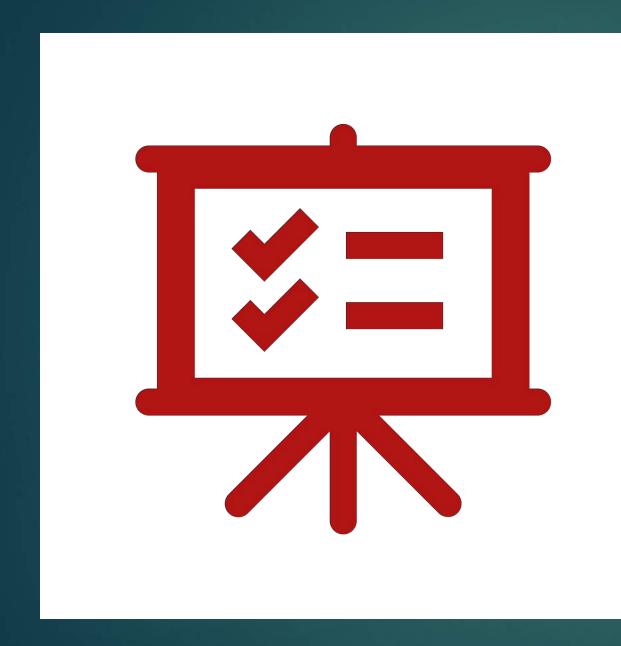
INF700 for Business and Management



### Module 1

Data, Information and Knowledge

### Module 2

Information Systems & Enterprise Strategy

### Module 3

IS Infrastructure

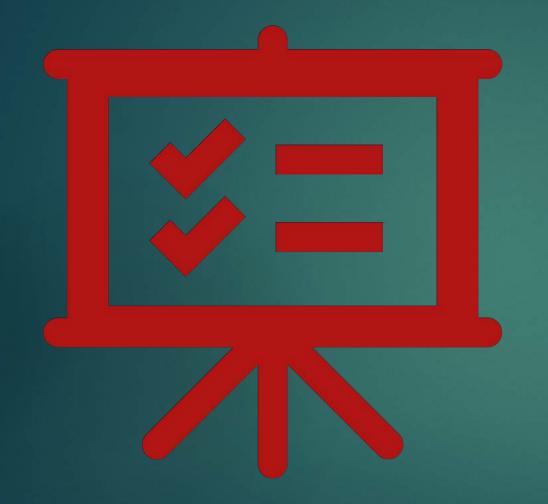
### Module 4

Business Process Management

### Module 5

Information Systems Security

28/03/2019



Module

Information Systems and Enterprise Strategy

28/03/2019

# www.andrewsai.com 28/03/2019

### Plan for Today

Part 1- BIS Strategy - Lecture

- Environmental Analysis
- Strategic Tools/Models

### **Short Break (10 mins)**

Part 2 - BIS Strategy & Competitiveness—Case Analyses

- Case Study 1 FreshDirect
- Case Study 2 Walmart

Part 3 – BIS Governance & Digital Business Operating Models

# Introduction to BIS as Strategy

# What is Strategy?

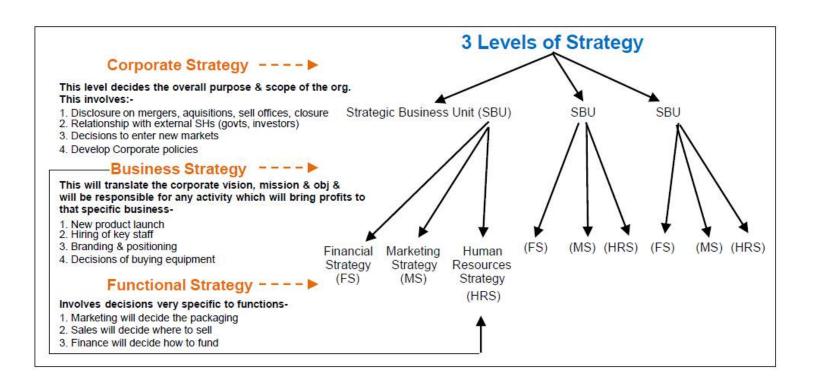
### Strategy can be defined as:

'the direction and scope of an organisation over the long term, which achieves advantage in a changing environment through its configuration of resources and competencies with the aim of fulfilling stakeholder expectation

Simply put, strategy is how an organisation attempts to meet its objectives

# Aligning IT to Business Strategy

- IT-business strategy alignment should consider internal and external opportunities as well as resource requirements.
- Michael Porter, of the Harvard Business School, states that corporations <u>need to incorporate IT</u> <u>into their business strategy formulation rather than</u> <u>focus on IT's operational role</u>.
- Technology strategy and business strategy need to be orchestrated prior to deploying IT.



