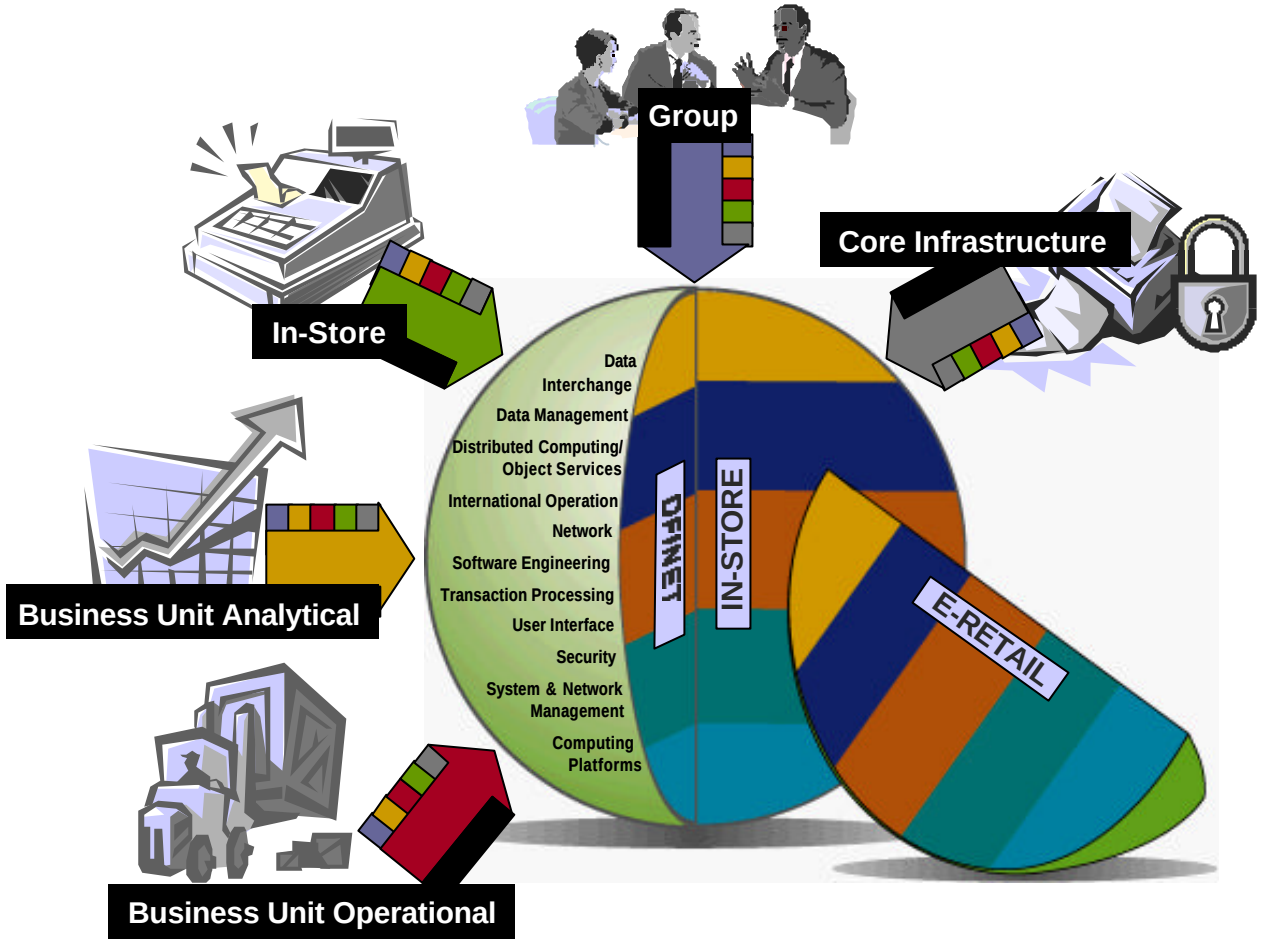
THE Open GROUP

CFOS

Geoff McClelland

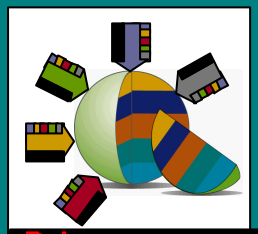
Director

Centre For Open Systems



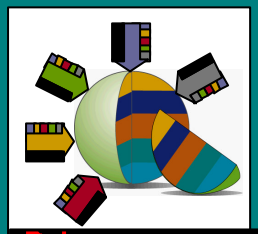
TOGAF in practice

gmcclelland@cfos.com.au



The IT Challenge

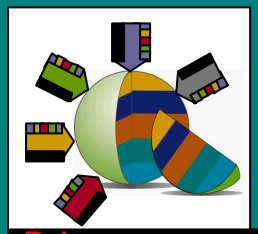
- **The IT environment must support distributed information systems of unlimited size and complexity.**
- **This requires an IT infrastructure that provides transparent communication, security, scaling, software portability, manageability, and international operation.**
- **IT users cannot continually invest in new technologies to keep up with infrastructure requirements: they require stable, open systems that can easily grow and evolve.**
- **No single company can or should control the IT infrastructure.**



Dairy Farm TECHNICAL ARCHITECTURE

Today's Corporate IT Problems

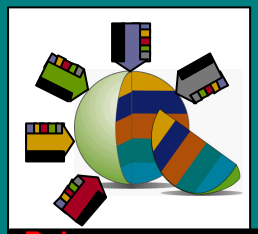
- **Growing use of IT - sheer scale of the problem.**
- **Growing complexity of IT infrastructure.**
- **Growing demands from business units for IT that provides competitive business advantage.**
- **Rationalizing existing technologies.**
- **Identifying solutions to link technologies together.**
- **Protecting investment in heritage technology.**
- **Developing a migration path to tomorrow's technology.**



Disparate Architectures - a challenge for management

TECHNICAL ARCHITECTURE

- **Stand alone projects which empowered the business but which now represent islands of functionality which must be integrated**
- **Customer Relationship Management (CRM) applications and Data Warehouses requiring access to multiple systems in near real time**
- **Intranet, extranet and Internet oriented eCommerce applications requiring tight integration with your existing heritage systems**
- **Widely varying views on the way forward; from your information systems staff, your IT vendors, your consultants and your business units.**



Dairy Farm TECHNICAL ARCHITECTURE

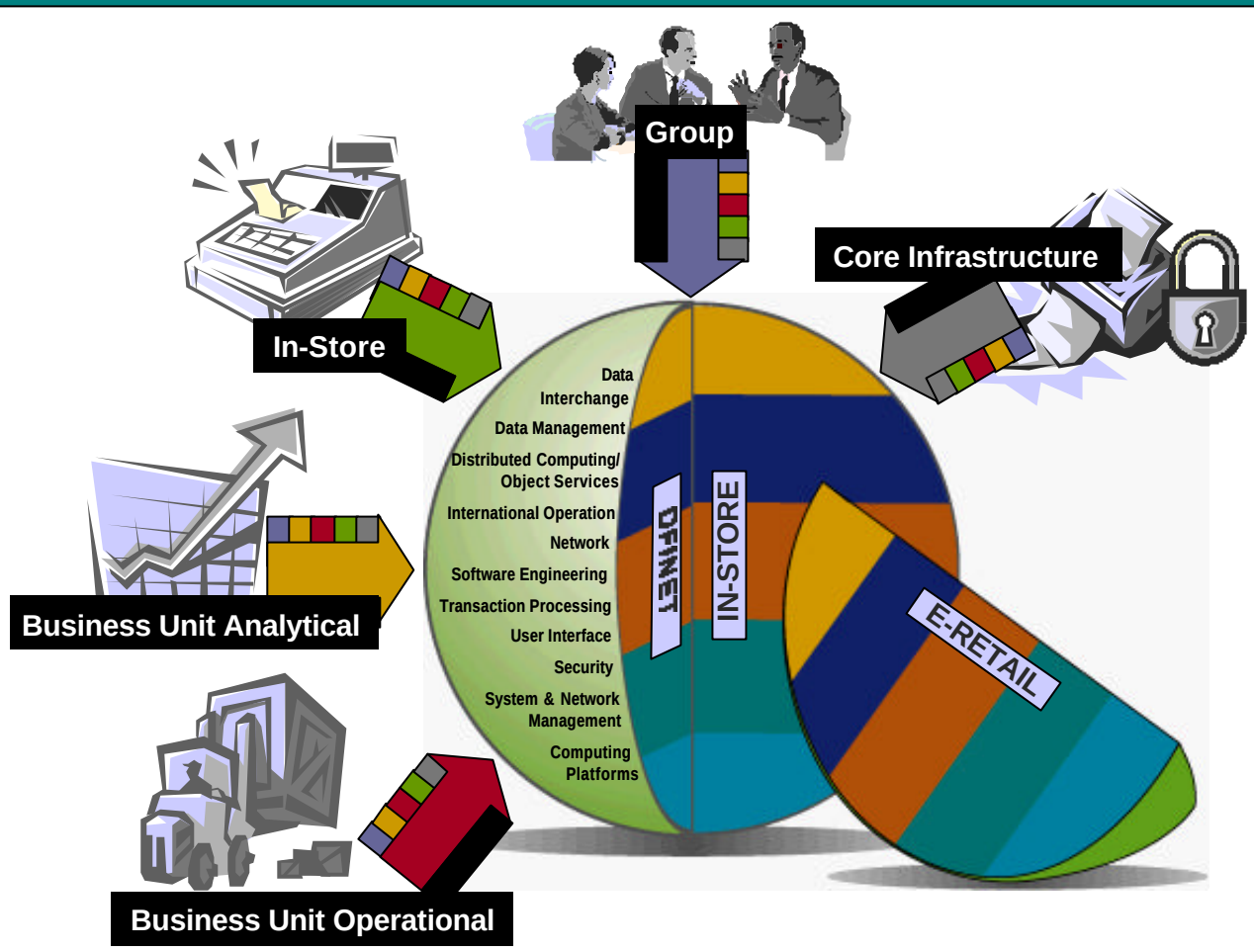
TOGAF - an architectural framework not an architecture

- **Presents a set of:**
  - **services, standards, design concepts, components and**
  - **configurations to guide the development of specific architectures**
- **Correct use of TOGAF should lead to:**
  - **the use of common principles, assumptions and terminology within your teams and across your systems architectures**
  - **the development of information systems with better integration and interoperability especially with respect to whole of enterprise issues such as directories, security and systems management**

Dairy Farm

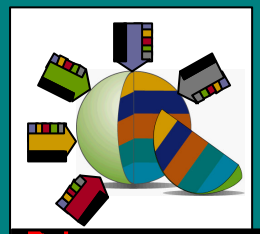
Nick Price
Group Technical Architect

Geoff McClelland
Director
Centre For Open Systems



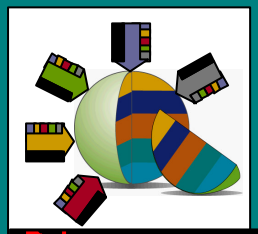
DFG Technical Architecture

Designing for the future



Agenda

- **DFG—Introduction to the Company**
- **Why develop an Architecture?**
- **DFG TA Development Process**
- **DFG TA Structure**
- **What has changed in the last 3 years?**



TECHNICAL ARCHITECTURE

Dairy Farm—Mission

To be the Leading Food and Drugstore Retailer in the Asia Pacific Region in terms of sales and long-term shareholder value creation.

