- First principles analysis of:
  - Coding
  - Business model (ownership)
  - Up-stream & down-stream controls
- Implementation (system acceptance)
- Universal applicability of chart of accounts



**Lean processes!**

# RRS STRATEGY

- Consistent design to support management enquiry
- Overlay ledgers
- EVA
- Future focused management support
- Comparative reporting down as well as up
- Slice and dice analysis



Learning Organization



# INFORMATION ARCHITECTURE AND DESIGN OF FIS : RENNIES GROUP LIMITED CASE STUDY



- Introduction
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- Conclusion



# RENNIES GROUP IMPLEMENTATION CONSIDERATIONS



- Undertaken as extension of existing project already underway
- Clearly defined strategic objectives as customer focused service organization
- Stern Stewart & Co appointed to implement EVA programme
- RRS software (Hyperion) already selected
- Project plan in place



# RENNIES GROUP IMPLEMENTATION CONSIDERATIONS



- Initially limited scale
- Emphasis on first principles analysis of information classification and coding of consolidation ledger
- Support great diversity of businesses:
  - Rennies Travel
  - Rent a Bakkie
  - Renfreight
  - XPS
  - Manica (Southern & Central Africa)



# RENNIES GROUP IMPLEMENTATION CONSIDERATIONS



- Basic consideration of business model concept and definition of overlays (will constitute a later phase)
- Multiple Pilot Site implementation in terms of original project plan, managed by Group Information Services
- This presentation concentrates on Group Consolidation Master Chart of Accounts to support full diversity of operations



# RENNIES GROUP IMPLEMENTATION CONSIDERATIONS



## REQUIRE CONSOLIDATION OF INFORMATION





## POTENTIAL COMPONENTS OF HYPERION MODEL



- First stage rolled out in January 95 was Financial General Ledger
- Consolidation model in progress
- Other items to follow in due course



  
**FIRST STAGE**





# INFORMATION ARCHITECTURE AND DESIGN OF FIS : RENNIES GROUP LIMITED CASE STUDY



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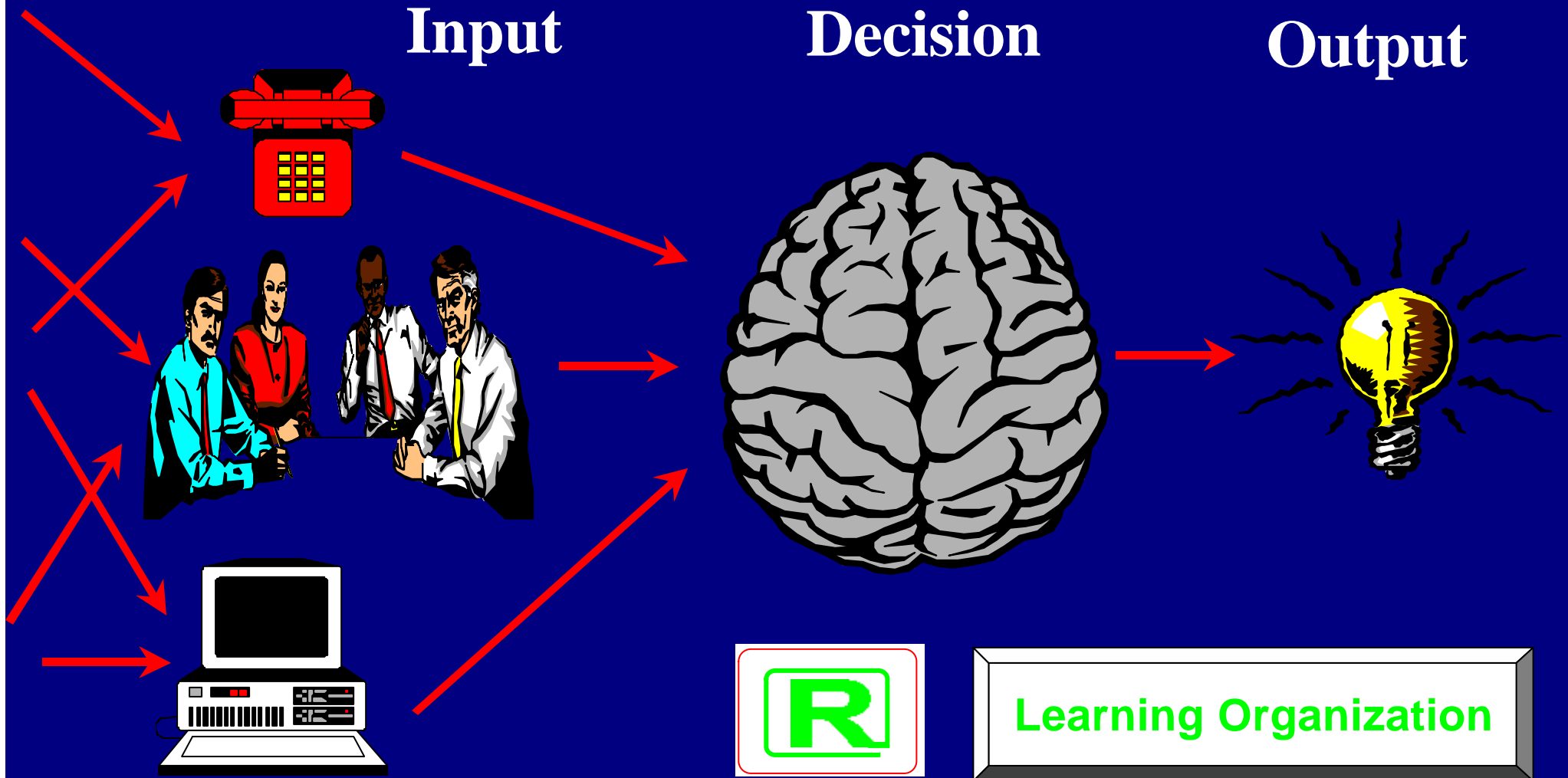
# INFORMATION ARCHITECTURE AND



## DESIGN OF RRS MASTER CHART OF ACCOUNTS

- Design undertaken by way of a series of workshops with senior financial and operational management of larger divisions and companies within RGL
- Particular emphasis on widespread consultation with senior end users
- Focus on long term solution