## Levels of Strategy

## 3 Levels of Strategy – Johnson & Scholes

- Corporate Strategy Looks at the industries in which the organisation operates. This may mean deciding to leave existing area or enter new ones. This is particularly true if the organisation has a number of divisions
- <u>Business Strategy</u> looks at how the organisation (or subsidiary/division) competes. This tends to mean either:
- The division is trying to win customers by being better than rivals in some way (differentiation/focus as strategy)

### OR,

- The subsidiary is trying to win customers by being cheaper than rivals (cost leadership).
- ▶ 3. <u>Operational Strategy</u> looks at how resources are used to carry out the strategies noted above

### Strategic Position

- > Identify key stakeholders and their expectations
- Develop long term objectives to satisfy these stakeholders
- Calculate financial and non-financial ratios to show position of organization
- Identify core resources and competencies within the organization
- Identify key factors changing the environment outside the organization
- Use strategic analysis tools to develop strategic position

# Strategic Choices

- > Consider possible exit from existing industries
- Consider diversification into new industries
- Consider how to turnaround underperforming existing competitive advantages
- Consider entry into new markets
- Consider development of new products
- Consider developing new competitive advantages
- Use Porter's 5 Forces model and Competitive Strategies/Value Chain Analysis/McFarlan's Grid, etc

# Strategy in Action

- Evaluate strategic option and choose strategy to be followed
- Implement any necessary changes in the organisation

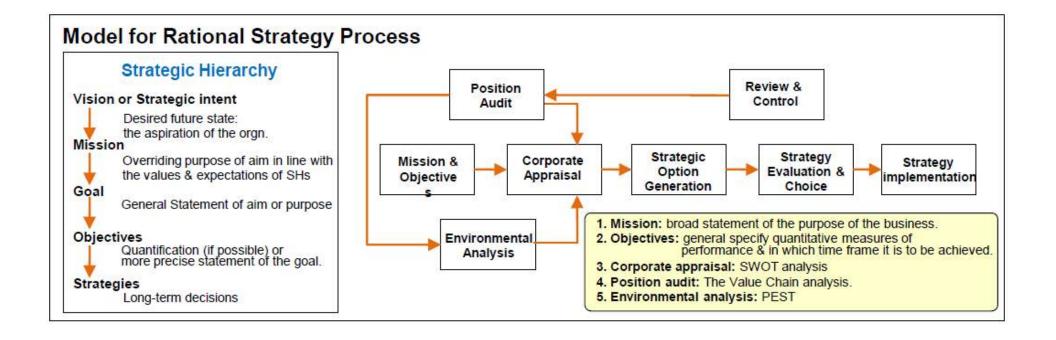
# Two Approaches to Strategy

1. Strategic Planning – involves formal analysis of each of the stages in strategic position before a final strategic option is chosen

Used in public sector, justify actions, considers all aspects of biz, proactivity

2. Free-wheeling opportunism – means having no long term strategic plan, in effect, making up the strategy as the organisation goes along

Quick response, etc.



## Old School Approach to Strategy?

## More Approaches to Strategy?

- Position-based strategy organization that is responding to changes in the external environment (reacting to or anticipating opportunties and threats)
- 2. Resource-based strategy organisation that concentrates on gaining an advantage because of its own strengths. These resources must be:
- (1) valuable, (2) rare, (3) imperfectly imitable (tough to imitate), and
- (4) non-substitutable.

# Three Lenses Approach to Developing Strategy?

<u>Strategy as design</u> – driven from the top

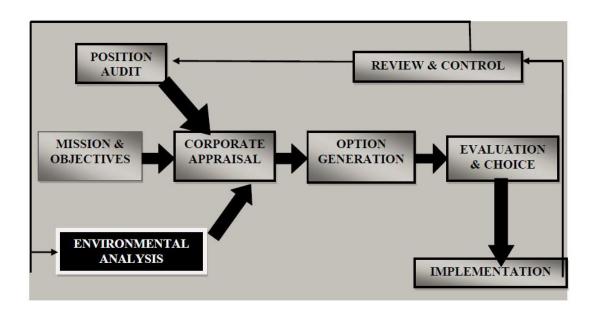
Strategy as experience – repeating what worked in the past

Strategy as ideas – encourage innovation

# Environmental scanning

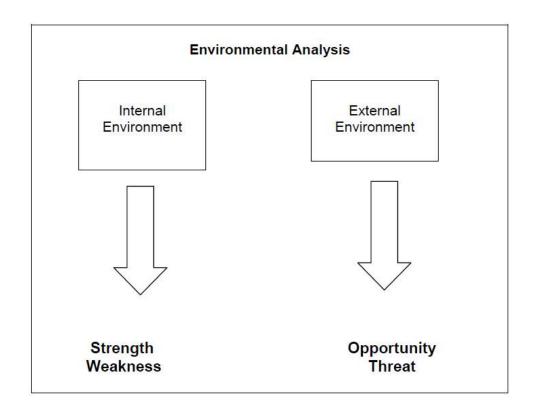
### **Environmental Analysis**

"A study which considers potential environmental effects during the planning phase before an investment is made or an operation started" (CIMA)



# Environmental Analysis

www.andrewsai.com 3/28/1



# Environmental Analysis

www.andrewsai.com 3/28/19

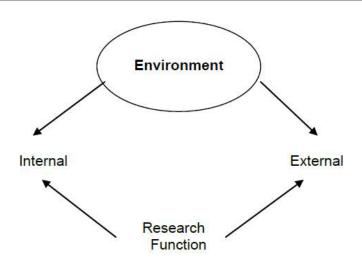
### Environmental Analysis

Organisations are strongly affected by their environment – essentially the world around them:

EXTERNAL environmental analysis – looks at the <u>OPPORTUNITIES</u> and THREATS

INTERNAL environmental analysis – looks at the <u>STRENGTHS</u> and WEAKNESSES

### **Overview of Environment**



### Environmental Analysis

www.andrewsai.com 3/28/1

# Strategic Analysis Tools/Models

# SWOT

### Corporate Appraisal (SWOT)

Internal Strengths Weaknesses

External Opportunities Threats

SWOT

www.andrewsai.com

### **SWOT ANALYSIS**

aka Corporate Appraisal. Combines both internal and external analysis. Strengths & Weaknesses need to:

- be precise
- be internal & specific to the firm
- not be outcomes (e.g., profits)
- not be two sides of the same coin

# Internal External Strengths Opportunities Things we are doing well Events or

- Things we are doing that the competition are not
- Major successes

### Weaknesses

- Things we are doing badly
- Things we are doing badly (need to correct)
- Major failures

- Events or changes in the external environment that can be exploited
- Things likely to go well in the future

#### Threats

- Events or changes in the external environment we need to protect ourselves from or defend ourselves against
- Things likely to go bad in the future

Positive Negative Tech skills Absence of skills Leading brands Weak brands Dist. channels Poor distribution Cust. lovalty Low cust, retention Product quality Unreliable prod/svc Scale Sub-scale Management Management Changing customer tastes T Changing customer tastes Mkt liberalization Mkt. closing Tech advances Tech advances Incrased taxes Lower personal tax Changing demogs Changing demogs New distribution ch. New distribution ch.

3 strategies arising from SWOT:

- 1. Matching: Strengths => Opportunities
- Converting: Threat/Weakness => Opportunity/Strength
- Remedying: minimize of avoid a weakness/ threat. Ideally eliminate

# The FreshDirect Case-Group Activity

### 4 Groups (20 minutes)

Each group covers a theme:

- Strengths
- Weaknesses
- **>** Opportunities
- > Threats

<u>See Case</u> 1 in Canvas <u>FreshDirect & Suppliers' Web site from Here</u> www.andrewsai.com 28/03/2019 Partnership with suppliers

www.andrewsai.com 28/03/2019

Dell's struggles as computers, customers, and the product mix changed, all underscore the importance of continually assessing a firm's strategic position among changing market conditions.

There is no guarantee that today's winning strategy will dominate forever

## SWOT - FreshDirect- Matching/Converting

Internal	<b>External</b>
Strengths	Opportunities
web-store front: one-click men	with semi-prepared meals - • High prices of substitute products
'Meals in 4 mins':ability to pull u	prior grocery lists • limited selection for buyers in brick and mortar stores
<ul> <li>Firm's Iphone app</li> </ul>	time-strapped Manhattanites
<ul> <li>vast warehouse in lower rent inc</li> </ul>	ustrial area of queens • area shoppers without cars and keen to avoid traffic jams
<ul> <li>next-day deliveries</li> </ul>	web not being only channel to reach customers
<ul> <li>Short supply chain - Fresh good</li> </ul>	• apartments in NYC redesigned to receive deliveries of absent
larger than local supermarket	customers using secured freezers.
<ul> <li>Artificial Intelligence software+s</li> </ul>	ome seven miles of fibre-optic  • High entry barriers
cables linking systems and sens	
from bakin gto verifying orders	
<ul> <li>benefits to suppliers -no middle</li> </ul>	nen
<ul> <li>no 'slotting fees' by suppliers</li> </ul>	
• 600,00 payingn cutomers	
Scale advantages – economies	of scale
Weaknesses	Threats
low pricing	<ul> <li>replication of business model</li> </ul>
<ul> <li>capital outlay against revenue</li> </ul>	
,	• suppliers
	Short shelf life of food products

# PESTEL

### PESTEL

P - Political E - Economic S - Social T - Technological E - Environmental L - Legal

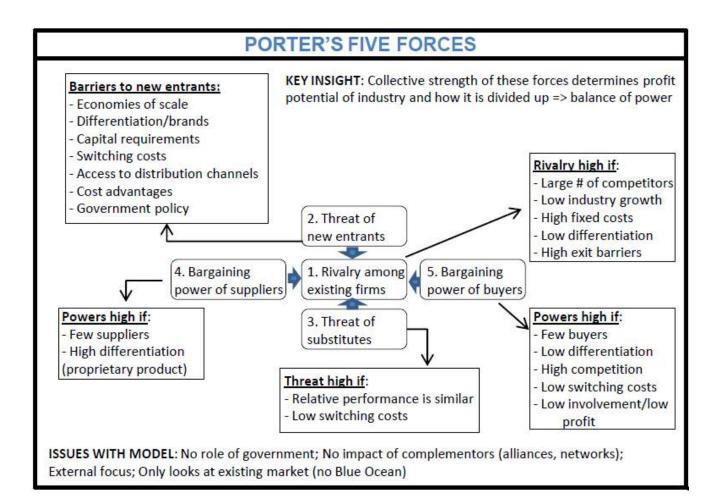
www.andrewsai.com 3/28/19

# Porter's Five Forces

### Porter's 5 Forces Threat of New Entrants Power of Power of Rivalry Buyers Suppliers Threat of Substitutes

# Porter's 5 Forces

www.andrewsai.com 3/28/



# Porter's Five Forces

www.andrewsai.com

## The FreshDirect Case

<u>The FreshDirect Case - Strategic Positioning</u> <u>FreshDirect Web address</u>

Partnership with suppliers

### 1. COMPETITIVE RIVALRY -LOW

### 3. BARGAINING POWER OF BUYERS – LOW

- No viable competitors
- Low industry growth
- High fixed costs\*- high delivery costs with low margins
- High differentiation -excellent packaging and delivery with convenience. No phy. store
- Low/No competition
- High exit barriers