guardian

Cold Storage
The fresh food people

Wellcome 惠康

FRANKLINS BigFresh

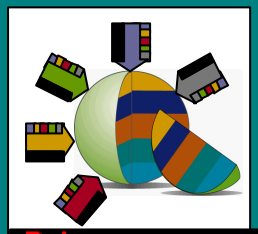
woolworths
The real fresh food people.

mannings

7 ELEVEN

FRANKLINS No Frills

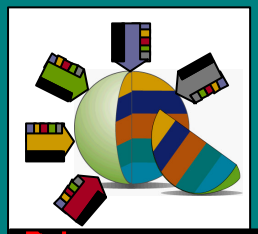
HERO



TECHNICAL ARCHITECTURE

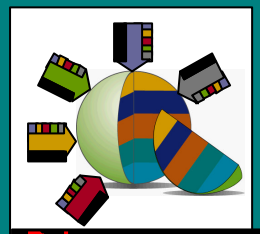
The Dairy Farm Group (as at 31 Dec 2000)

- **Operated 2,200 outlets, principally supermarkets, hypermarkets, convenience stores and drugstores**
- **Employed some 79,000 people in nine territories and had sales of US$6.6 billion in 2000**
- **Operates under well-known local brands, including:**
  - **Supermarkets - Wellcome in Hong Kong and Taiwan, Franklins in Australia, Woolworths in New Zealand, Cold Storage in Singapore, Giant in Malaysia, Hero in Indonesia, and Foodworld in India;**
  - **Hypermarkets - Giant in Malaysia and Singapore**
  - **Drugstores - Mannings in Hong Kong, Guardian in Singapore, Malaysia and Indonesia, and Health and Glow in India; and**
  - **Convenience stores - 7-Eleven in Hong Kong, Mainland China and Singapore.**



Dairy Farm—the company

- **New CEO (Ronald J. Floto, ex Kmart) appointed June 1997**
- **Significant changes took place**
  - **Moved from a federation of companies to a Group**
  - **Created centres of excellence to leverage competencies across the group**



TECHNICAL ARCHITECTURE

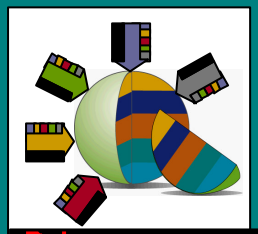
DFI Business Evolution

OLD

- **De-centralised**
- **Federation**
- **Retailer push**
- **Large inventories**
- **Manual processes**
- **Buying / Selling**
- **Mass consumers**

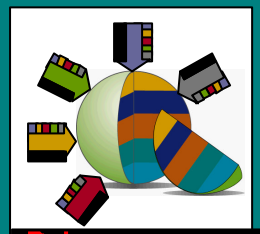
NEW

- **Group**
- **Cohesion**
- **Customer pull**
- **Just in time**
- **Automatic processes**
- **Category Management**
- **Individual customers**



Architecture development rationale

- **Competition from US/European retailers—requires rapid response**
- **Historic under-investment in IT. Now a one time chance to ‘get it right’**
- **Facilitate migration from Federation to Group (i.e. Regional Hubs, Central buying etc.)**
- **Business moving so fast, BU IT can’t catch up**
- **Need to minimise large $$$ risk**



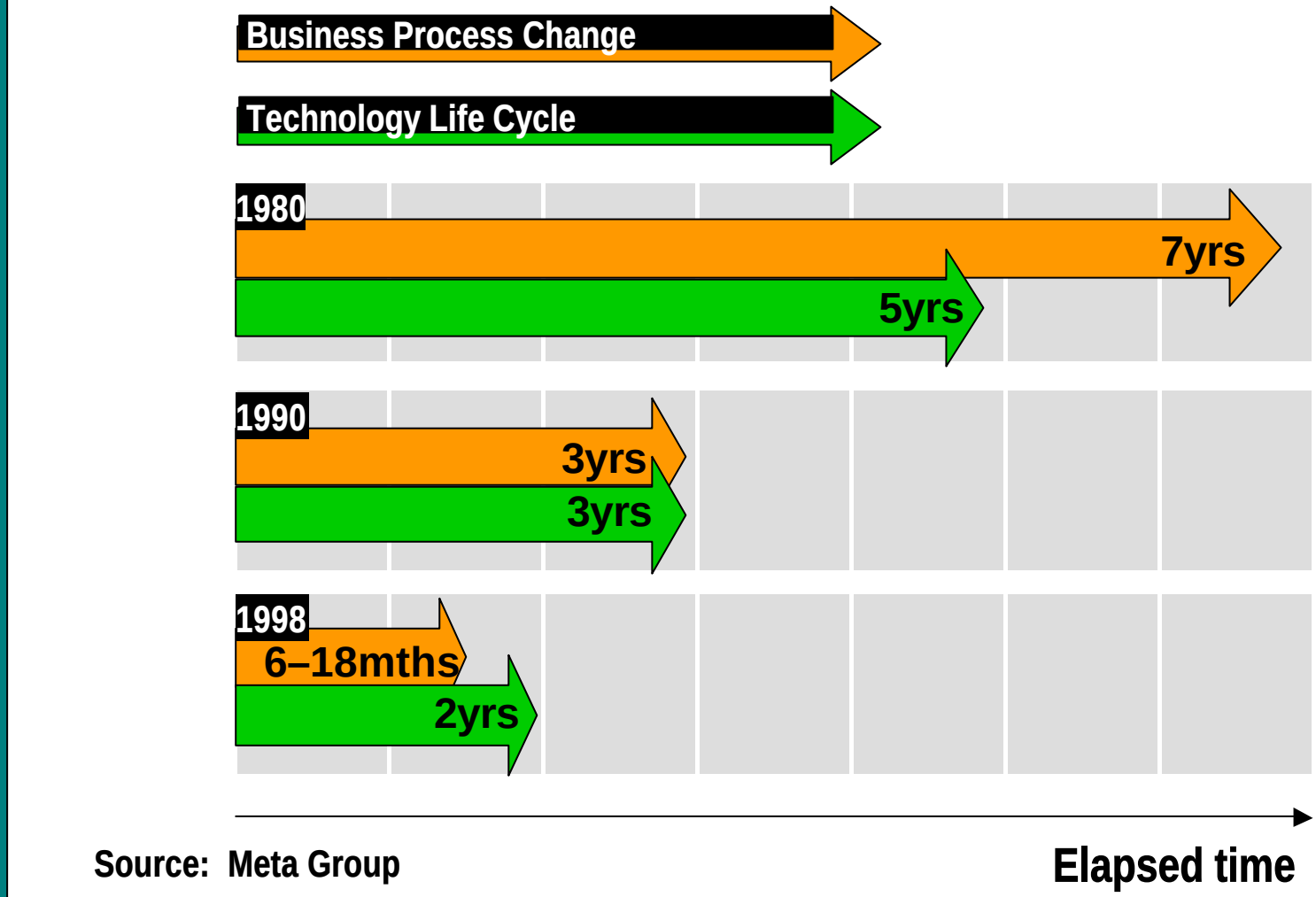
TECHNICAL ARCHITECTURE

Agenda

- DFG—Introduction to the Company
- **Why develop an Architecture?**
- DFG TA Development Process
- DFG TA Structure