## THE INFORMED DECISION PROCESS



**BUT**

**THE DECISION SUPPORT SYSTEM  
INFORMATION PYRAMID**

**DECISION MAKING**

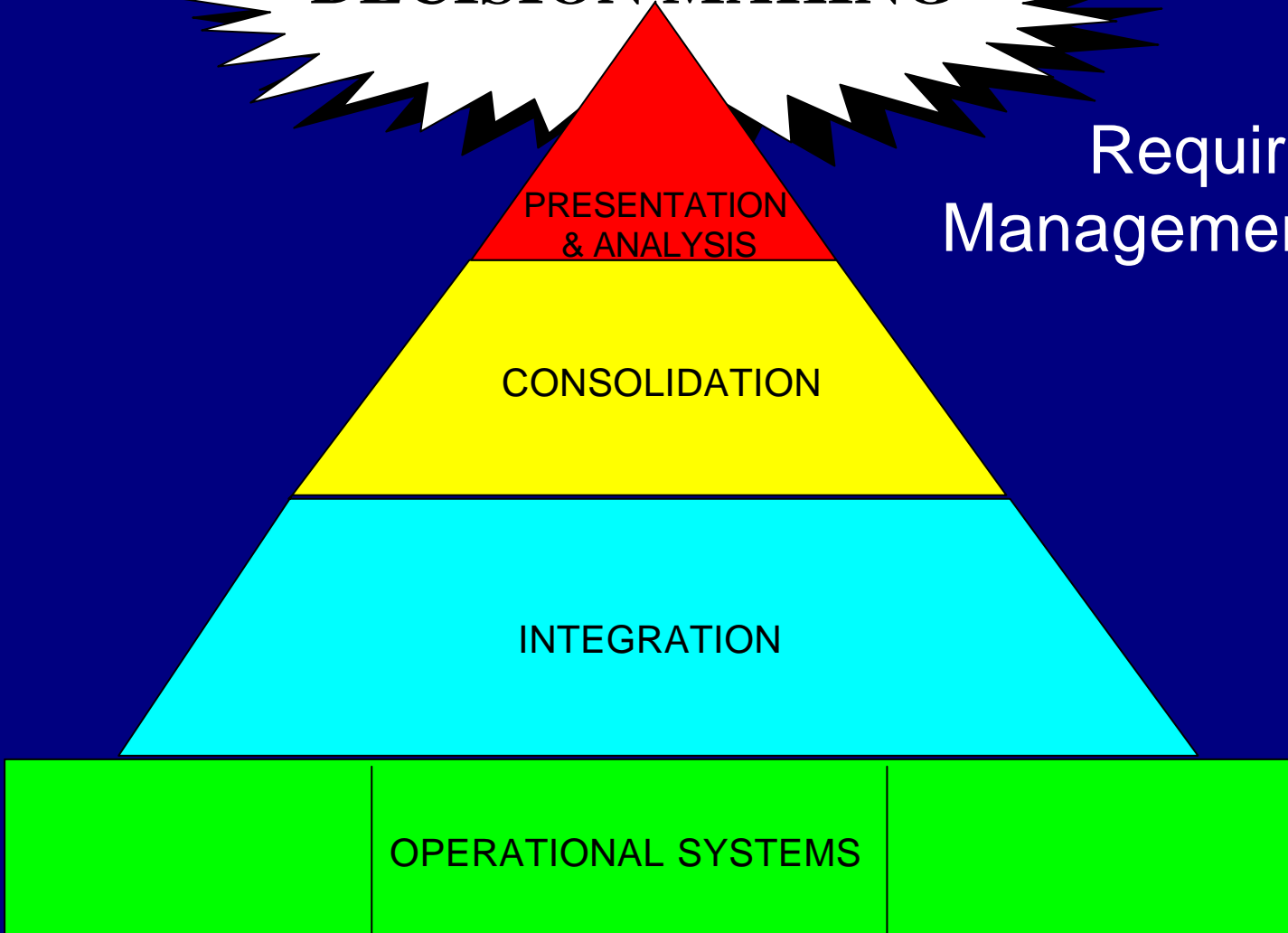
PRESENTATION  
& ANALYSIS

Requires  
Management Input

CONSOLIDATION

INTEGRATION

OPERATIONAL SYSTEMS



**INFORMATION ARCHITECTURE AND  
DESIGN OF GROUP REPORTING MASTER CHART OF ACCOUNTS**

**INFORMATION CLASSIFICATION**

**THE SINGLE BIGGEST REASON  
WHY I.T. INVESTMENTS FAIL**





## INFORMATION CLASSIFICATION

### THE SINGLE BIGGEST REASON WHY I.T. INVESTMENTS FAIL

- What is Information Classification
- Why is it so important
- How did we do it



Learning Organization



**BUSINESS MODEL CONSIDERATIONS  
THAT FORM THE BASIS OF THE DESIGN**

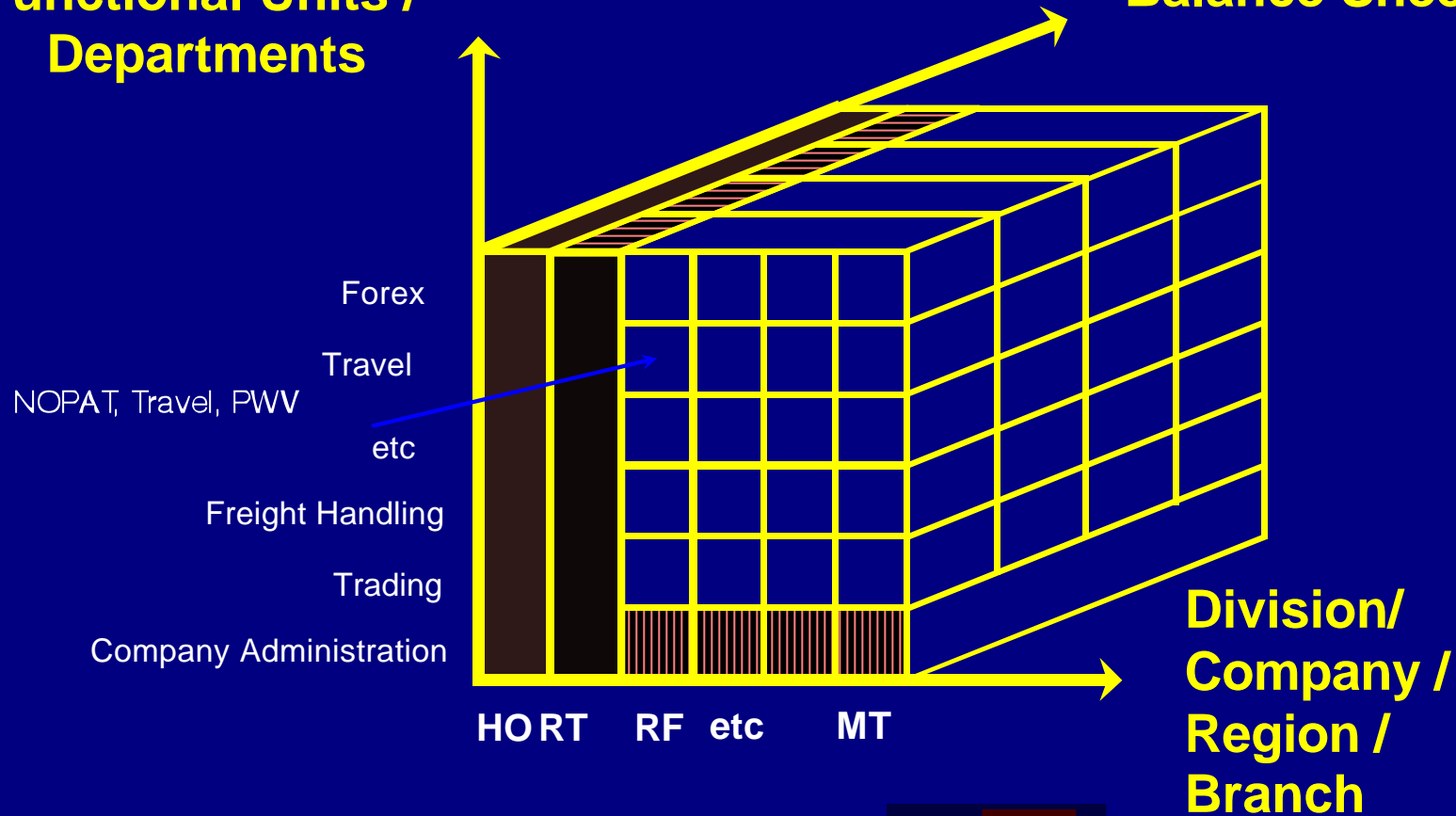
- All information should be allocated according to a business model
- All information can be posted without ambiguity
- Post directly and uniquely
- Only one owner of each cell