- Many buyers large customer base
- High product differentiation excellent packaging and delivery with convenience
- Low competition
- High switching costs buying a car, traffic jams and old produce having been on shelf longer

#### 2. Threat of New Entrants - Low

#### **Barriers to Entry**

- Scale advantages serving 600,000+ customers
- Differentiation offering fresh farm produce, reputation for delivery
- Capital requirements the firm spent 75 million dollars building infrastructure before it could serve a single customer
- Access to distribution channels offering benefits to suppliers. Partnerships with suppliers
- Cost advantages low cost strategy

#### 4. Threat of Substitutes –Low

- Store with old produce
- High switching costs

### 5. Bargaining power of suppliers - high

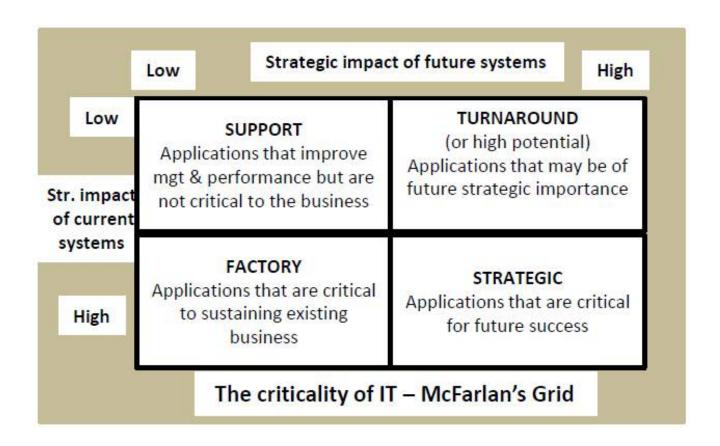
- Many suppliers deals
- Option to switch into clent's business forward intergration

### The FreshDirect Case – Solution

Using the Porter's 5 Forces

www.andrewsai.com

# McFarlan's Strategic Grid



## MacFarlan's Grid 1

#### IT Strategic Grid McFarlan applications which are critical to sustaining future business Investment in IS/IT applications which the strategy organization currently High Factory Strategic depends for success · IT is enabling critical operations to IT strategy is the backbone of function smoothly competitive success New IT applications in New IT applications are not fundamental to the firm's ability to development are crucial to future compete competitive success Strategic impact of (Eg.: Defense) (Eg.: Bank, retail stores, airlines) existing IT systems Support Turnaround · IT supports operations but are not IT supports operations but are not dependent on IT dependent on IT absolutely New IT applications are not · New IT applications necessary to necessarily linking to business enable the firm to achieve its planning activity strategic objectives (Eg.: University, consulting) (Eg.: High fashion, oil refining) High Investment in IS/IT Low Strategic impact of IT applications which are Investment in IS/IT applications under development valuable but not applications which critical to success may be important in Strategic Relevance and Impact Grid (source: McFarlan et al, 1999). achieving future success

Investment in IS/IT

#### MacFarlan's Grid 2

## MacFarlan's Grid

It is a model used to indicate the strategic importance of information systems to a company now and in the future. It is sometimes referred to as an <u>APPLICATIONS PORTFOLIO</u> model since it assesses the current mix of business information systems within an organisation. It was developed by McFarlan and McKenney (1993)

<u>Strategic segment</u> - indicates that the business depends on both its existing IS and its continued investment in new IS to sustain continued competitive advantage.

<u>Turnaround segment</u> – suggests that while a business in this position does not currently derive significant competitive benefits from its current IS, future investment in this area has the potential to positively affect the business' competitive position

<u>Factory segment</u> – for a business operating in this segment, while depending on its current IS to operate competitively, does not envisage further IS investment having a positive impact on its competitive position

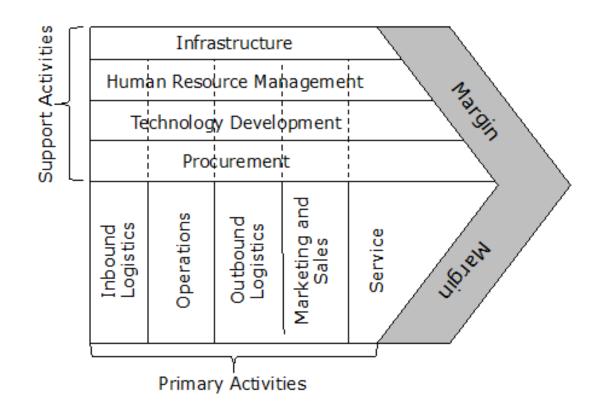
<u>Support segment</u> - does not believe it will derive significant competitive advantage from IS.

Value Chain – Position Audit

Critical Success Factors (CSFs)

Ansoff's Growth Strategies

# Porter's Value Chain



: Michael E. Porter "Competitive Strategy: Techniques for Analyzing Industries and Competitors"

# Porter's Value Chain

3/28/19

#### More Approaches to Strategy?

It is an analytical framework for decomposing an organisation into its individual activities and determining the value added at each stage.