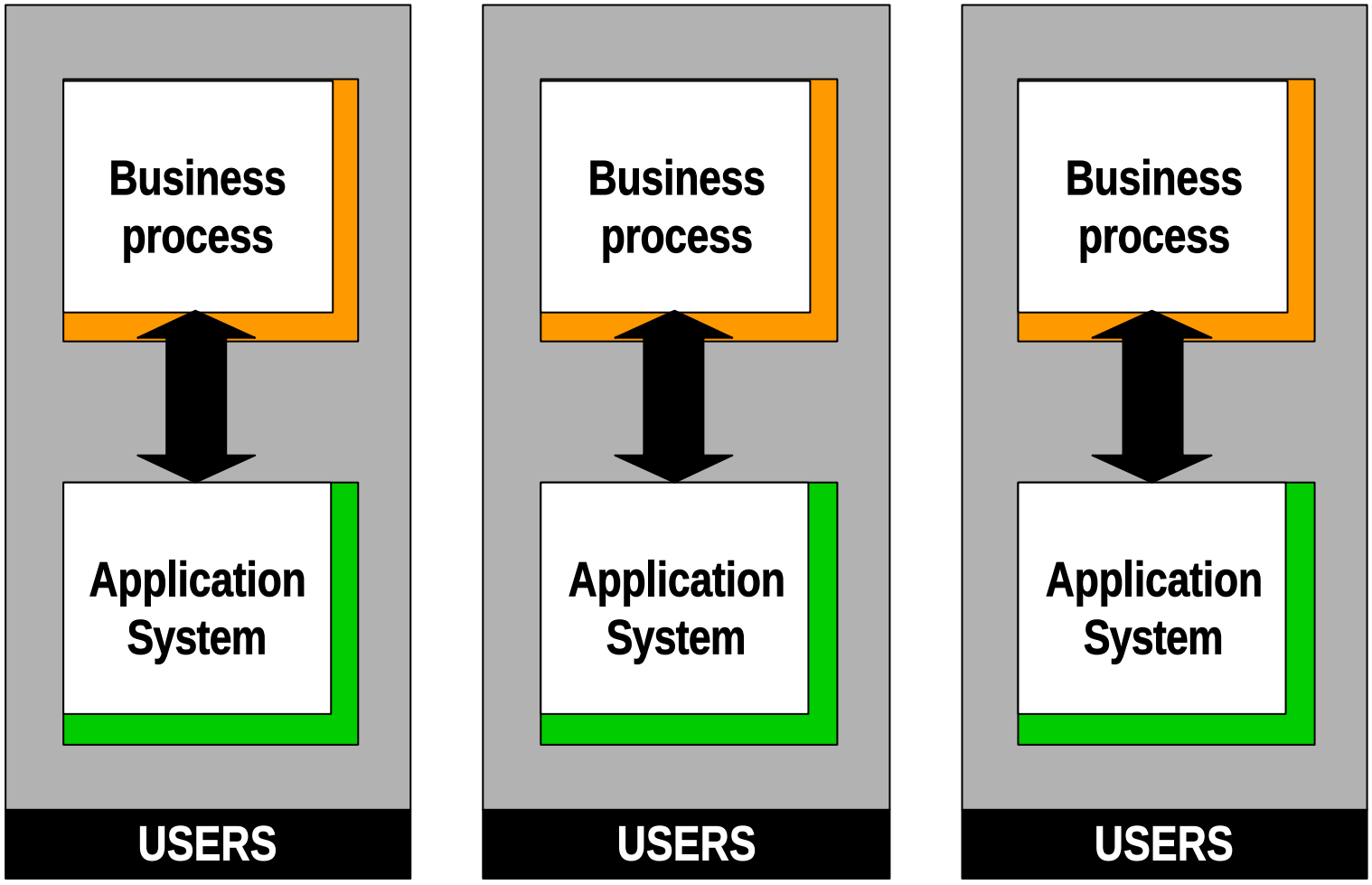
Technology/Business Cycle Times

TECHNICAL ARCHITECTURE



Source: Meta Group

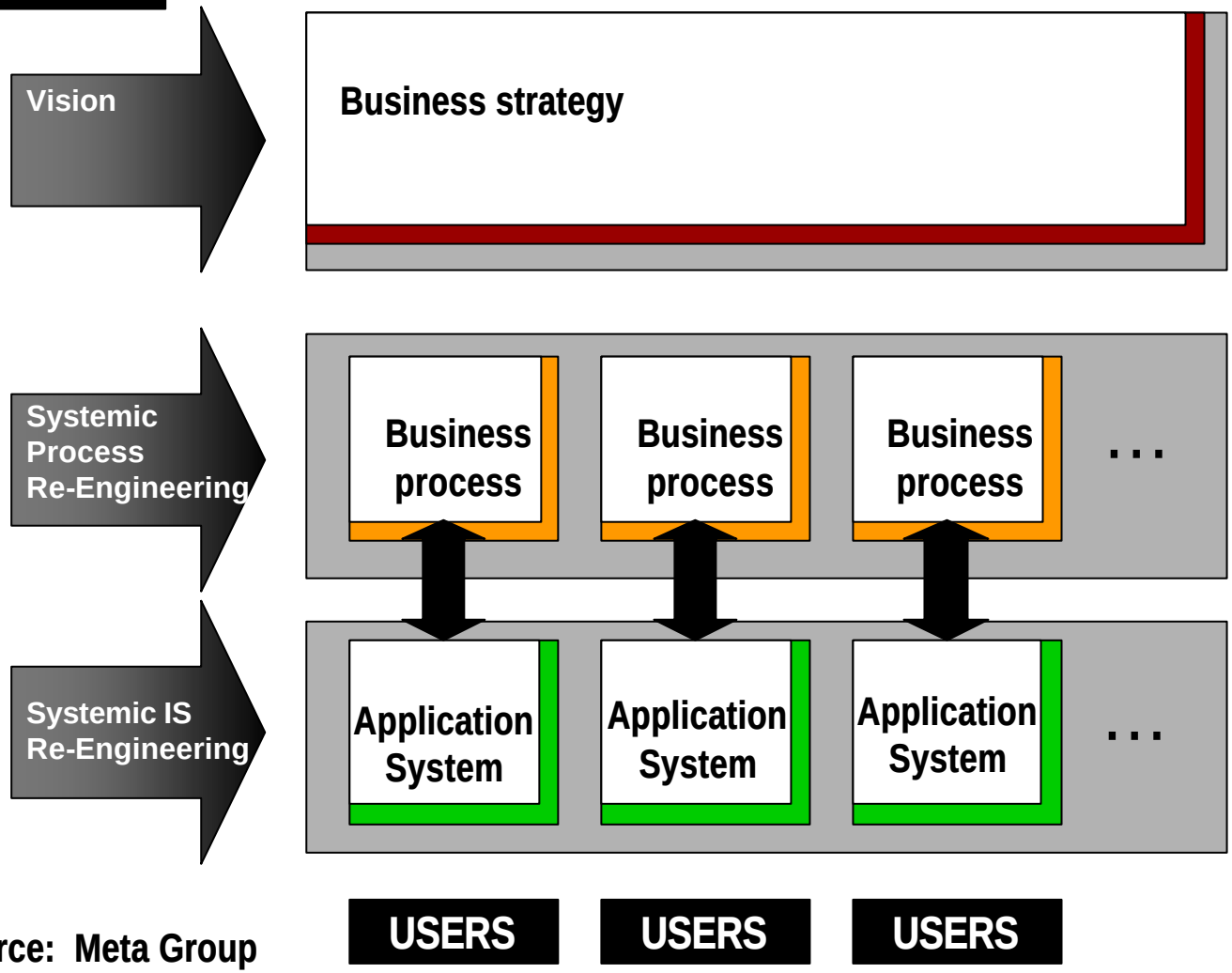
Vertical Business Processes



Source: Meta Group

Value Chains

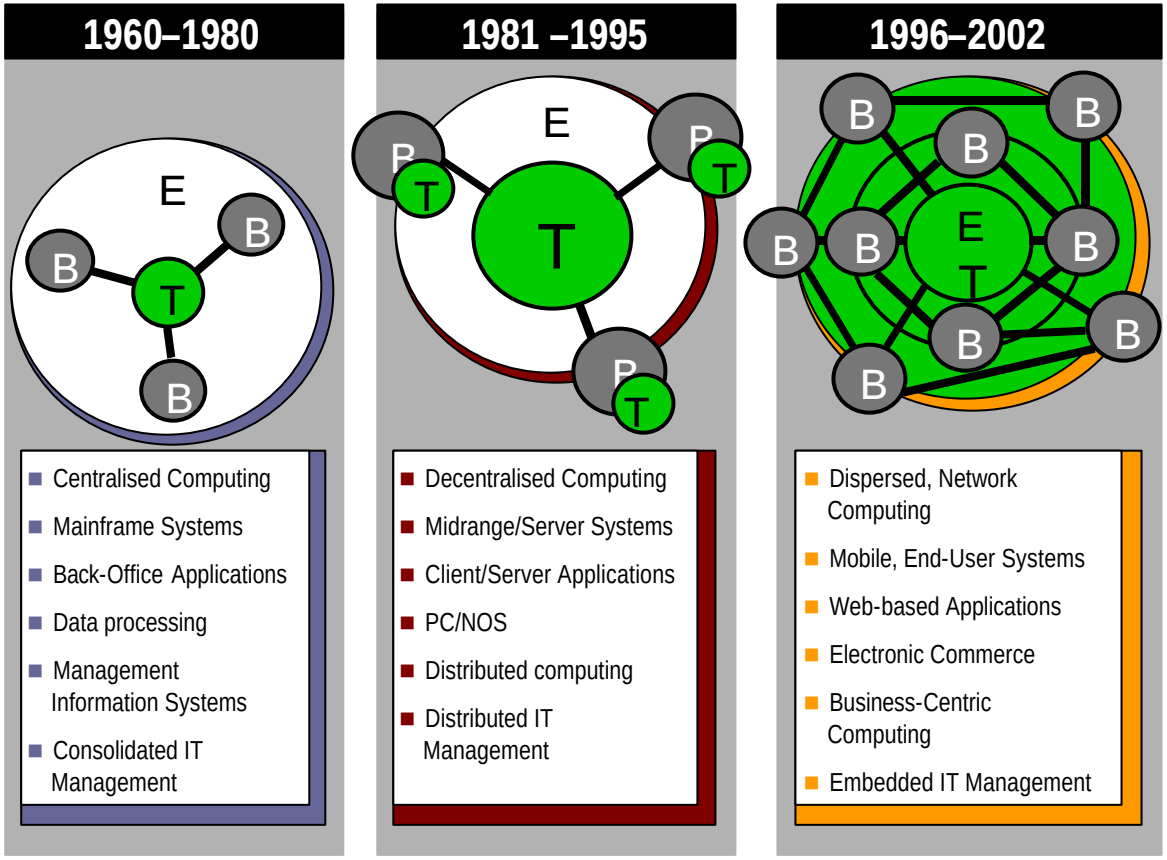
TECHNICAL ARCHITECTURE



Source: Meta Group

The Changing Nature of IT

TECHNICAL ARCHITECTURE



E = **Enterprise Domain**

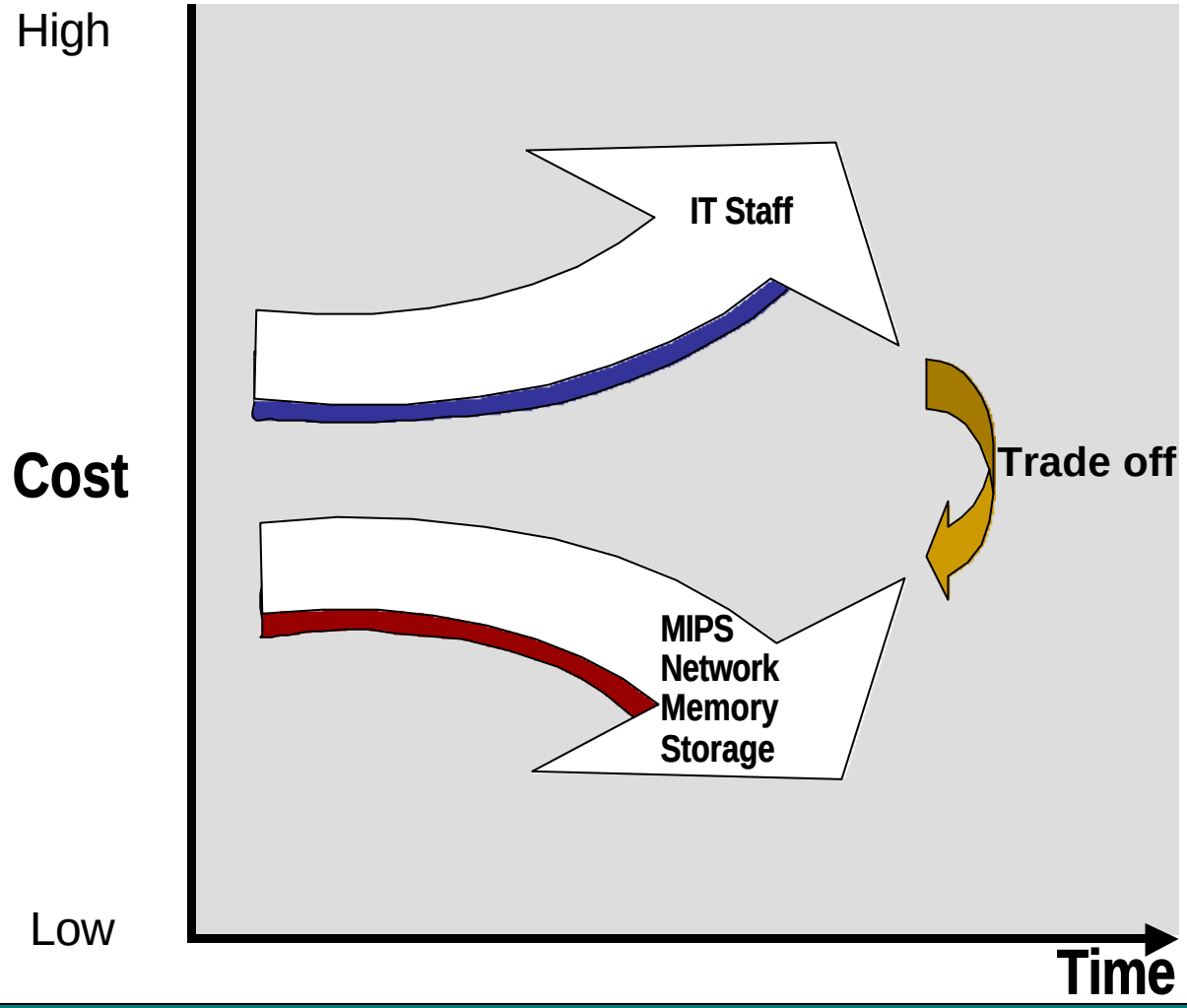
T = **Technology Domain**

B = **Business Domain (Functions/BU)**

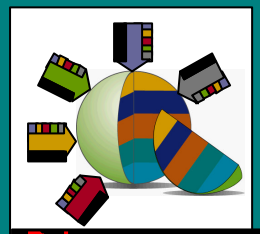
Source: GartnerGroup

IT Staff Negative Price Performance

TECHNICAL ARCHITECTURE



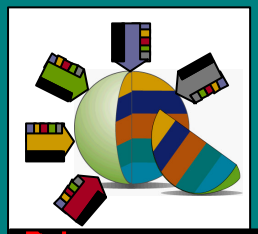
Source: Meta Group



TECHNICAL ARCHITECTURE

Agenda

- DFG—Introduction to the Company
- Why develop an Architecture?
- **DFG TA Development Process**
- DFG TA Structure

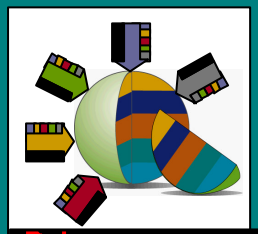


TECHNICAL ARCHITECTURE

Technical Architecture Program Group

Charter

To conceive, design, populate, publish and continually improve a Technical Architecture for the Dairy Farm Group