**WITHOUT UNAMBIGUOUS OWNERSHIP THERE  
IS NO ACCOUNTABILITY**

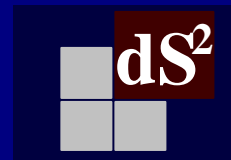
# MULTIDIMENSIONAL, MULTI LAYERED "CUBIC" BUSINESS MODEL

Functional Units /  
Departments

Chart of Accounts /  
Income Statement &  
Balance Sheet, etc

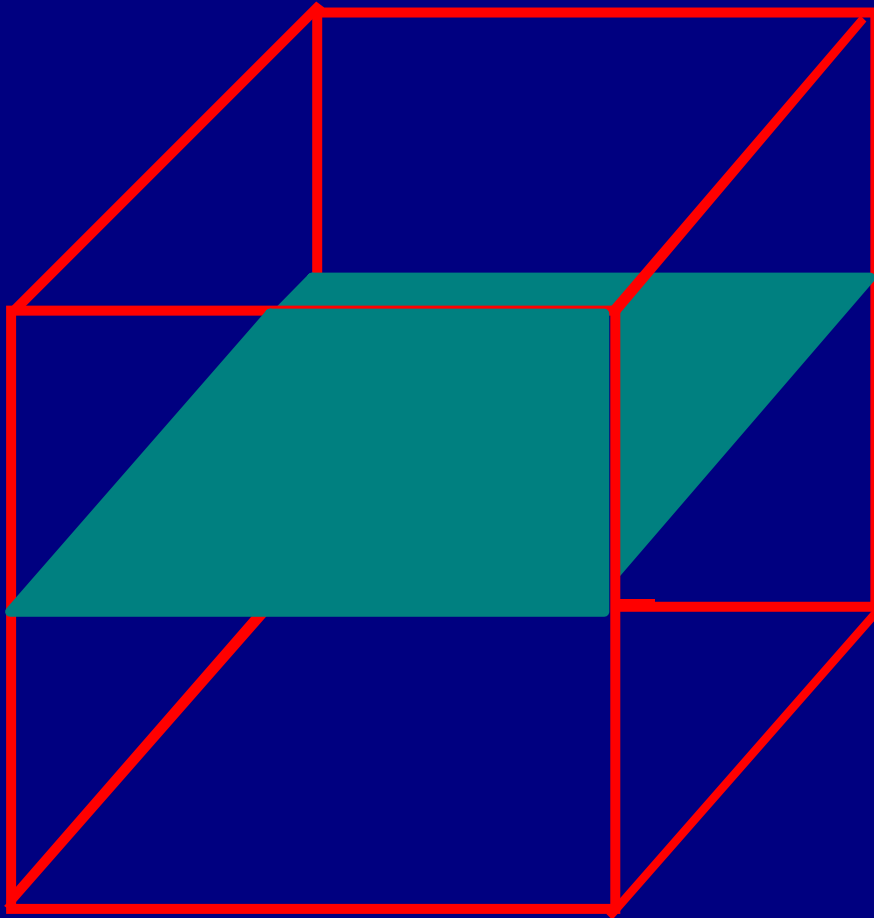


(c) James A Robertson & Associates 1990, 1993  
Differentiated Strategic Solutions 1994