Makes a distinction between:

- primary activities which contribute directly to getting goods and services closer to the customer (physical creation of a product, marketing and delivery to buyers, support and servicing after sales), and
  - Inbound logistics receiving, storing and expediting materials to the point of manufacture of the goods or service being produced
  - o **Operations** transforming the inputs into finished goods or services
  - Outbound logistics storing finished products and distributing goods and services to the customer
  - Marketing and sales promotion and sales activities that allow the potential customer to buy the product or service
  - <u>Service</u> after-sales service to maintain or enhance product value for the customer

#### More Approaches to Strategy?

- 2. <u>Support activities</u> which provide the inputs and infrastructure that allow the primary activities to take place
  - Corporate administration and infrastructure This supports the entire value chain and includes general management, legal services, finance, quality management and public relations
  - Human Resource Management Activities here includes staff recruitment, training, development, appraisal, promotion and rewarding employees
  - Product Technology/development this includes development of the technology of the product or service, the processes that produce it and the processes that ensure the successful management of the organisation. It also includes traditional research and development activities
  - <u>Procurement</u> This supports the process of purchasing inputs for all the activities
    of the value chain. Such inputs might include raw materials, office equipment,
    product equipment and information systems.



ACTIVITY	IMPLEMENTATION BY IKEA	
Inbound Logistics	<ul> <li>Distribution of products to the stores from 42 distribution centres.</li> <li>10,000 item product line manufactured by over 1,000 suppliers.</li> </ul>	
Outbound Logistics	Preferred method for customer to transport their products themselves.	
Operations	<ul> <li>Operations in more than 40 countries, 208 companies operated stores in 26 countries while remaining stores operated by franchisees</li> <li>IKEA does not manufacture its own products</li> </ul>	
Marketing and Sales	<ul> <li>Targeted at families with lower income, students and singles</li> <li>Low prices.</li> <li>Family-friendly store environment.</li> </ul>	
Services	<ul> <li>Information provided through catalogues and displays.</li> <li>Self-help service.</li> <li>Support Activities</li> <li>Low number of sales assistants in stores</li> </ul>	

# Using the Value Chain Analysis –

#### IKEA Example

3/28/19

- When we compare FreshDirect's value chain to traditional rivals, there are differences across every element.
- But most importantly, the elements in FreshDirect's value chain work together to create and reinforce competitive advantages that others cannot easily copy.
- Incumbents would be straddled between two business models, unable to reap the full advantages of either.
- And late-moving pure-play rivals will struggle, as FreshDirect's <u>lead time allows</u> the firm to develop brand, scale, data, and other advantages that newcomers lack

# Using the Value Chain Analysis –

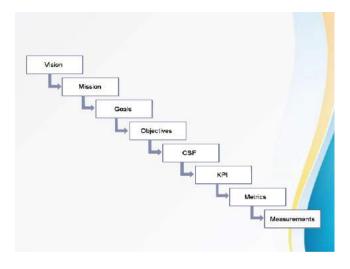
#### **FreshDirect**

# Critical Success Factors

#### Methodology of CSF analysis:

- Identify CSF for the specific strategy. They recommend to keep list of CSF 6 or <.</li>
- Identify the underpinning competencies essential to gaining competitive adv in each of the CSFs. This will involve thorough investigation of the activities, skills & processes that deliver superior performance of each.
- 3. Ensure list of competence is sufficient to give competitive advantage.
- Identify performance standards that need to be achieved to outperform rivals.
- Ensure that competitors will not be able to imitate or better the firms's performance of each activity, otherwise it will not be a basis of a secure competitive strategy
- competitive strategy
  6. Monitor competitiors & predict the likely impact of their moves in terms of their impact on these CSFs





CSFs



Ansoff matrix helps to identify growth opportunities by taking into consideration the (i.e existing/new) market & products (existing/new)

	MARKET DEVELOPMENT	DIVERSIFICATION
New	Identifying and developing new markets for its current products.	Starting up or acquiring businesses outside its current products or markets.
MARKETS	MARKET PENETRATION	PRODUCT DEVELOPMENT
Existing	Making more sales to current customers w/o changing its product:  -Adding more stores -Improvements in ads, pricing, services, menu, design etc	Adding modified or new products to current markets.

Uniqueness perceived by customer	Low cost position
DIFFERENTIATION	OVERALL COST LEADERSHIP
Distinguishing the firm's product	The organization aggressively seeks:
Or service from others:	-Efficient facilities
	- Cost reductions
The organization may use:	-Tight cost control
-Advertising	To produce products more efficiently than
- Distinctive product features	competitors
-Exceptional service	PESSON PERSON CONTROL
-New technology	This is profitable because:
PROCESSOR AND	-Provides a successful strategy against the 5
This is profitable because:	competitive forces
-Customers are loyal	- Low cost producer is protected from
-Will pay high prices for the product	powerful customers & suppliers as they
All Solitions W	cannot find lower prices elsewhere, & other
Cos. that pursue a differentiation strategy	buyers will have less slack for price
typically need:	negotiation with suppliers
-Strong marketing abilities	100 May 100 Ma
- A creative flair	-If substitute products or potential new
- A reputation for leadership	entrants threaten, the low cost producer is
	better positioned to prevent loss of market
Successful differentiation can:	share
-Reduce the bargaining power of large buyers	

Here the org. concentrates on a specific customer or buyer group. A company can use a low

Cost approach or a differentiation approach, but only for the segment.

- Low price acts as a barrier to entry and

substitute products

- Reduce the power of substitute products

that a new entrant wont be able to match

-Large companies may overlook niches
- No resources to compete broadly

Why focus?:

- Erect barriers in the form of customer loyalty

Strategic Advantage

# Ansoff's Matrix & Porter's Generic Strategies

3/28/19

Information Strategy, Systems & technology Strategy: Align IT in the most effective manner to deliver exceptional services to our business partners.