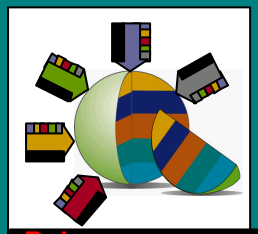
TECHNICAL ARCHITECTURE

Technical Architecture Program Group

- **DFG Technical Architects**
- **Industry Consortia Consultants**
- **DFG Vendors**

Membership

Mike Aikins
Shawn Davies
Paul Hickey
Ronald Fons
Paul King
Frank May
Geoff McClelland
Nick Price
Tim Redhead



Dairy Farm TECHNICAL ARCHITECTURE

DFG Technology Planning Process

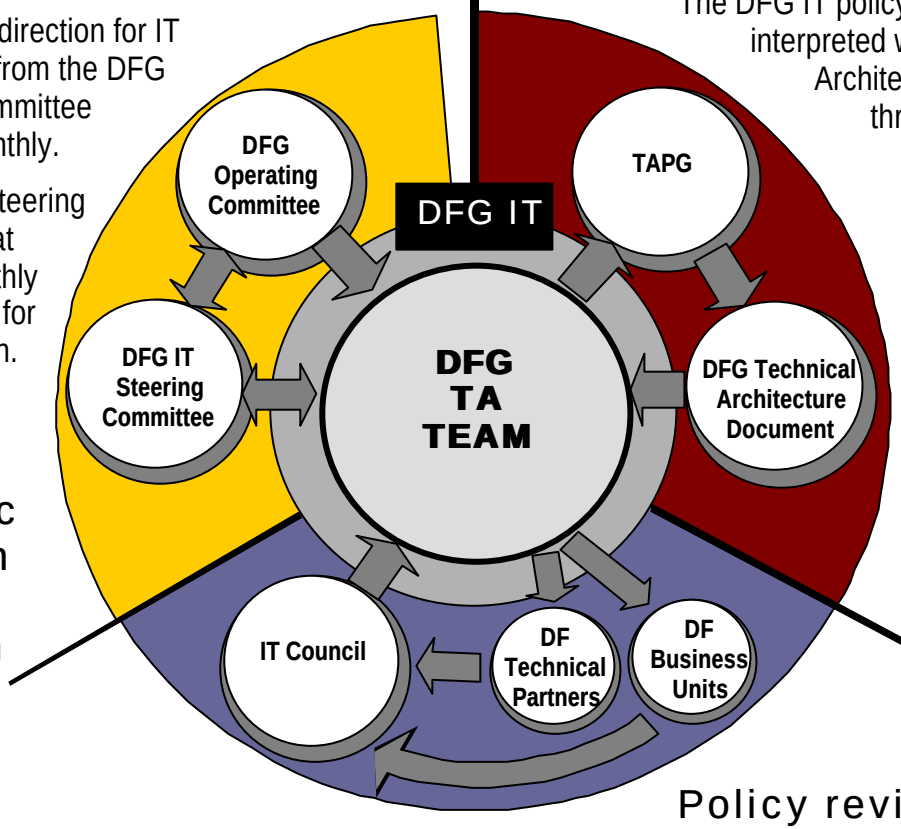
1 Policy formation

The Strategic direction for IT policy comes from the DFG Operating Committee who meet monthly.

The DGF IT Steering Committee that meets bi-monthly is responsible for policy adoption.

The DFG IT policy is captured and interpreted within the Technical Architecture by the TAPG through a formal bi-monthly review of the document.

TAPG updates and publishes the Technical Architecture Document every six months.



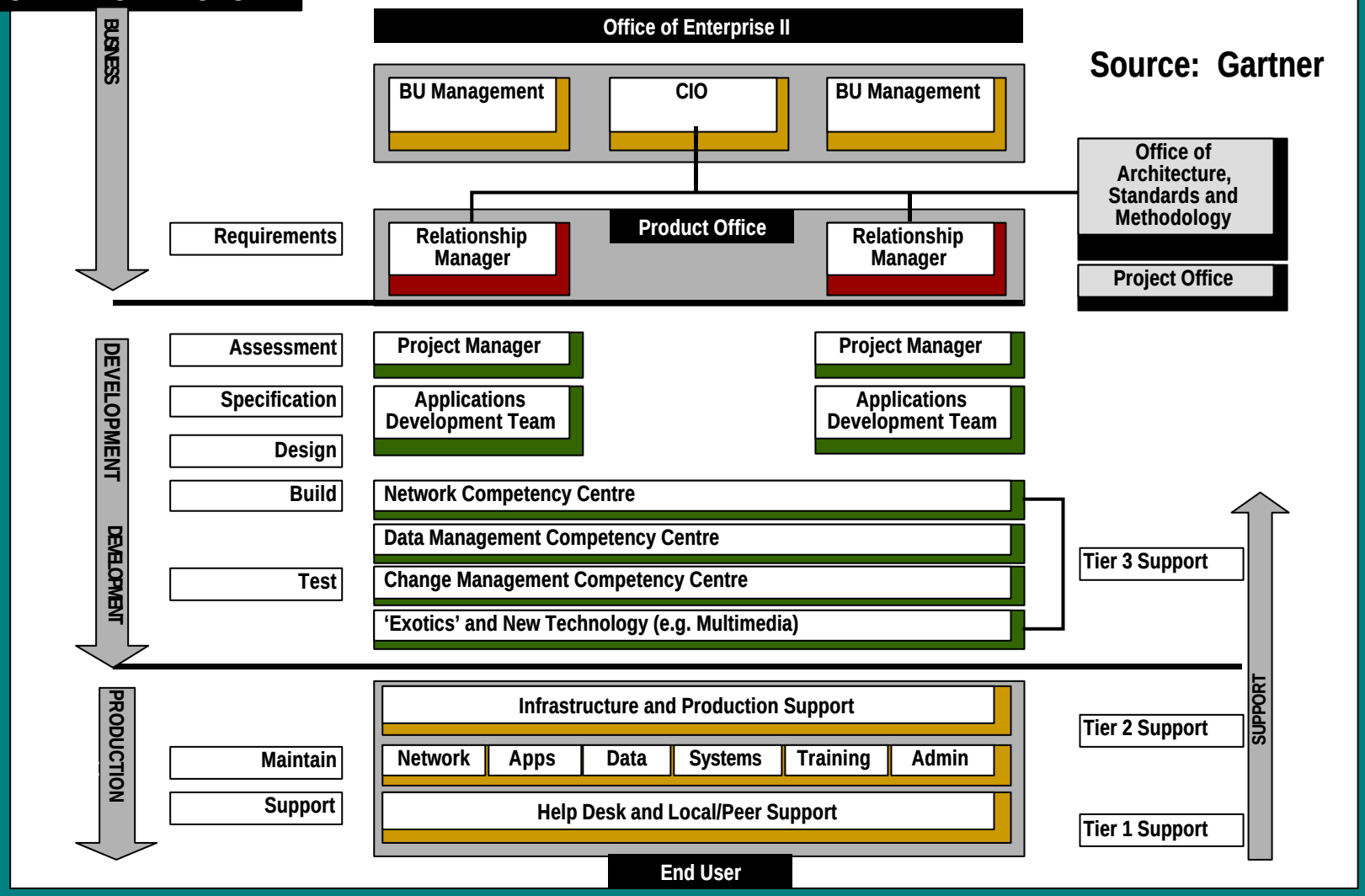
3 Strategic direction & Policy adoption

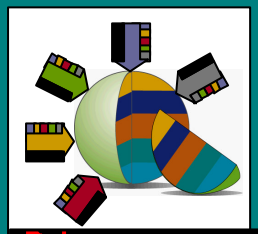
2 Policy review

The DFG IT policy is reviewed by the DFG Business Units, DFG's Technical Partners and by the IT Council

IM Governance

TECHNICAL ARCHITECTURE

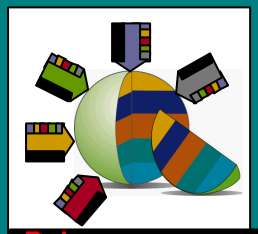




TECHNICAL ARCHITECTURE

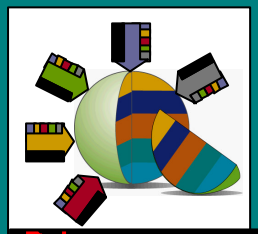
DFG Architectural Principles

- **Customer Focus**
- **Infrastructure Investment**
- **Total Cost of Ownership**
- **Open Vendor Neutrality**
- **Innovation**
- **Single Systems Architecture**
- **Endorsed Architectures**
- **Reuse then Buy rather than Build**
  - **Build for Competitive Advantage,**
  - **Buy for Competitive Parity**
- **Core attributes**



What is the DFG TA?

- A process not a document
- A business led technology plan
- A mechanism to ensure technology convergence (technologies, suppliers, system re-use etc.)



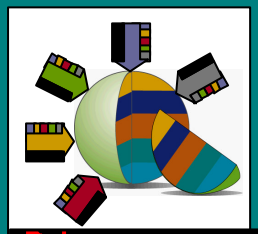
TECHNICAL ARCHITECTURE

Technical Architecture Definition

An expression of IT strategy embodied as a logically consistent set of principles that:

- ***Are derived from business requirements***
- ***guide engineering of IT systems across underlying component architectures***
- ***are understood and supported by senior management and LOB's***
- ***take into account the full context in which the TA will be applied***
- ***enable rapid change in business processes and the applications that enable them***

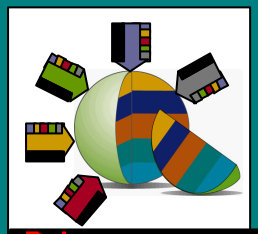
Source: Meta Group



TECHNICAL ARCHITECTURE

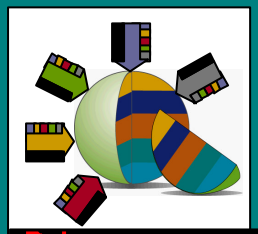
DFG TA Purpose

1. To enable rapid change in DFG business processes and systems by providing a clear definition of:
   - ***DFG Endorsed technology standards***
   - ***Technologies and products for use within DFG***
   - ***Policies that govern the use of technology within DFG***



DFG TA Purpose

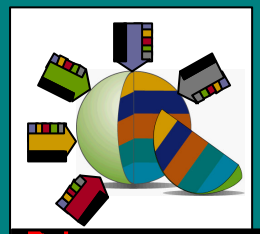
2. To present to planners and strategists within DFG and its technology partners a clear view of DFG technology strategy over a three-year time horizon



DFG TA Challenges

Three challenges to successful implementation:

- ***Must be seen to be continually 'actionable and affordable'***
- ***Senior management must understand how the TA enables the business to achieve its objectives***
- ***Design decisions must be demonstrated to link to DFG business requirements***