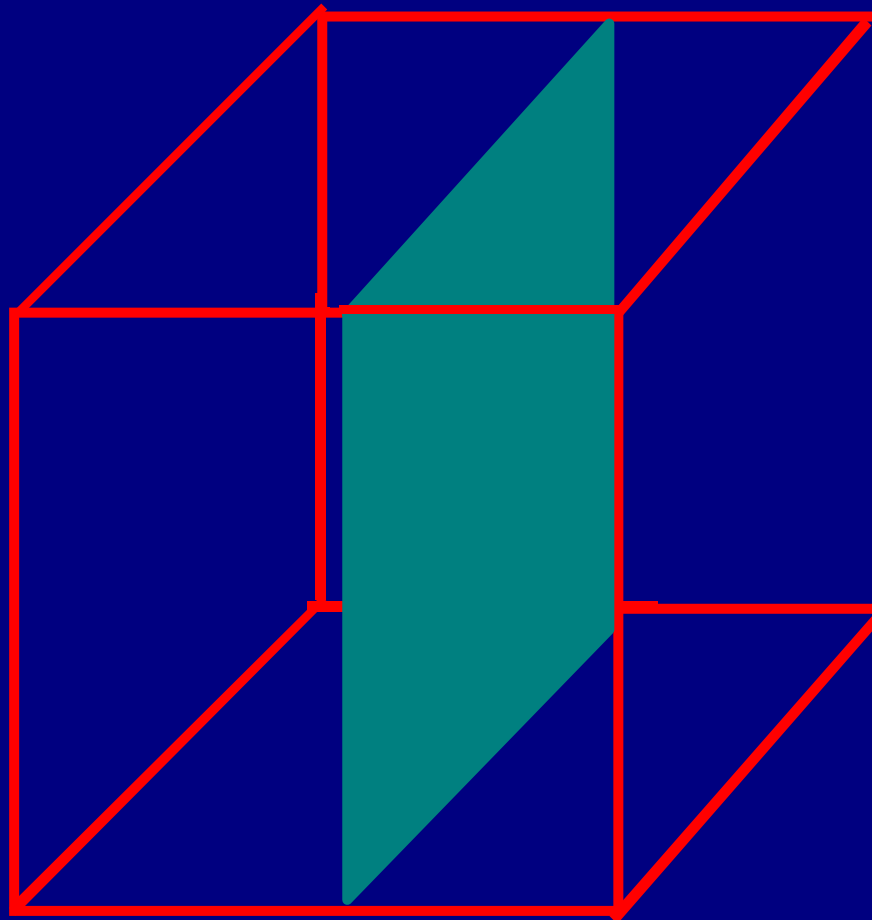


**THE BUSINESS MODEL WILL  
ENABLE US TO SLICE AND DICE THE  
FINANCIAL INFORMATION IN RRS**



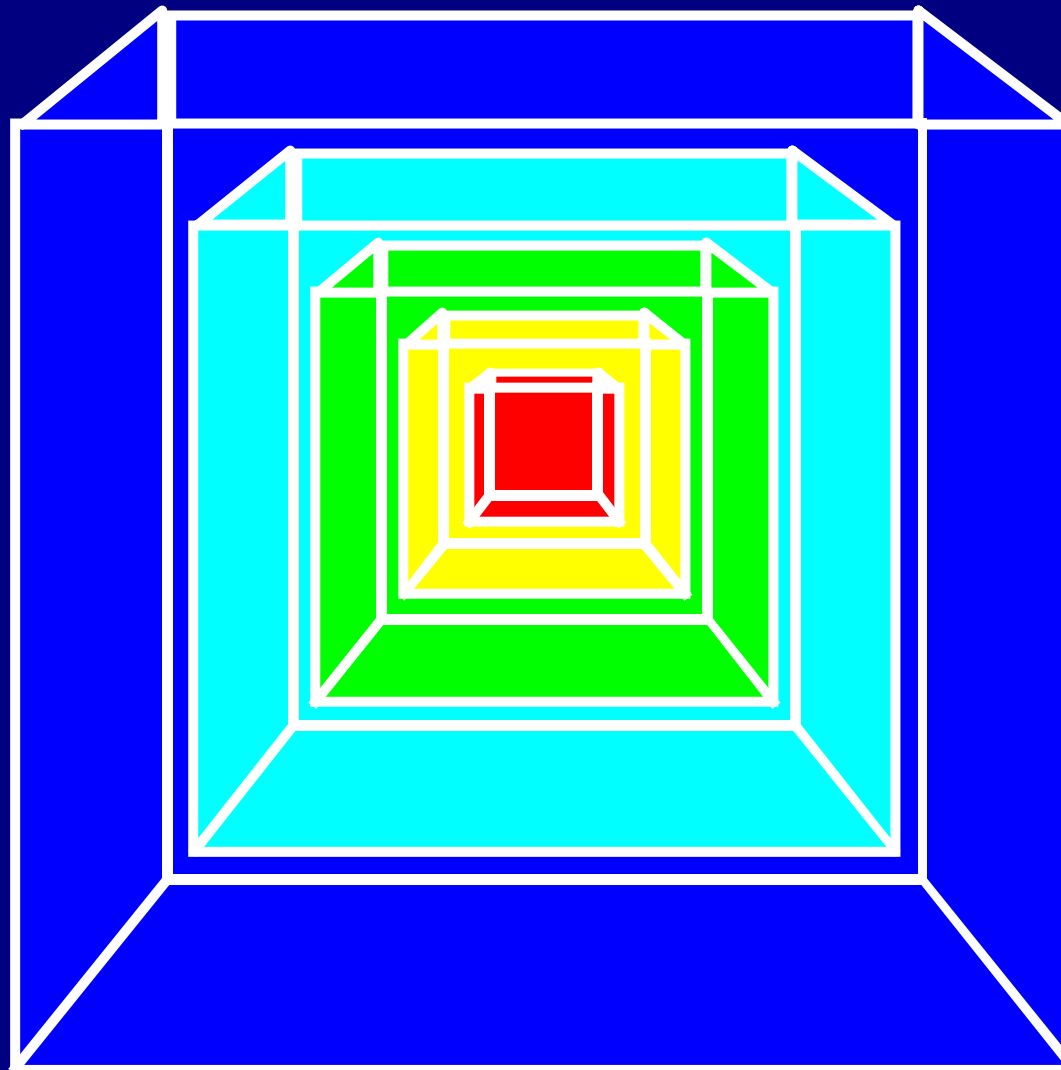
**Slice and dice in any  
direction**

**THE BUSINESS MODEL WILL  
ENABLE US TO SLICE AND DICE THE  
FINANCIAL INFORMATION IN RRS**



**Slice and dice in any  
direction**

# SLICING AND DICING THE FINANCIAL INFORMATION

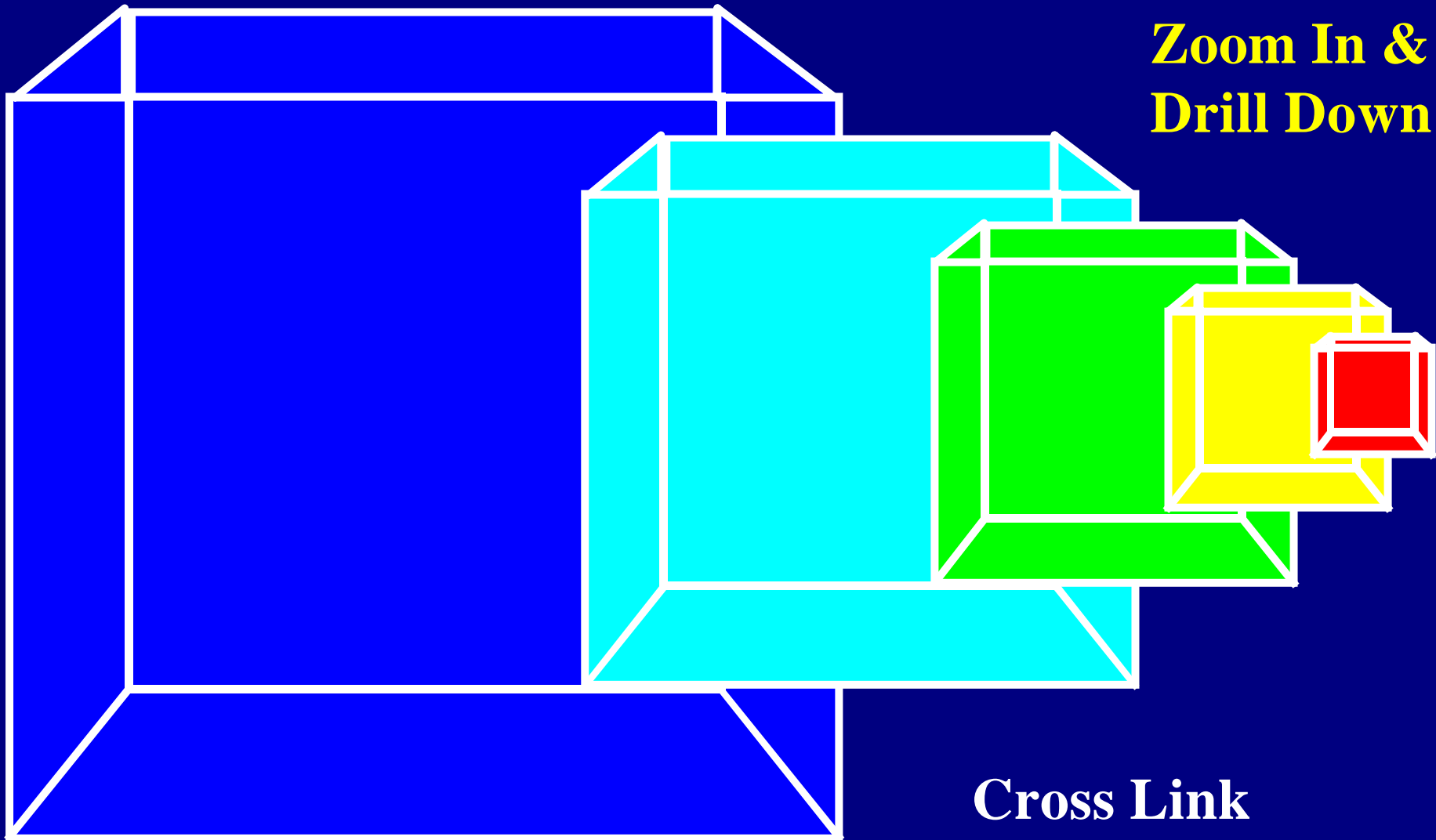


**Zoom In**

# SLICING AND DICING THE FINANCIAL INFORMATION



**Zoom In &  
Drill Down**



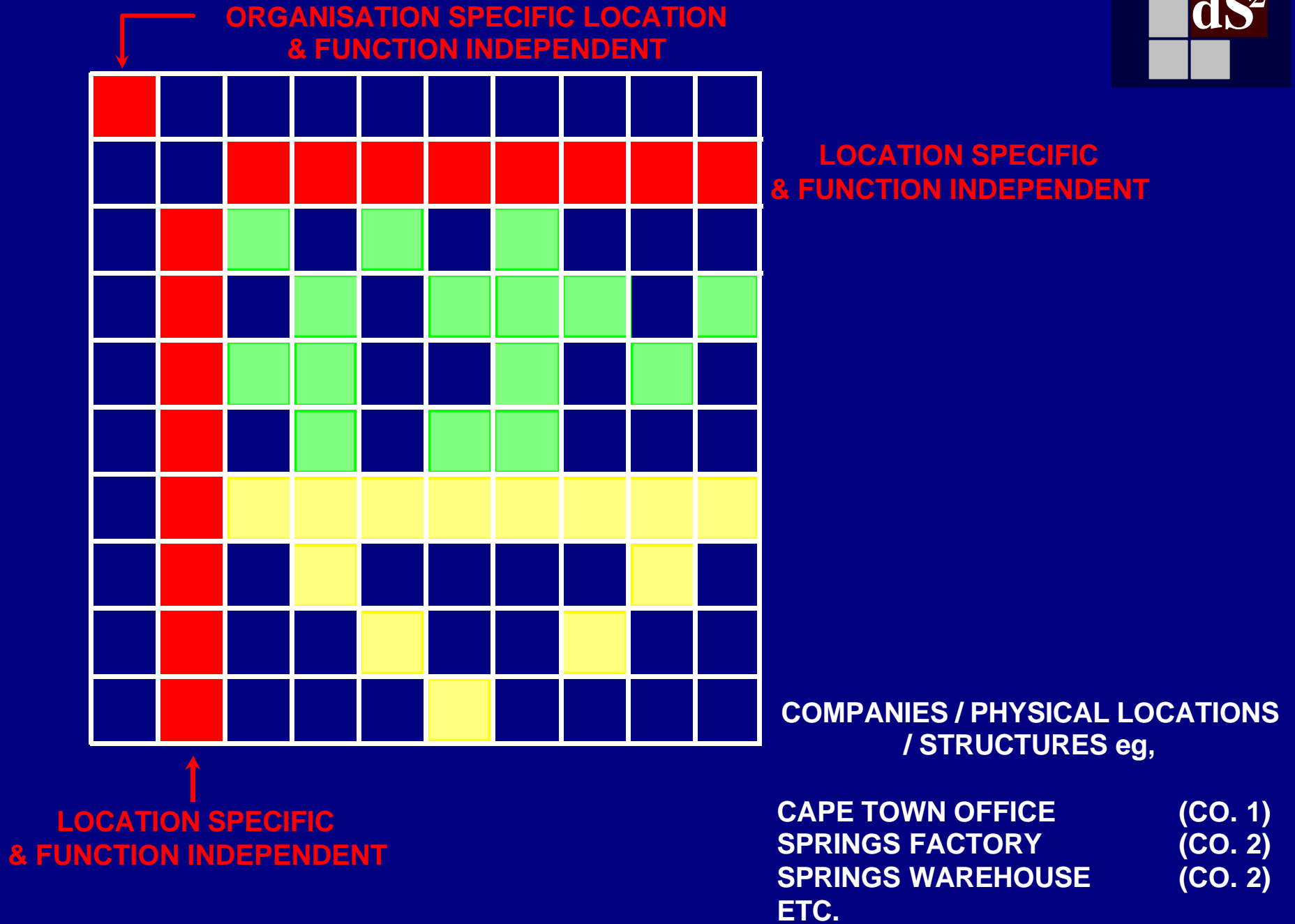
**Cross Link**

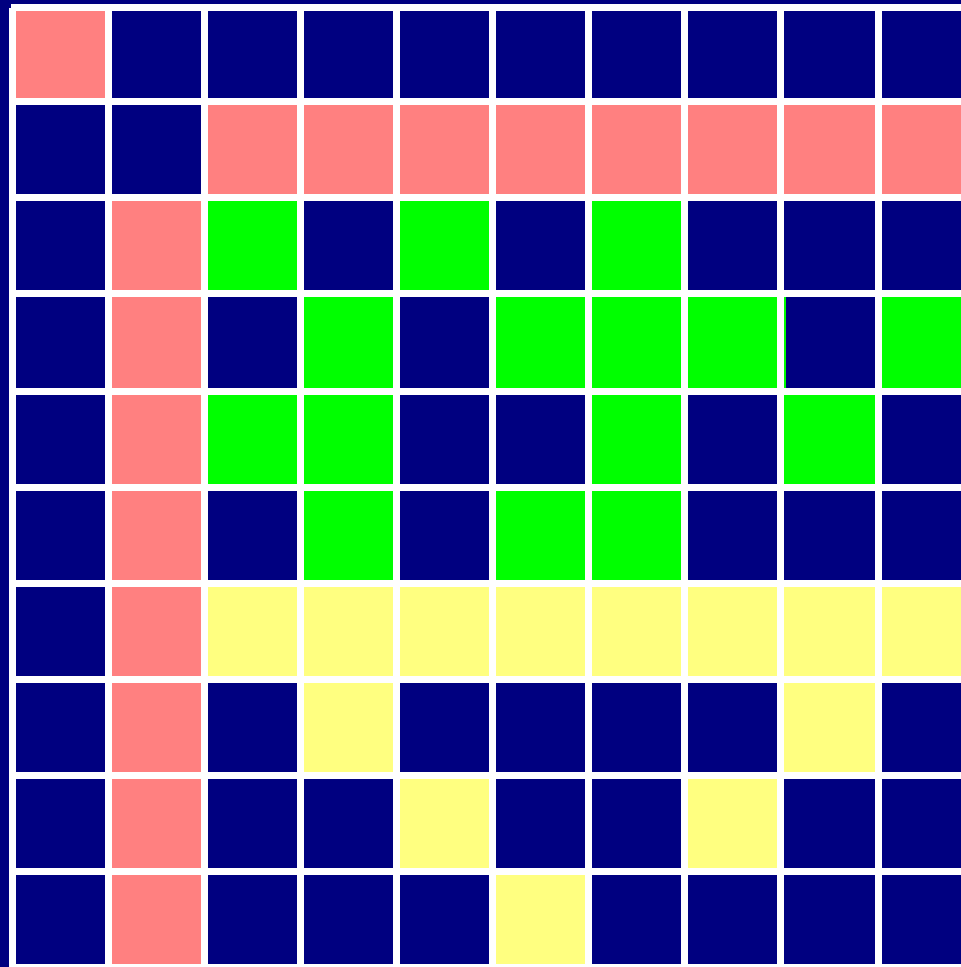


