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

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RENNIES GROUP LIMITED

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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
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STRATEGY vs TACTICS: A DEFINITION

Survive

Thrive

Die

Fast

Die

Slowly

Different and better every day!

Effectiveness

Doing Things Right

1. TactiC: Doing The Right Things

2. TactiC: Doing Things Right
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.

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
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
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**
In this case study, we explore the implementation and design of a Financial Information System (FIS) at Rennies Group Limited. The objectives include:

- **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
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• 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
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)
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
First stage rolled out in January 95 was Financial General Ledger

Consolidation model in progress

Other items to follow in due course
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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

Input  Decision  Output

Learning Organization
THE DECISION SUPPORT SYSTEM
INFORMATION PYRAMID

OPERATIONAL SYSTEMS

INTEGRATION

CONSOLIDATION

PRESENTATION & ANALYSIS

DECISION MAKING

Requires Management Input

BUT
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
BLOGS 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

- Forex
- Travel
- Freight Handling
- Trading
- Company Administration

Chart of Accounts / Income Statement & Balance Sheet, etc

Division/Company / Region / Branch

(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
SLICING AND DICING THE FINANCIAL INFORMATION

Zoom In & Drill Down

Cross Link
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.
ORGANISATION SPECIFIC LOCATION & FUNCTION INDEPENDENT

LOCATION SPECIFIC & FUNCTION INDEPENDENT

COMPANIES / PHYSICAL LOCATIONS / STRUCTURES eg,
CAPE TOWN OFFICE (CO. 1)
SPRINGS FACTORY (CO. 2)
SPRINGS WAREHOUSE (CO. 2)
ETC.
CORE BUSINESS UNITS

COMPANIES / PHYSICAL LOCATIONS / STRUCTURES eg,

CAPE TOWN OFFICE (CO. 1)
SPRINGS FACTORY (CO. 2)
SPRINGS WAREHOUSE (CO. 2)
ETC.
| COMPANIES / PHYSICAL LOCATIONS / STRUCTURES eg, |
| CAPE TOWN OFFICE (CO. 1) |
| SPRINGS FACTORY (CO. 2) |
| SPRINGS WAREHOUSE (CO. 2) |
| ETC. |

<table>
<thead>
<tr>
<th>SUPPORT AND ADMINISTRATIVE UNITS</th>
</tr>
</thead>
</table>

| FUNCTION / DEPARTMENT eg, |
| MANAGEMENT |
| FINANCE |
| PRODUCTION |
| ETC. |
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
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
ABSTRACT THINKING / MANAGEMENT

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

BASIC CONCEPTS
PRESENTATION SKILLS

5 TO 10 SLICES OPTIMUM
# NEW GL DESIGN eg RENNIES TRAVEL

<table>
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<th>COMMISSIONS</th>
<th>FEES</th>
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<td>Cargo handling</td>
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<th>AGENCY</th>
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<td>Other</td>
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<tr>
<td>Freight Margin</td>
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</tbody>
</table>

*BOLD TEXT APPLIES TO RENNIES TRAVEL*
NEW GL DESIGN eg RENFREIGHT

- 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 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
END RESULT

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

IMPORT ENTITY IN HYPERION

MULTIPLE ADJUSTMENT ENTITIES, eg EVA, Management Accounts, Tax, etc

View 1
View 2
View 3

GL Co 1
GL Co 2
GL Co 3

Hyperion Divisional Site

Companies
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
Upload data used as building blocks, groups of accounts:

- Income statement
- Balance sheet
- Flow accounts
- Balance and control
- Non-Financial and Derived, including EVA
• 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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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 have 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
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
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
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.
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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
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- 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

We wish to acknowledge the contributions and inputs of all our colleagues, clients, associates, staff and families without whom the work on which these ideas are based would not have been possible and the permission of Rennies Group Management to produce this paper.

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