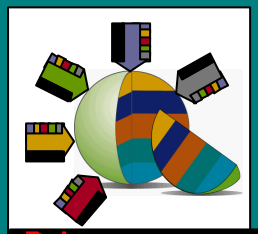


TECHNICAL ARCHITECTURE

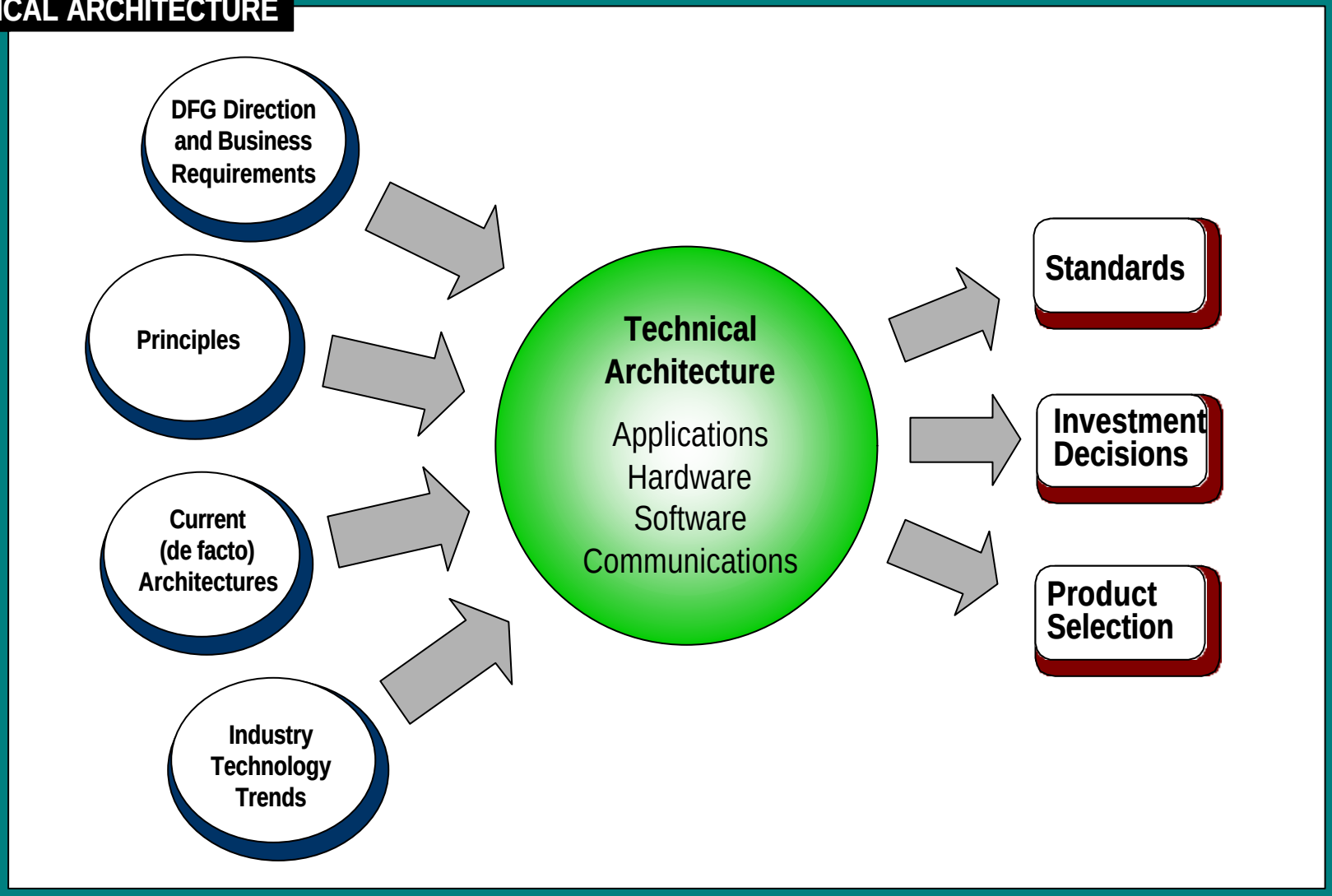
Agenda

- DFG—Introduction to the Company
- Why develop an Architecture?
- DFG TA Development Process
- **DFG TA Structure**