## **BUSINESS MODEL CONSIDERATIONS THAT FORM THE BASIS OF THE DESIGN**

A well defined and maintained model  
gives every manager and supervisor  
unambiguous ownership and therefore  
accountability and responsibility for each unit

**WITHOUT UNAMBIGUOUS OWNERSHIP THERE  
IS NO ACCOUNTABILITY**





**CORE BUSINESS UNITS**

**COMPANIES / PHYSICAL LOCATIONS  
/ STRUCTURES eg,**

<b>CAPE TOWN OFFICE</b>	<b>(CO. 1)</b>
<b>SPRINGS FACTORY</b>	<b>(CO. 2)</b>
<b>SPRINGS WAREHOUSE</b>	<b>(CO. 2)</b>
<b>ETC.</b>	



FUNCTION / DEPARTMENT eg,

MANAGEMENT  
FINANCE  
PRODUCTION  
ETC.

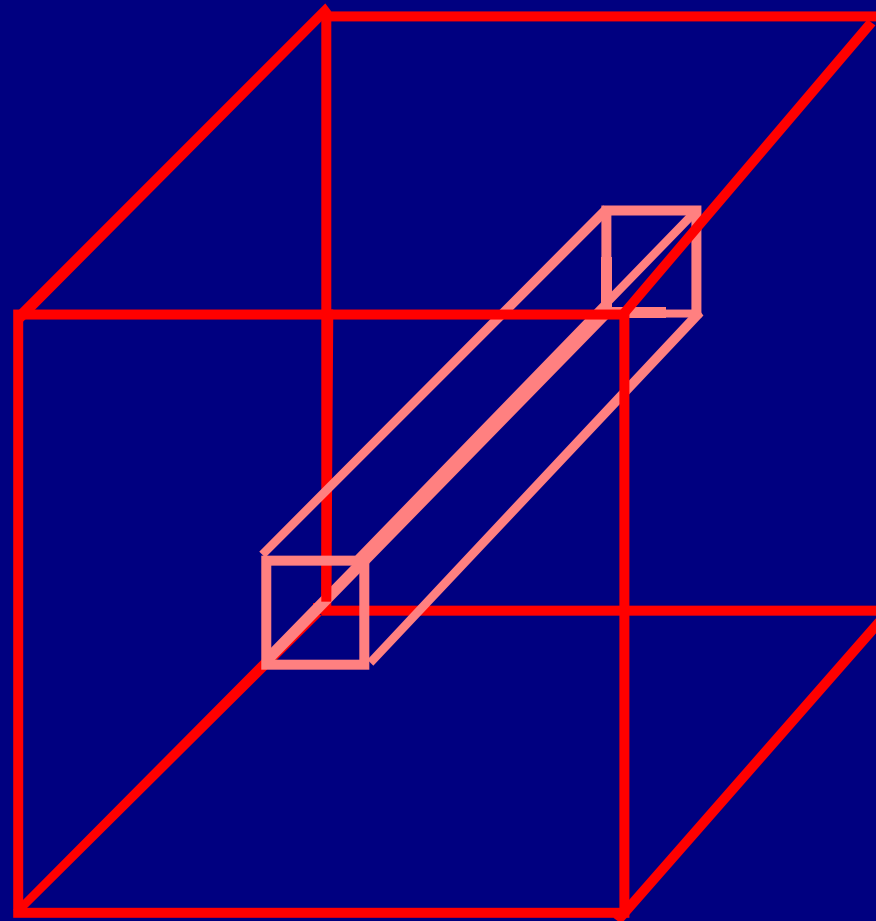
COMPANIES / PHYSICAL LOCATIONS  
/ STRUCTURES eg,