#### Objectives:

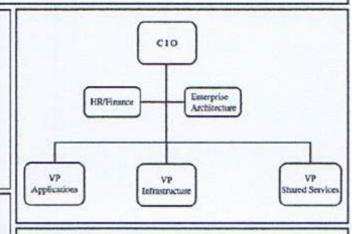
- Customer-focused IT organization that provides the highest level of service to internal business partners.
- Deliver technology solutions to enable the business in the following areas:
  - Reduce costs
  - Increase revenue
  - Improve customer satisfaction
- Cost-effective organization that operates at or below industry benchmarks

#### Risks:

Significant changes are necessary to operate in a cost-effective fashion.

#### Milestones:

- Hire new IT leader Date Implement new IT organization model Date
- IT leadership development program Date
- IT-wide staff development plans
   Date



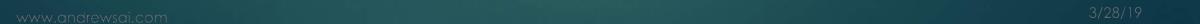
#### Assessment of Current Environment:

- Inexperienced IT management
- No formal training and development program
- Unclear roles and responsibilities
- Poor relations with business parties

### Information Strategy

Companies need to develop a plan to link its business and information strategies and the model below shows how this can be done:

An example of an IT strategy



#### Benefits of an Information Systems Strategy:

- Achieve goal congruence between the IS & corporate objectives
- 2. Helps create and sustain competitive advantage
- High levels of expenditure on IS will be more focused
- 4. Dev. In IT can be exploited at the right time

#### Information Strategy

ndrewsai.com 3/28/19

#### 3. How? IT

Technology used to collect, store, perform apps, provide info:

- Hardware
- Software
- Peripherals
- Networks

#### 1. What? IS

- What info required?
- By whom?
- How provided?
- What data collected?
- How collected?

#### 2. Who? IM

Applications or processes required to turn data into information:

- Applications?
- Sequence?

#### 3 Elements of IS Strategy



#### Strategic Planning Model

The link between the <u>corporate strategy</u> and the <u>information needs</u> is often established by considering <u>Critical Success Factors</u> (CSFs) for the organisation.

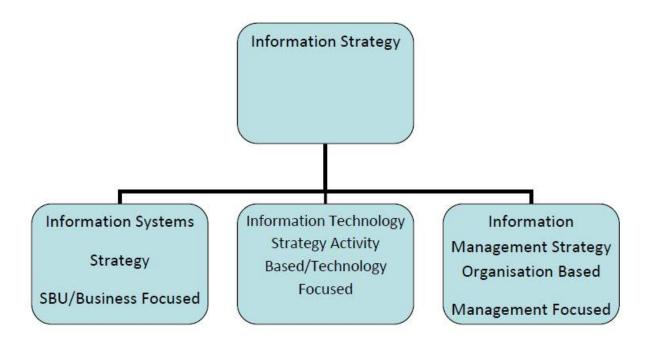
The organisation will need information on the key performance indicators (KPIs) to ensure that the CSFs are being achieved and, as a result, that the business aims are being achieved.

The <u>information needs</u> of the organisation <u>then drive the</u> <u>information strategy</u> and the information systems created.

Information Strategy in the ---

Strategic Planning Model

The Information Strategy is the <u>overall plan</u> a business has to create and develop its information systems. Its broken into 3 parts:



#### Information Strategy Components

## Information Strategy Components

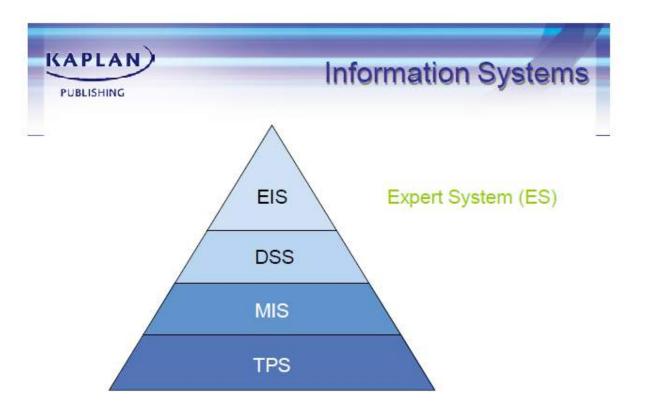
The difference between the three components are summarised below:

<u>IS Strategy</u> – looks at the way in which information systems in various parts of the organisation are organised.

IT Strategy - looks at the technology infrastructure of the systems

<u>IM Strategy</u> - considers how the systems support management processes

# Levels of Management (recap) & BIS



#### Information Systems Pyramid

## IT Governance Business Operating Models

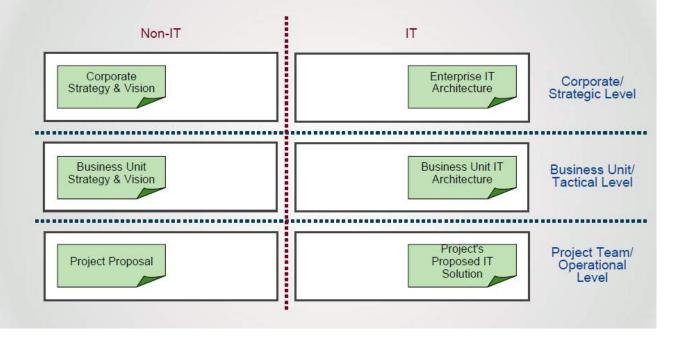
Framework for decision rights and accountability to promote desirable behaviour in the management and use of IT