The DFG Technical Architecture Inputs

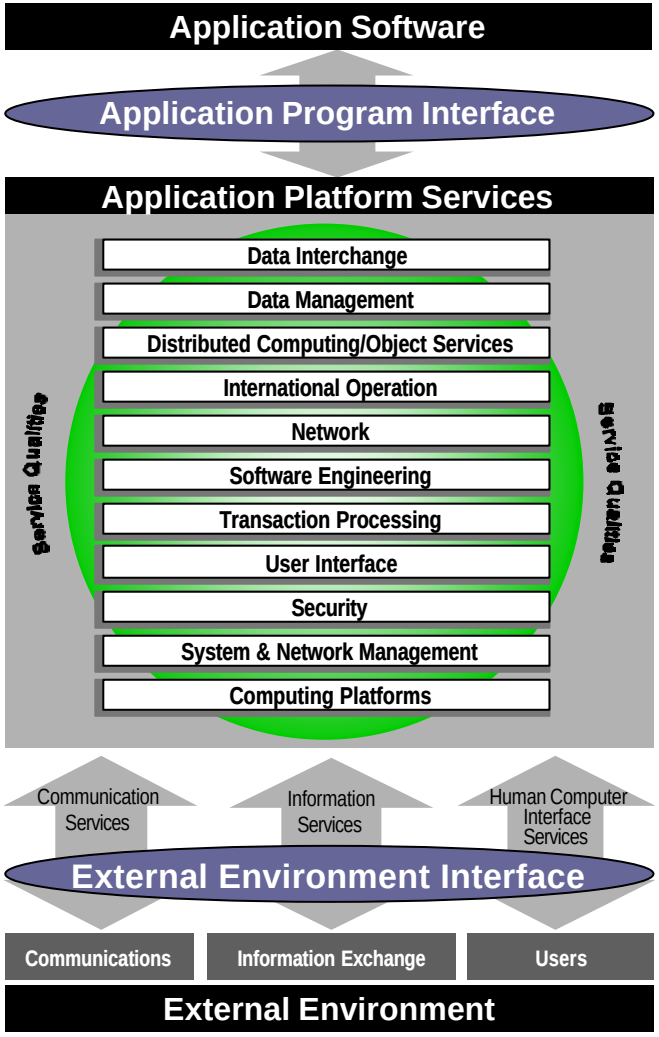


Dairy Farm TECHNICAL ARCHITECTURE



Detailed Technical Reference Model

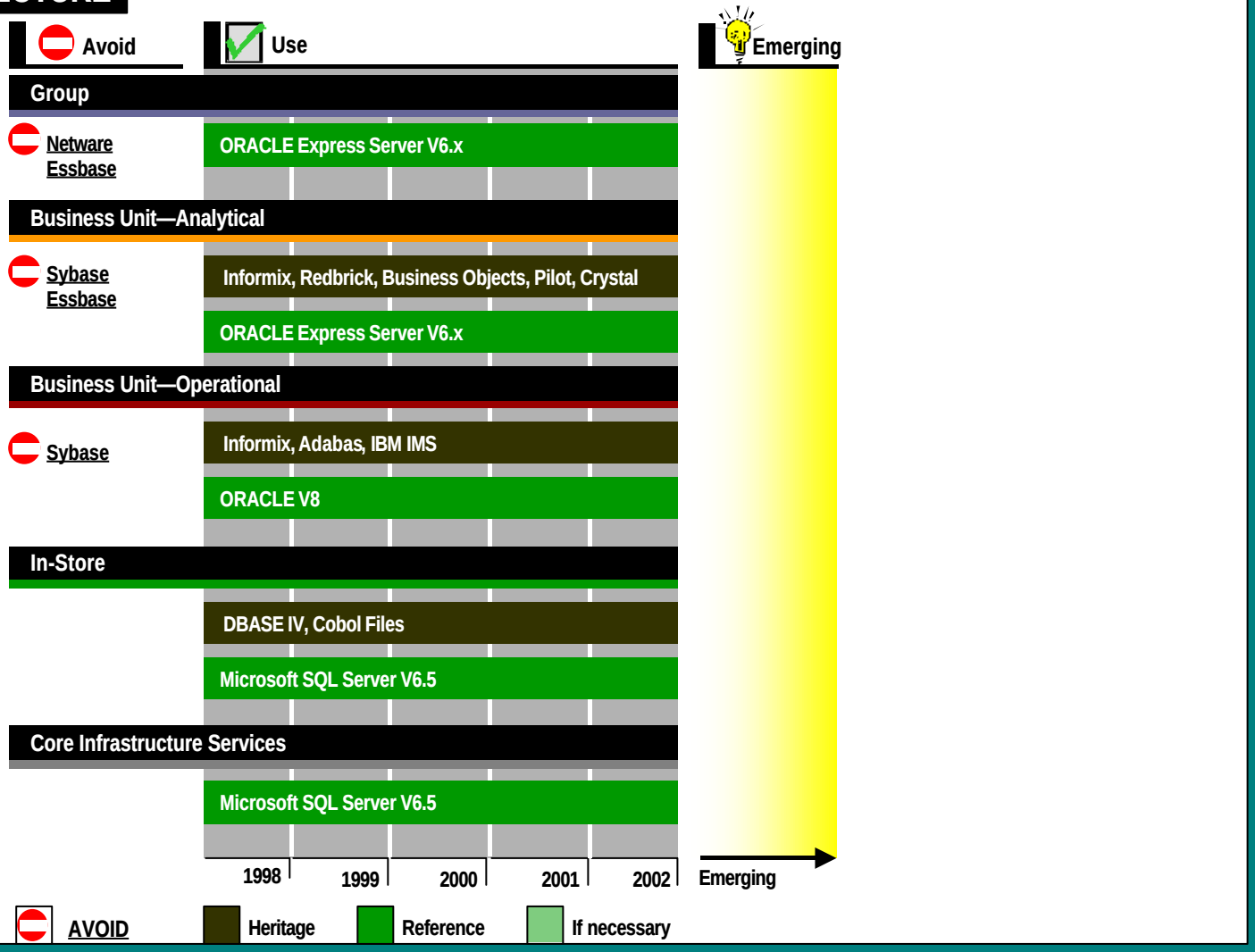
TECHNICAL ARCHITECTURE



Source: The Open Group

Deployment Table - Data Management

TECHNICAL ARCHITECTURE



Business Domain Views

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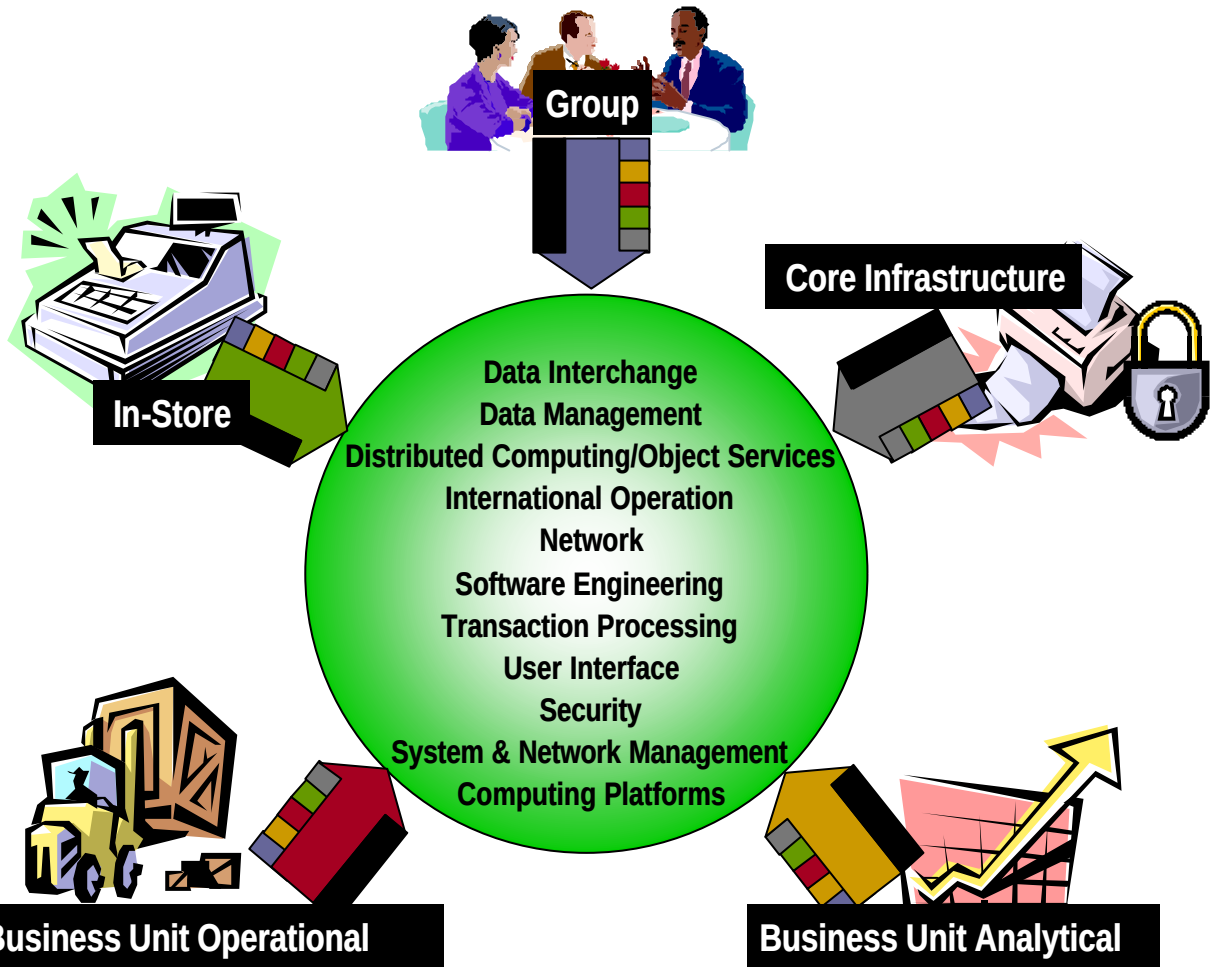

Scope of the DFG TA

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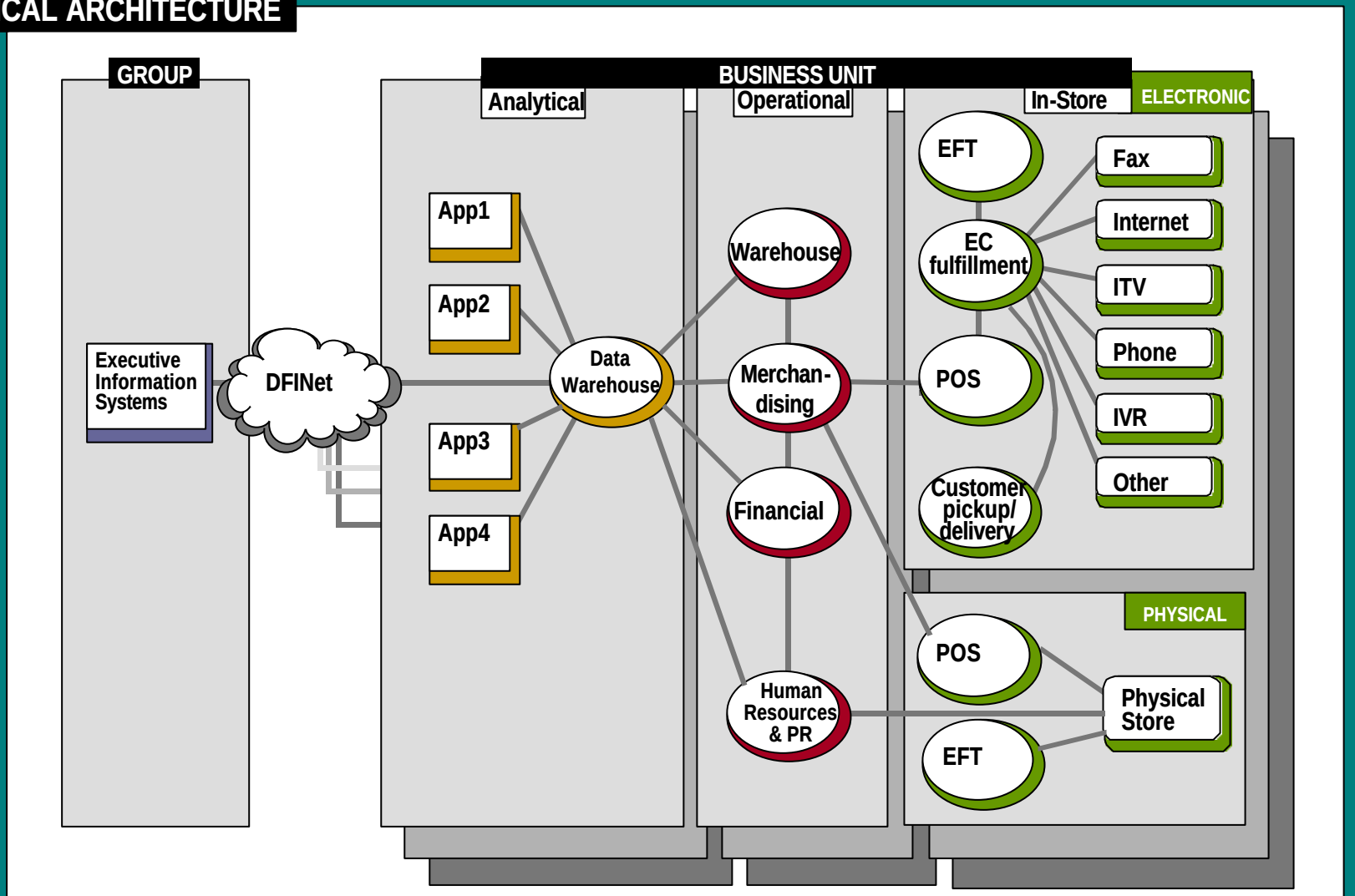
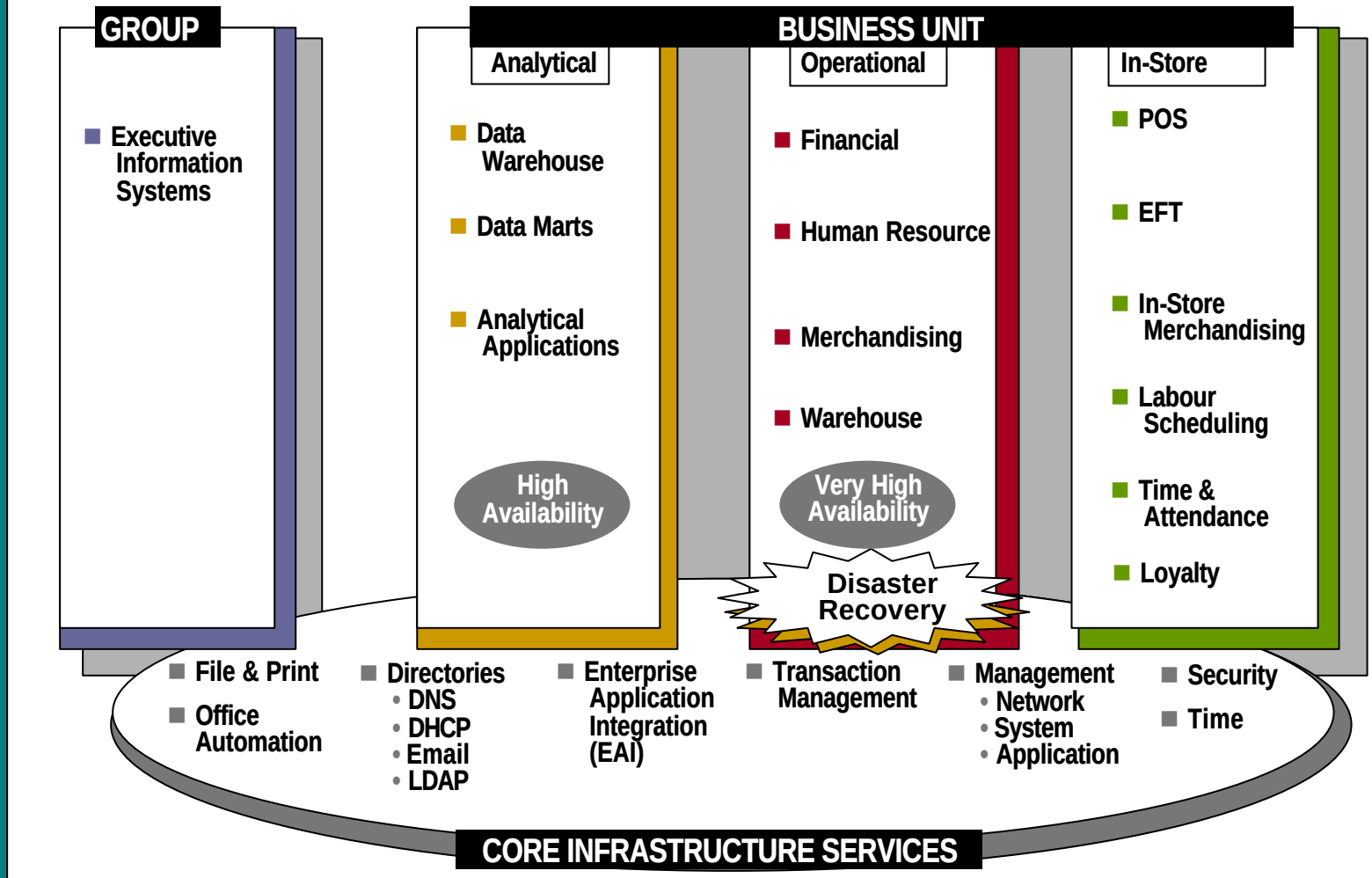