Red	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
Dark Blue	Dark Blue	Red	Red	Red	Red	Red	Red	Red	Red
Dark Blue	Red	Green	Dark Blue	Green	Dark Blue	Green	Dark Blue	Dark Blue	Dark Blue
Dark Blue	Red	Dark Blue	Green	Dark Blue	Green	Green	Green	Dark Blue	Green
Dark Blue	Red	Green	Green	Dark Blue	Green	Dark Blue	Dark Blue	Green	Dark Blue
Dark Blue	Red	Dark Blue	Green	Dark Blue	Green	Green	Dark Blue	Dark Blue	Dark Blue
Dark Blue	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Dark Blue	Red	Dark Blue	Yellow	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Yellow	Dark Blue
Dark Blue	Red	Dark Blue	Dark Blue	Yellow	Dark Blue	Dark Blue	Yellow	Dark Blue	Dark Blue
Dark Blue	Red	Dark Blue	Dark Blue	Dark Blue	Yellow	Dark Blue	Dark Blue	Dark Blue	Dark Blue

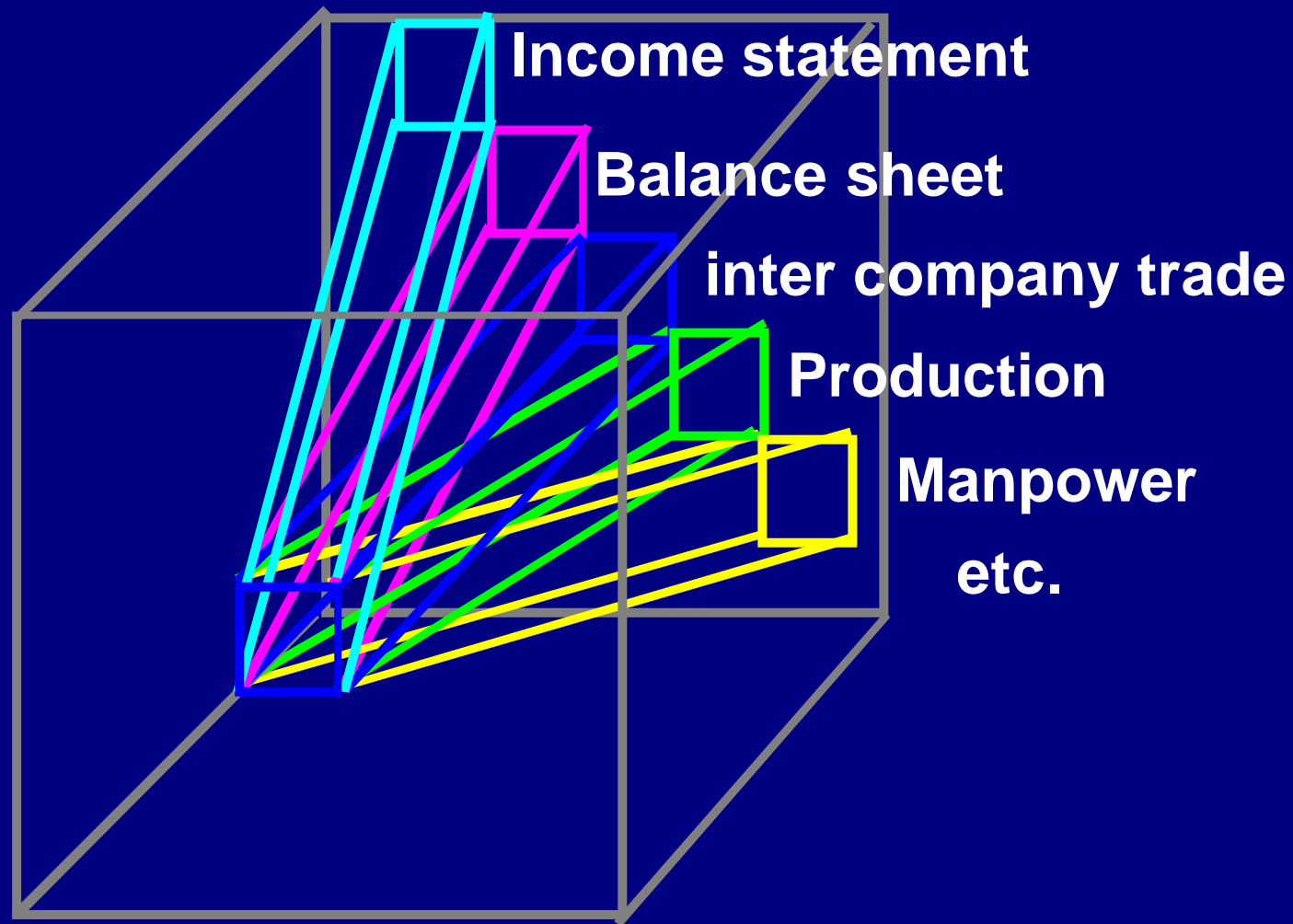
CAPE TOWN OFFICE (CO. 1)  
SPRINGS FACTORY (CO. 2)  
SPRINGS WAREHOUSE (CO. 2)  
ETC.

SUPPORT AND ADMINISTRATIVE  
UNITS





**All items that can be  
uniquely attributed to this cell of the  
model by function & location**





## RESULTS OF DESIGN PROCESS

- Development of clear understanding of diversity of businesses
- Business unit independent definitions of Revenue and Cost Drivers
- Ensure general applicability irrespective of organizational structure
- Highly structured classification scheme



## RESULTS OF DESIGN PROCESS

- Support for both disbursement and expense orientated operations
- Framework for monthly, year-end, tax, management and EVA reporting
- Clear conceptual understanding of future business model



## RESULTS OF DESIGN PROCESS

- Conceptual definition of framework for:
  - Inter-Region
  - Inter-Branch
  - Inter-Subsidiary
- for later implementation
  
- Framework for market sector input-output model at financial level
  - e.g. nett trade with particular major organization



## RESULTS OF DESIGN PROCESS

- Solution suitable for "Cascading" to:
  - Divisions
  - Operating Companies
  - Individual SBU's
- Capable of replacing existing charts of accounts at operating Co and SBU level.
- Foundation for EIS



## INFORMATION ARCHITECTURE AND DESIGN OF GROUP REPORTING MASTER CHART OF ACCOUNTS



### RESULTS OF DESIGN PROCESS

- Enable Group Finance to add Considerable Value to individual operating companies



## DESIGN PROCESS

- Information architecture analysis and design spread over approximately two months
- High level of involvement of Group Financial Manager (Kerstin), Project Manager and Consultant as well as the rest of the team
- Ten workshops (2 to 8 hours)
- Continuous liaison and project team meetings