## Definition of IT Governance

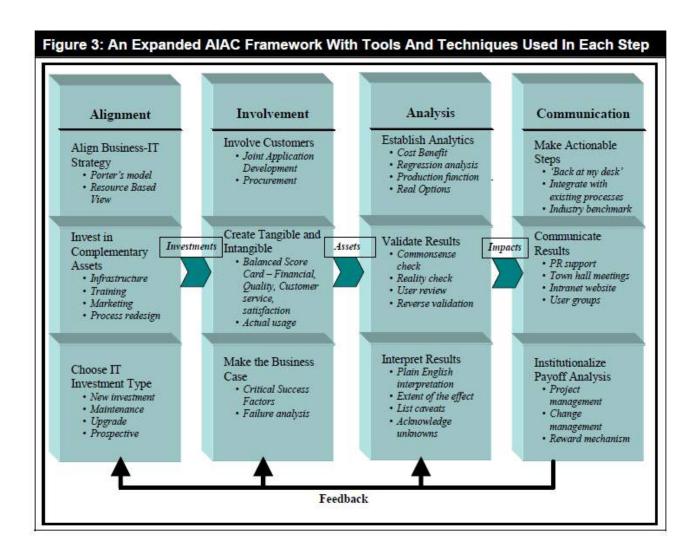
(more on this later)

3/28/19

Governance is challenging to implement because IT decisions are made at multiple organizational levels



#### IT Governance

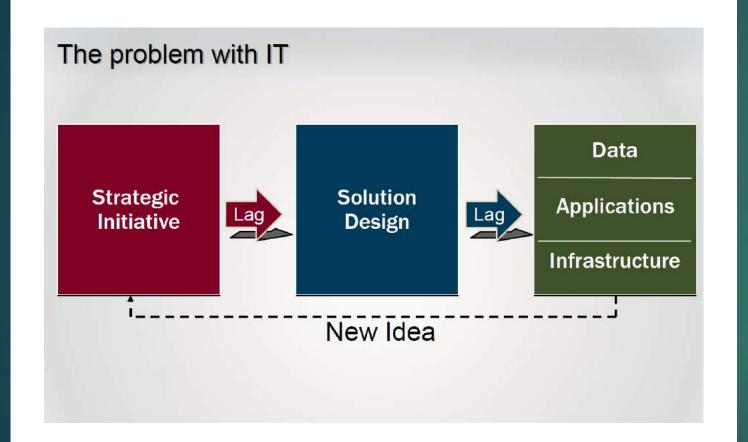


## IT Investment & The Organisation

## Payoff metrics – assessing the outcome of an IT initiative

- ROI as a metric for evaluating technologies
- balanced scorecard (BSC) more recently used

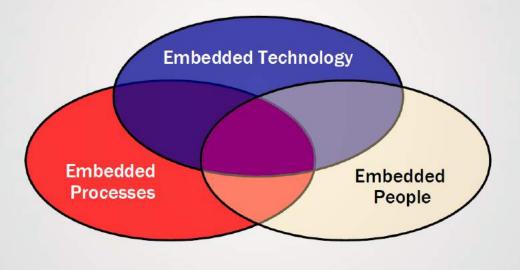
# Generating Business Value from IT



# The problem with IT

#### The nature of the problem

 IT invariably provides a long-lived solution to an immediate business problem or opportunity and thus becomes an inhibitor rather than enabler of change.



# The problem with IT

#### Five key IT decisions need to be governed

#### Principles for IT

High level statements about how IT is to be used. Driven by business principles (e.g., operating model)

#### Enterprise Architecture

Organizing logic for data, applications, and infrastructure captured in a set of policies, relationships, and technical choices to achieve desired business and technical standardization and integration

#### IT Infrastructure Strategies

Strategies for shared IT capability (both technical and human) delivered as reliable services (e.g., network, help desk, shared data)

#### Business Application Needs

Specifying the business need for purchased or internally developed IT applications

#### IT Investment and Prioritization

Decisions about how much and where to invest in IT including project approvals and justification techniques

#### IT Governance -

Framework for decision rights and accountability to encourage desirable behavior in the use of IT.

Governance complements organizational structure to enable a firm to meet conflicting objectives.

## Making IT an ASSET Depends on....

#### Operating Model

- IT governance and decision making processes
- Development and management of a digitized platform

### Integration & Standardisation

Key Dimensions of an Operating Model

An Operating Model has two dimensions:

Business process standardisation;

Business process integration

The four general types of operating models are:



<u>Diversification</u> (low standardization, low integration)



<u>Coordination</u> (low standardization, high integration)



**Replication** (high standardization, low integration)



<u>Unification</u> (high standardization, high integration)

Figure 1: Characteristics of Four Operating Models

<b>Business Process Integration</b>	High	Coordination Shared customers, products or suppliers Impact on other business unit transactions Operationally unique business units or functions Autonomous business management Business unit control over business process design Shared customer/supplier/product data Consensus processes for designing IT infrastructure services; IT application decisions are made in business units	Unification  Customers and suppliers may be local or global Globally integrated business processes often with support of enterprise systems Business units with similar or overlapping operations Centralized management often applying functional/process/business unit matrices High-level process owners design standardized process Centrally mandated databases IT decisions made centrally
	Low	Diversification  Few, if any, shared customers or suppliers Independent transactions Operationally unique business units Autonomous business management Business unit control over business process design Few data standards across business units Most IT decisions made within business units.	Replication  Few, if any, shared customers  Independent transactions aggregated at a high level Operationally similar business units  Autonomous business unit leaders with limited discretion over processes Centralized (or federal) control over business process design  Standardized data definitions but data locally owned with some aggregation at corporate Centrally mandated IT services
		Low	High

**Business Process Standardization** 

#### Operating Model characteristics

the desired <u>level of business process</u> <u>integration</u>

and <u>business process</u> <u>standardization</u>

for delivering goods and services to customers. It describes how a firm will profit and grow.