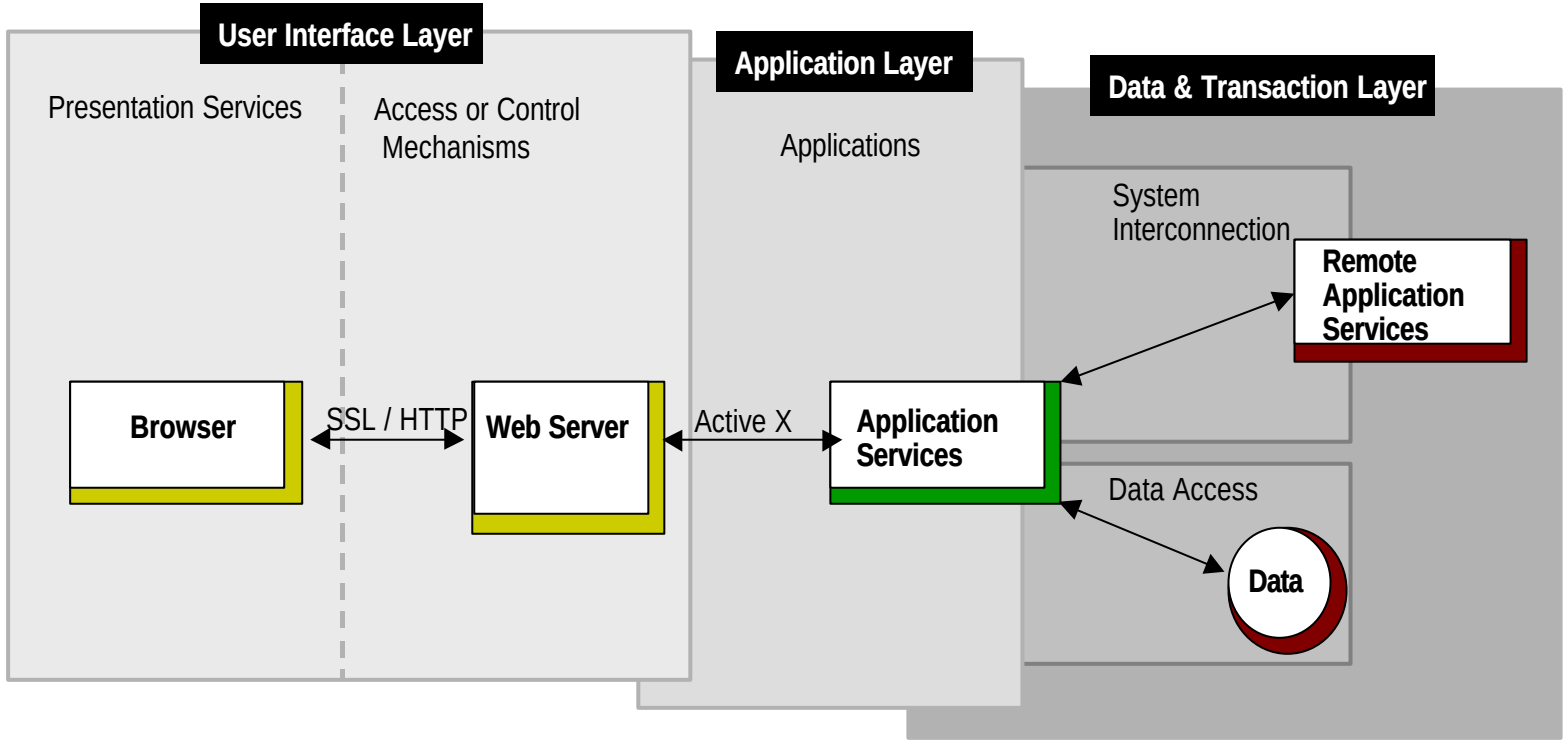
Business Process Domains

TECHNICAL ARCHITECTURE



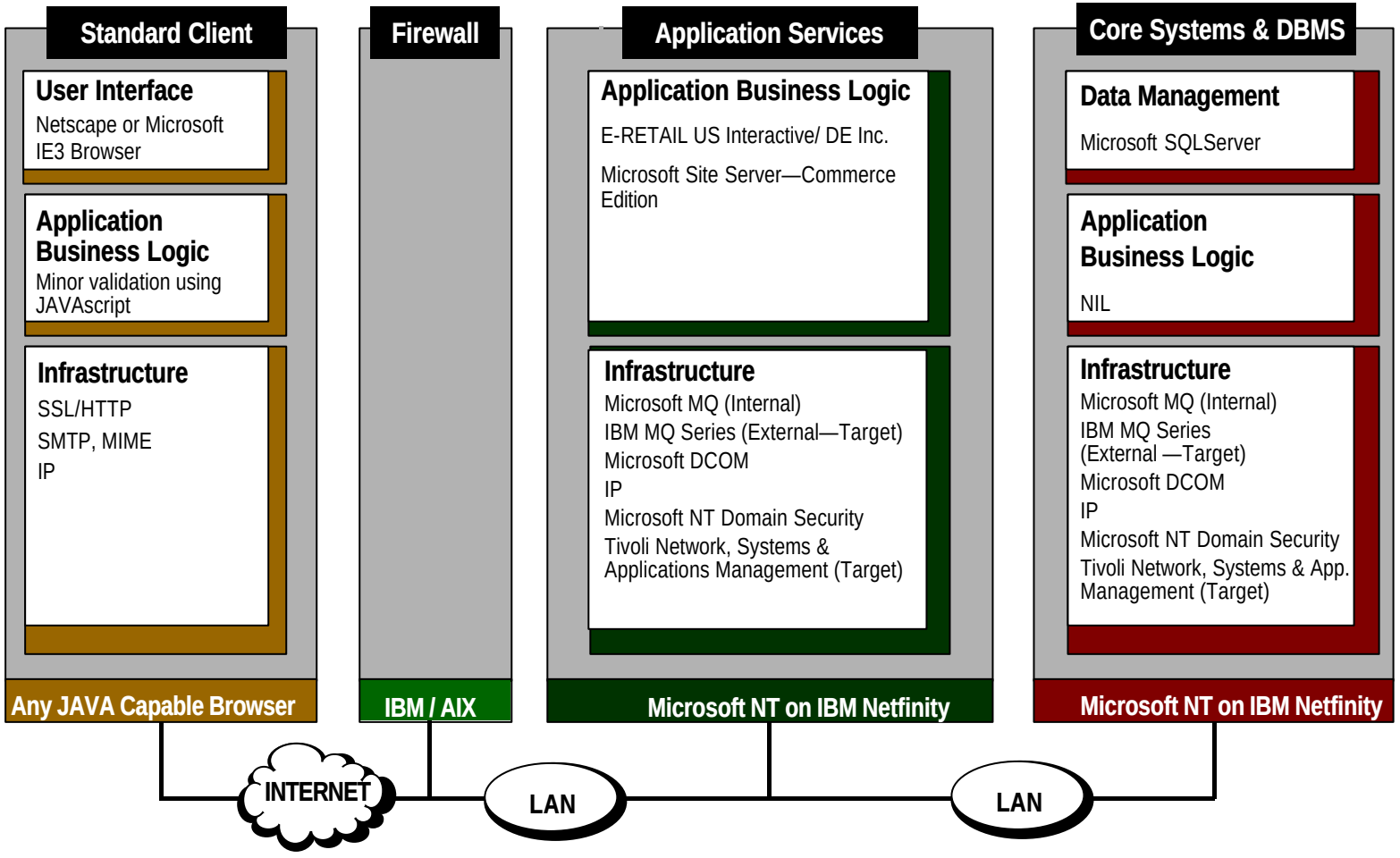
Application Logical Partitioning for E-RETAIL

TECHNICAL ARCHITECTURE



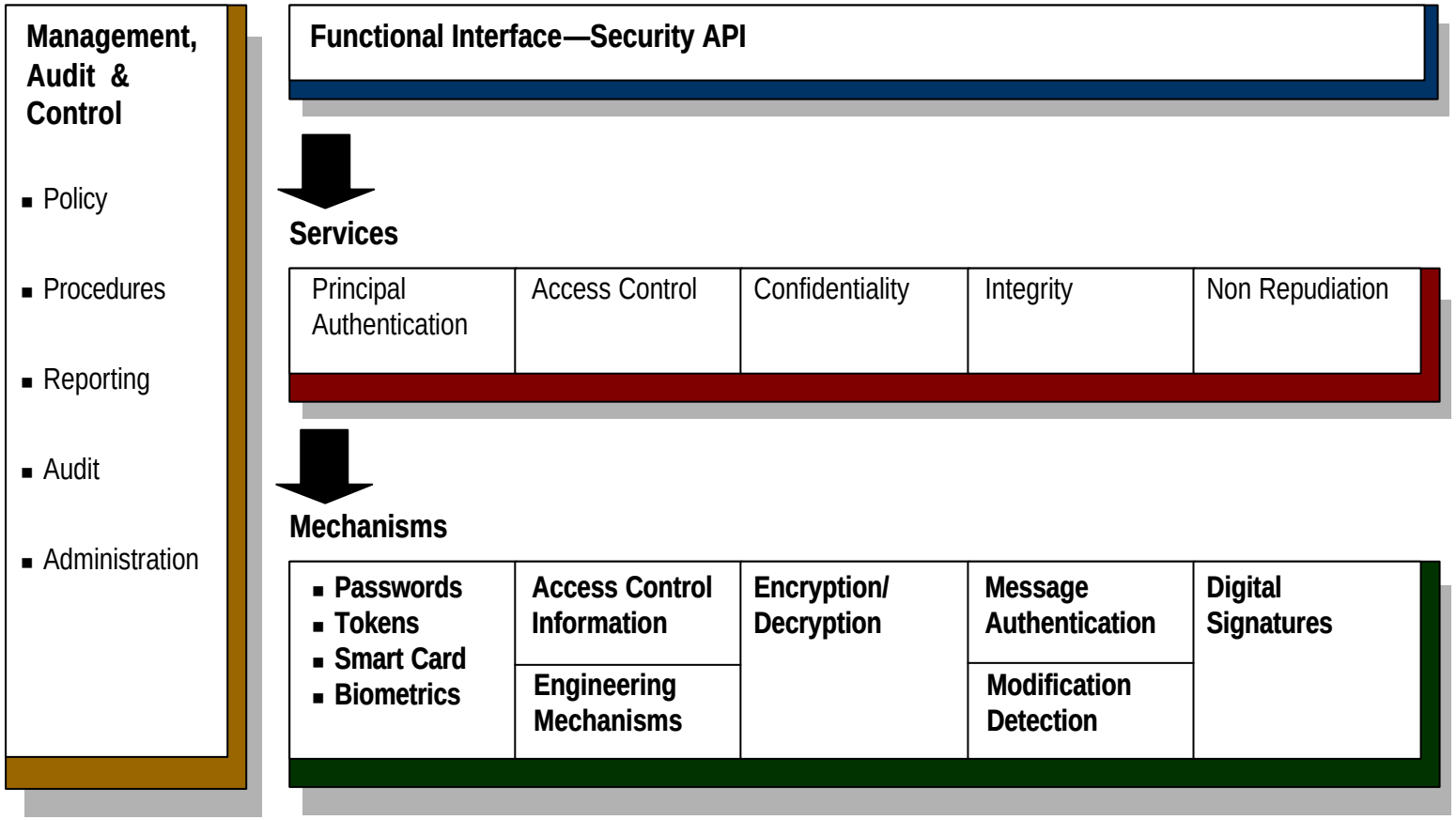
Application Physical Topology for E-RETAIL

TECHNICAL ARCHITECTURE



Service Qualities: Security

TECHNICAL ARCHITECTURE

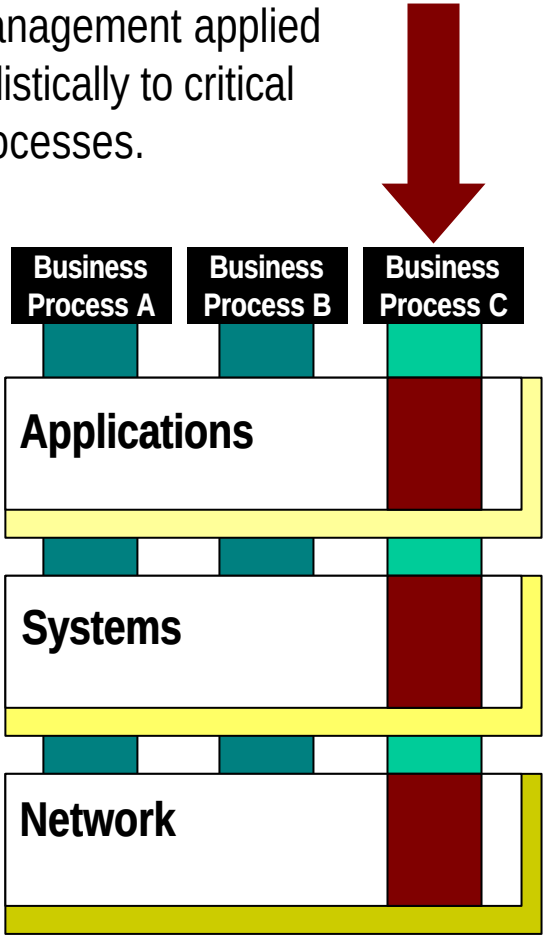


Service Qualities: Systems and Network Management

TECHNICAL ARCHITECTURE

DFG's Business Process Approach

Management applied holistically to critical processes.