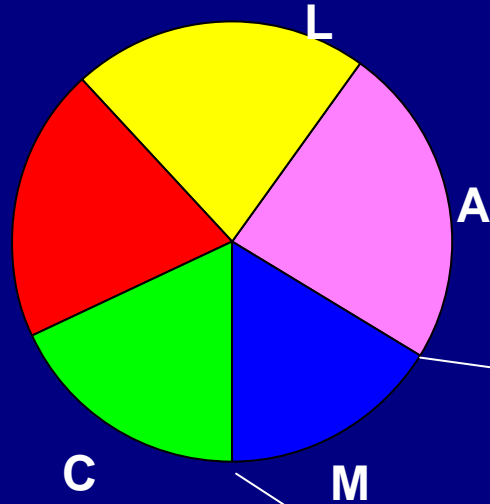
## PRINCIPLES APPLIED

- Structured chart of accounts
- Hierarchical
- Presentation conventions

# HIERARCHICAL DATA ENQUIRY CONCEPT



TOP LEVEL SUMMARY  
OF ENTIRE DATABASE



PROGRESSIVE

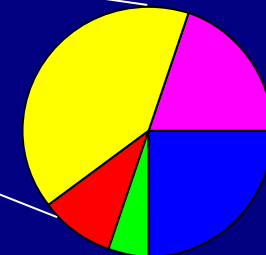
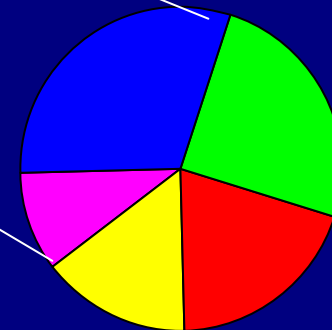
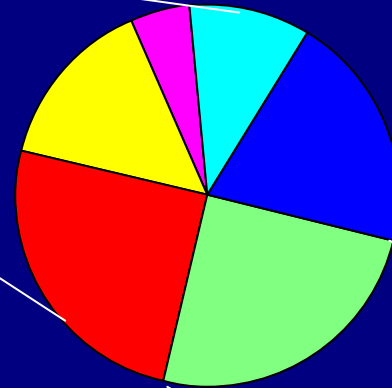
DRILL

DOWN

TO

DETAIL

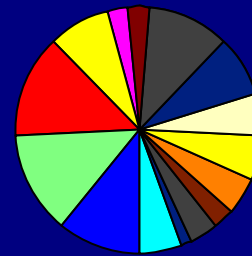
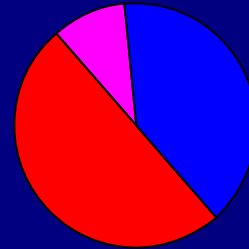
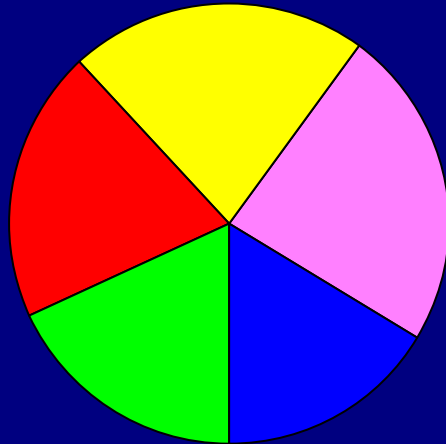
ANALYSIS OF ITEMS  
MAKING UP ITEM "M"



IDEAL CODING WILL GIVE BETWEEN  
5 AND 10 SLICES IN EACH PIE CHART

# BASIC CONCEPTS

## PRESENTATION SKILLS



**5 TO 10 SLICES OPTIMUM**

### ABSTRACT THINKING / MANAGEMENT

The average person can manage  
7 plus or minus 2  
distinct areas or concepts

# NEW GL DESIGN eg **RENNIES TRAVEL**



- HANDLING CHARGES
- Cargo handling

- AGENCY
- Sea
- Air
- Rail

- **MARGIN**
- **Forex Margin**
- Freight Margin

## • **COMMISSIONS**

- **Air**
- **International**
- **Domestic**
- **Charter**
- **Other**

## • **INCENTIVES**

## • **FEES**



**BOLD TEXT APPLIES TO RENNIIES TRAVEL**



# NEW GL DESIGN eg **RENFREIGHT**

- **HANDLING CHARGES**

- **Cargo handling**

- **AGENCY**

- **Sea**

- **Air**

- **Rail**

- **MARGIN**

- Forex Margin

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- Air

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- INCENTIVES

- **FEES**



**BOLD TEXT APPLIES TO RENFREIGHT**

# NEW GL DESIGN



- HANDLING CHARGES

- Cargo handling

- AGENCY

- Sea
- Air
- Rail

- MARGIN

- Forex Margin
- Freight Margin

- COMMISSIONS

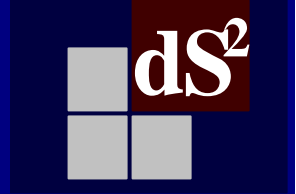
- Air
  - International
  - Domestic
  - Charter
  - Other

- INCENTIVES

- FEES



UNDERLINE is common, RENNIES TRAVEL,  
RENFREIGHT



## CONCLUSION

Without  
Effective  
Information Classification  
You Can Do Everything Else Right  
and  
"The System"  
will Still Fail To Deliver  
on Expectations



## INFORMATION ARCHITECTURE AND DESIGN OF GROUP REPORTING MASTER CHART OF ACCOUNTS



### END RESULT

- Consolidation chart of accounts with approximately 700 posting level accounts
- Suitable for implementation across the entire group





# INFORMATION ARCHITECTURE AND DESIGN OF FIS : RENNIES GROUP LIMITED CASE STUDY



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## HOW RENNIES GROUP HAS INTEGRATED EXISTING SYSTEMS



### CONSOLIDATION PROCESS IN HYPERION

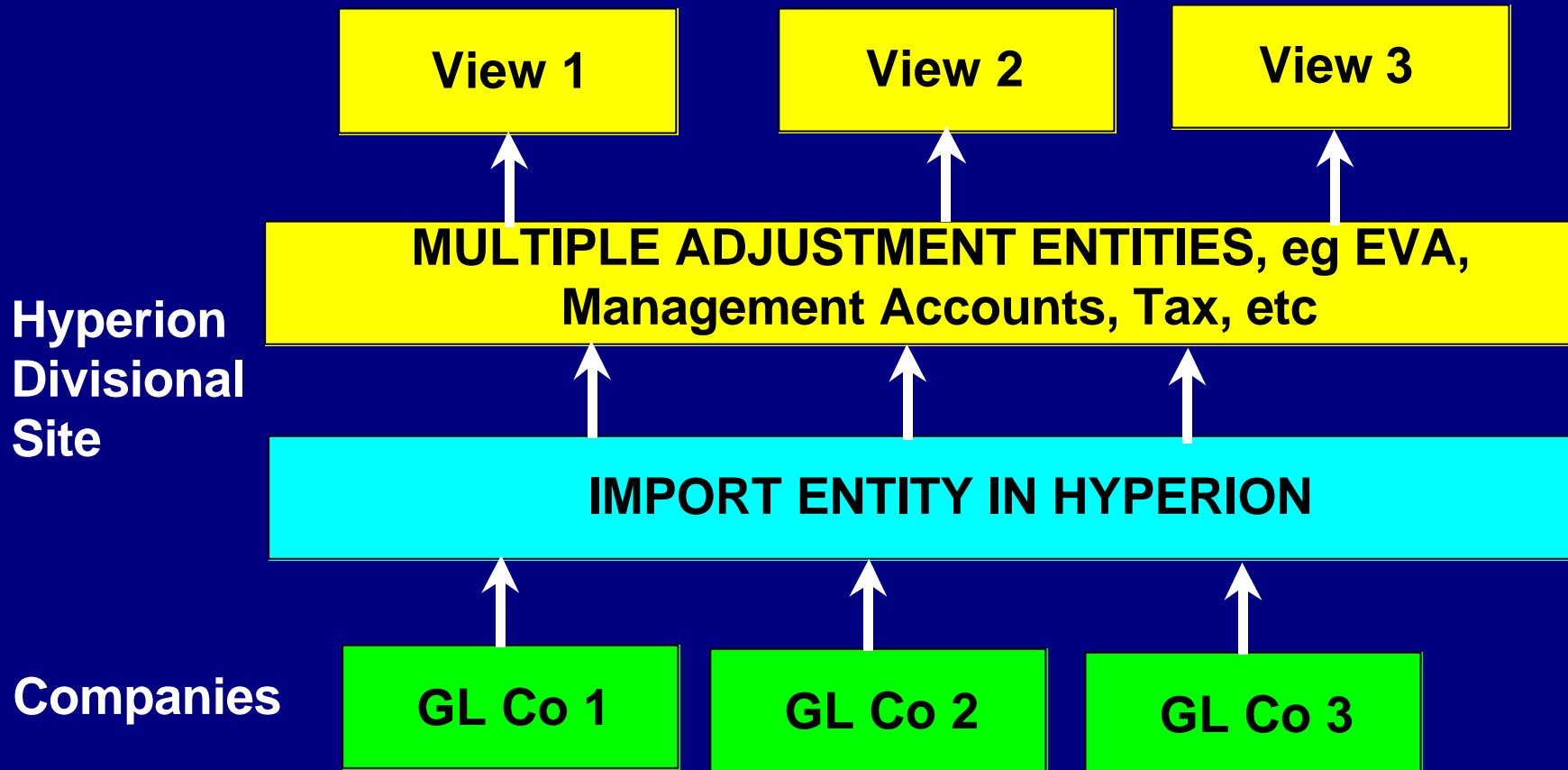
- Draw information out of existing ledgers
- Unique mapping for each company's general ledger
- Enables adjustments to be made
- Allows EVA and other adjustments to be made as overlays



# CONSOLIDATION PROCESS IN HYPERION



FIRST PHASE IS FINANCIAL GENERAL LEDGERS ONLY





## HOW RENNIES GROUP HAS INTEGRATED EXISTING SYSTEMS



- Existing general ledger charts of accounts mapped onto master consolidation chart by paper mapping facilitated by project team
- ASCII up-load files from existing systems in Hyperion format
- Direct link by way of account conversion and name conversion tables



## HOW RENNIES GROUP HAS INTEGRATED EXISTING SYSTEMS



- Upload data used as building blocks, groups of accounts:
  - Income statement
  - Balance sheet
  - Flow accounts
  - Balance and control
  - Non-Financial and Derived, including EVA



## HOW RENNIES GROUP HAS INTEGRATED EXISTING SYSTEMS



- Basic business entity model has been implemented at Divisional Level
- Separate input and adjustment entities
- Input ledgers in currency of origin, forex translation at appropriate point
- Reporting using tool and also dynamic link to Excel



## HOW RENNIES GROUP HAS INTEGRATED EXISTING SYSTEMS



- Currently busy with further deployment
- Detail business modelling, market modelling, geographic analysis and EIS will commence later this year
- Effective integration made possible by structured classification scheme
- Accommodates different accounting treatments and harmonizes



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## BENEFITS OF IMPLEMENTING FIS



- Will only run live in July but currently being used for budgeting
- Anticipated benefits include improved turnaround of :
  - Tax statements (save three weeks)
  - Year end pack (save two weeks)
  - save reconciliation and manual reprocessing across the group
  - Three days per month end



## BENEFITS OF IMPLEMENTING FIS



- All operations have been able to map on to consolidation chart of accounts successfully
- Some entities has some difficulty
- Certain tangible benefits experienced at sites where enthusiastic and proactive involvement by financial management and the executive has resulted in full potential being realized



## BENEFITS OF IMPLEMENTING FIS



### CASE 1 :

- Moved management reporting off existing bureau
- Greatly improved reporting while still in pilot phase
- Resulting time saving from ease of use, used in more detailed analysis in support of management effectiveness
- Expected improvement in decision making with regard to branch viability and competitiveness
- Increased market share is projected



## BENEFITS OF IMPLEMENTING FIS



### CASE 2 :

- One to one link between existing GL and RRS
- Created a powerful reporting tool which is fully exploited
- Reporting by profit centre, region, product type and executive is simple and flexible
- User is empowered in preparing financial information



## BENEFITS OF IMPLEMENTING FIS



- In flagship cases :
- Group Finance is seen to have added value to the operations of the group
- This demonstrates the potential synergy of a forward thinking Group Finance Function which anticipates decision support information needs of subsidiaries



# INFORMATION ARCHITECTURE AND DESIGN OF FIS : RENNIES GROUP LIMITED CASE STUDY



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## WHAT RENNIES GROUP LIMITED HAS GAINED FROM FIS



- Benefits previously discussed have been achieved
- A platform has been installed to support a wide variety of value adding services to be delivered by Group Finance and financial management of operations



## WHAT RENNIES GROUP LIMITED HAS GAINED FROM FIS



### A PLATFORM ON WHICH :

- Improved group reporting
- Corporate business model
- Group-wide EVA analysis and reporting
- Reporting of Key Performance Indicators including non-financial components
- Regional and market based analysis

**CAN BE BUILT**





## WHAT RENNIES GROUP LIMITED HAS GAINED FROM FIS



- Improved reporting effectiveness at the operational level
- Improved management decision support
- Further analysis and design of the business model and other components will take place in the second half of 1995



# INFORMATION ARCHITECTURE AND DESIGN OF FIS : RENNIES GROUP LIMITED CASE STUDY



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- **Conclusion**



# CONCLUSION



- Effective information architecture and design giving rise to effective information classification gives rise to significant benefits with FIS
- Without this, FIS is unlikely to succeed
- Strategic direction and information requirements must be taken into account
- Fundamental first principles analysis is vital



# CONCLUSION



**THE REAL COST IS PEOPLE**



**TECHNOLOGY IS NOT THE ISSUE  
PROFESSIONAL TIME IS**



# CONCLUSION



- Short term benefits have already been experienced
- Flagship sites have experienced dramatic improvements in management reporting capability
- Market focused analysis and reporting have been identified as potential future benefits

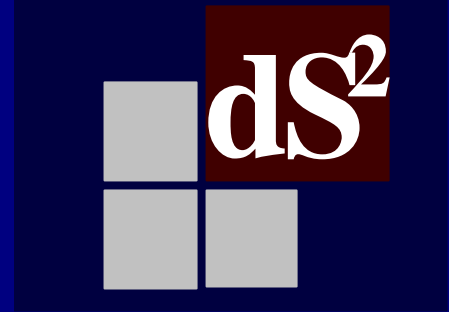


## CONCLUSION

- RRS should become an integral part of decision making
- Competitive advantage will be the key benefit!
- Group finance has leveraged the opportunity to add value to the operating companies



# **DEDICATION and ACKNOWLEDGEMENTS**



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**This presentation is dedicated to  
to The Glory of God  
who is the source and reason for our existence**

**INFORMATION ARCHITECTURE  
AND DESIGN OF FIS :  
RENNIES GROUP LIMITED CASE STUDY**

**QUESTIONS**



**dS2**

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