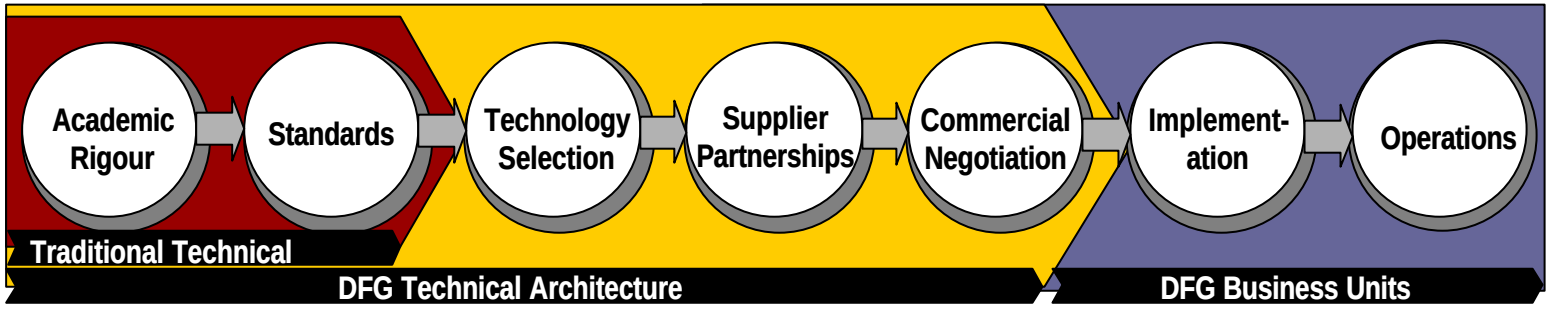


Traditional Approach

Management applied separately to technology domains.

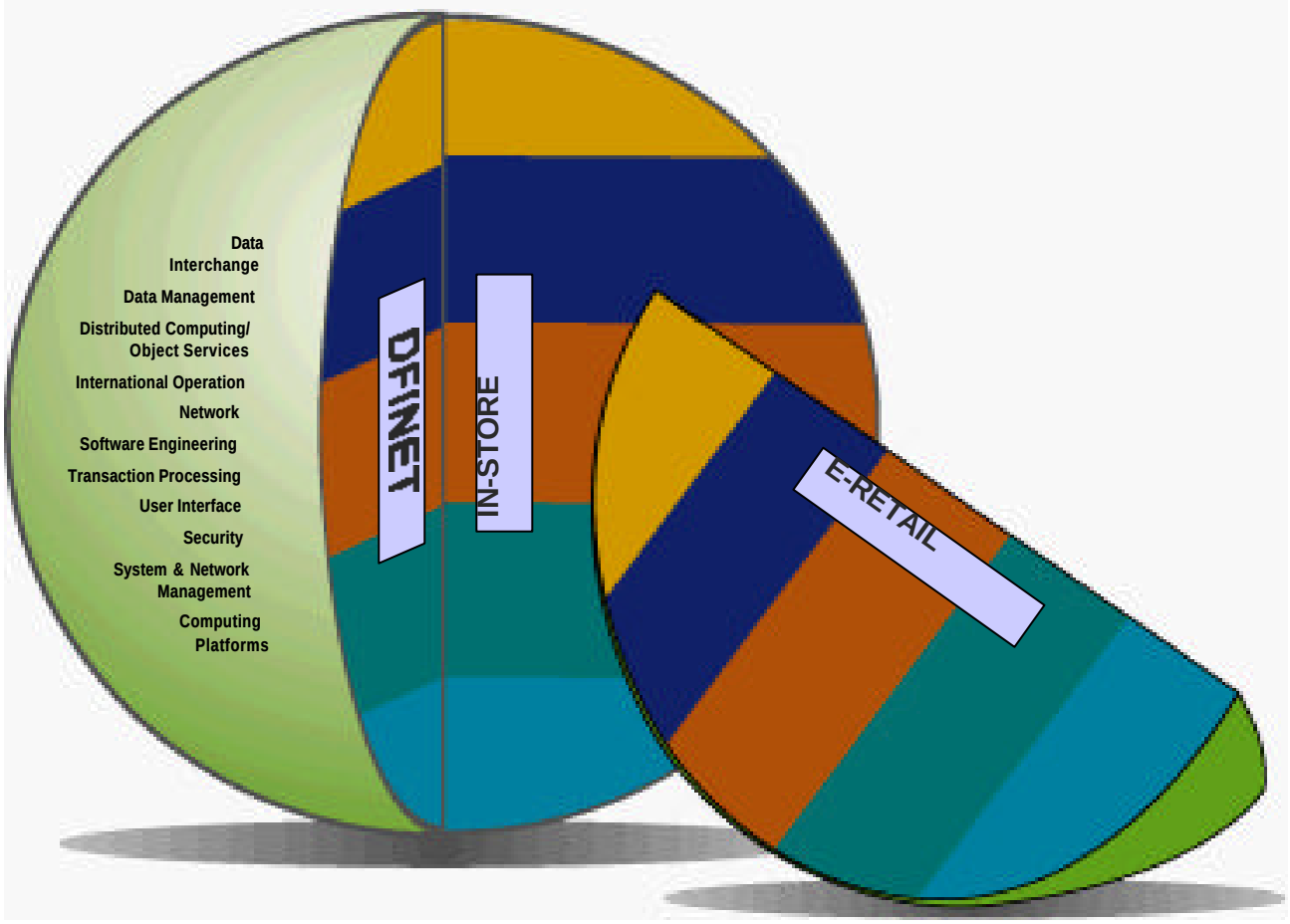
Depth of the Technical Architecture Process

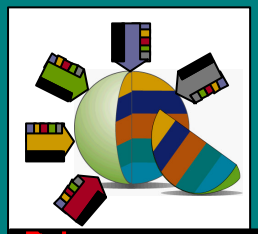
TECHNICAL ARCHITECTURE



Slices

TECHNICAL ARCHITECTURE

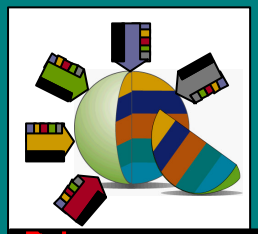




Dairy Farm TECHNICAL ARCHITECTURE

What has changed over the last three years since we started this process?

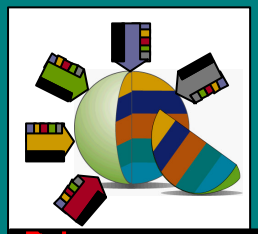
- Many of the IT people and the senior management team
- Business have been brought and sold
- The Asia meltdown has largely run its course
- The effects of the NASDAQ meltdown is still being felt
- Technological change has continued apace
- Supply chains have been reengineered but not as fast as many thought
- Several major planned initiatives couldn't substantiate a business case
- We learnt that in Asia even with good corporate discounts, "one size doesn't fit all"
- We still weren't able to move as fast as we needed to



What has changed? – Cont'd

- To be more responsive to each marketplace, Dairy Farm is shifting back to more autonomy at a country level
- The business and the IT have moved a lot closer together after some pretty rough moments
- We have done a lot more on IT Governance and have much more control over IT spend

The Technical Architecture V1.1 is still in use, the strategies are still being pursued and can genuinely thought to have largely stood the test of time.



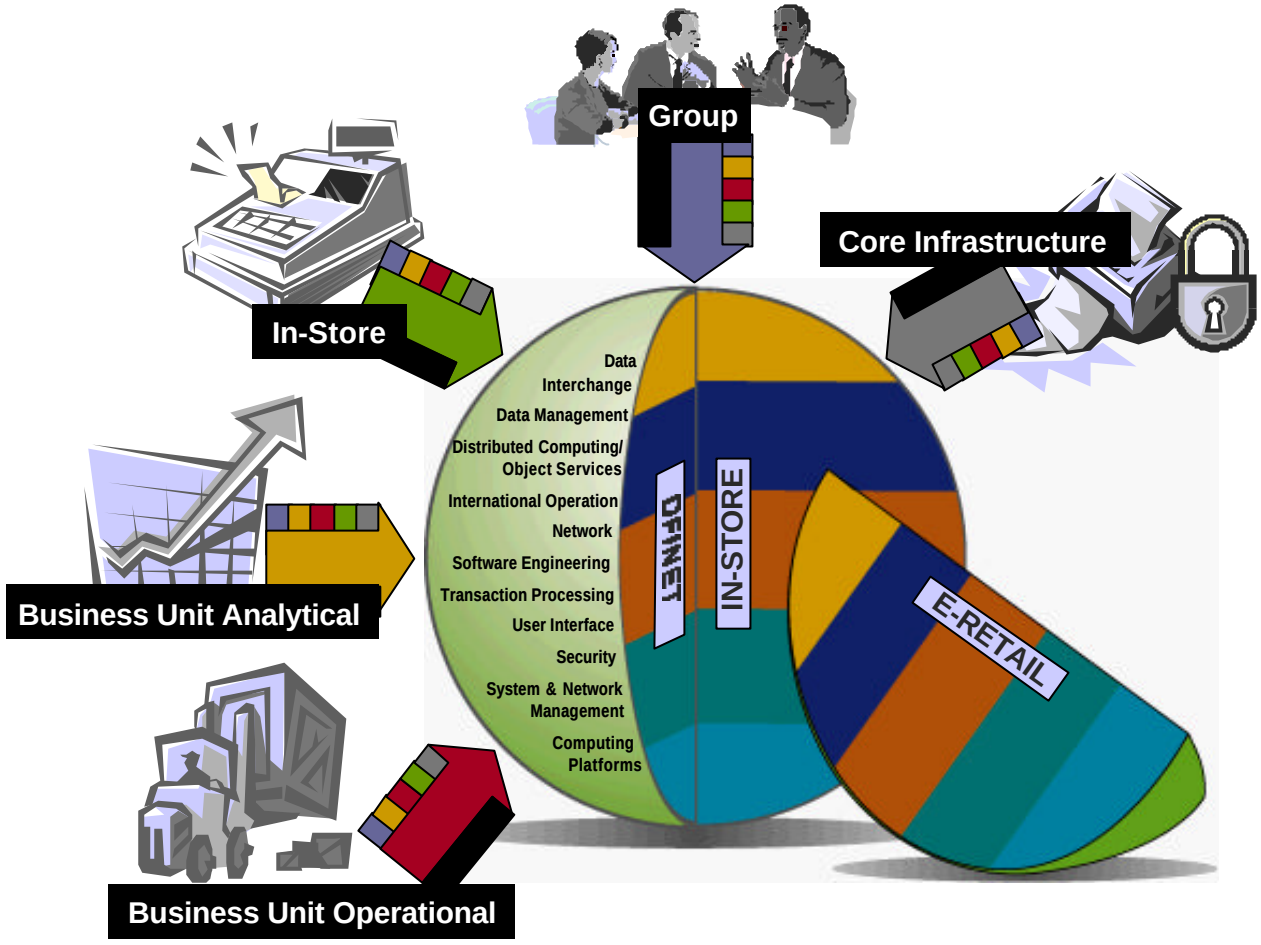
Summary

- DFG—Introduction to the Company
- Why develop an Architecture?
- DFG TA Development Process
- DFG TA Structure
- What has changed in the last 3 years?

THE Open GROUP

CFOS

Geoff McClelland
Director
Centre For Open Systems



Questions & Answers