## Different Standardization Requirements of the Four Operating Models

		a operating measie				
Business Process Integration	High	Coordination  Customer and product data  Shared services  Infrastructure, portal, and middleware technology	<ul> <li>Unification</li> <li>Operational and decision making processes</li> <li>Customer and product data</li> <li>Shared services</li> <li>Infrastructure technology and application systems</li> </ul>			
Business Proc	Low	Diversification ■ Shared services ■ Infrastructure technology	Replication  Operational processes Shared services Infrastructure technology and application systems			
		Low	High			
	Business Process Standardization					

#### **Operating Model**

Standardization Requirements

the desired <u>level of business process</u> <u>integration</u>

and <u>business process</u> <u>standardization</u>

for delivering goods and services to customers. It describes how a firm will profit and grow.

3/28/19

#### Different operating models require different IT capabilities

		Coordination	Unification
ss Integration	High	<ul> <li>Unique business units with a need to know each other's transactions</li> </ul>	<ul> <li>Single business with global process standards and global data access</li> </ul>
		■ Examples: Commonwealth Bank of Australia, MetLife, Actna	<ul> <li>Examples: Southwest Airlines, Dow Chemical, UPS Package Delivery</li> </ul>
	Low	<ul> <li>Key IT capability: access to shared data, through standard technology interfaces</li> </ul>	<ul> <li>Key IT capability: enterprise systems reinforcing standard processes and providing global data access</li> </ul>
Process		Diversification	Replication
		<ul> <li>Independent business units with different customers and expertise</li> </ul>	<ul> <li>Independent but similar business units sharing best practice</li> </ul>
Business		<ul> <li>Examples: Johnson &amp; Johnson, Pacific Life, ING</li> </ul>	<ul> <li>Examples: Marriott, 7-Eleven Japan, ING DIRECT</li> </ul>
B		■ Key IT capability: provide economies of scale without limiting independence	<ul> <li>Key IT capability: provide standard infrastructure and application components for global efficiencies</li> </ul>
		Low	High
		Business Proces	ss Standardization

#### Operating Model

IT Capabilities Requirements

the desired <u>level of business process</u> <u>integration</u>

and <u>business process</u> <u>standardization</u>

for delivering goods and services to customers. It describes how a firm will profit and grow.

3/28/19

#### Delta's Unification Operating Model **Operational Pipeline** Prepare Flight Flight Clean/ Monitor Unload Allocate Load for Flight Departure Arrival and Service Resources Aircraft Flight Aircraft Departure and Closeout Closeout Aircraft Hand Helds Pagers Gate Readers Kiosks Voice **Delta Nervous System** Video **Electronic Events** Maint. Schedule Business **Employee Relationship** Reflexes Management Ticket Equip. Aircraft Customer Nine Core Databases Cell Phones **PDAs** Desktops Laptops Scanners Reservation Systems Ticket Crown Skylinks Skymiles Reservations Skycap Boarding Inflight Baggage Room Counter Personalization Digital Relationships **Loyalty Programs**

### Delta's Operating Model

### Capabilities provided by Unification Model



<u>Scale:</u> supports efficient, reliable global operations

2

End-to-end visibility of business processses

3

Availability of data to provide customer service information and analyse pricing, scheduling, etc. 4

Rapic expansion of existing processes to new markets or for related products and services

5

supports integration of acquisitions of competitors

#### Risks and Limitations of Unification Model



Highly IT dependent, needs sophisticated back up and recovery



Locks in existing business
processes and data definitions;
not flexible for related products
and services demanding different
types of business processes



IT can become **monolithic** and **slow** 



Demands enormous organisational discipline and this is **difficult to implement** 

#### P&G's Diversification Operating Model 250 Brands Strong marketing and customer focus Ownership of unique business processes Product and service innovation and delivery Catalogue of services—some mandatory, some optional Marketing approach to build "brand" awareness and loyalty to GBS services Ownership of shared solution business processes Unit price management with guaranteed reductions over time · Scorecard of GBS performance with variable compensation Architecture interconnecting the different solutions to be building blocks for innovation New product development group to add new solutions **GBS Shared Solutions** Management of outsourcing partners

#### Diversification Model

www.andrewsai.com

Employee Services	es—Employee Services & Solutions  Pay, benefits, policies, career development, work plans	
People Management	Compensation planning, relocation, employee management tools	
Facilities	Office moves, conveniences: banking, dining, fitness centers, mail & documents	
Computers & Communications	PCs, e-mail, mobile phones, Intranet, service support	
Meetings	Rooms, technology & scheduling, audio & video conferencing, events	
Travel	Booking, expense accounting, credit cards, group meetings	

#### P&G Global Business Services—Business Services & Solutions

Purchases	Strategic sourcing, supplier relationship management, procurement service	
Financial Services & Solutions	General ledger, affiliate accounting, product/fixed asset accounting, expense, sales/marketing accounting, purchases-to-payment (include accounts payable), banking, financial reporting	
Product Innovation	Bioinformatics systems, product imaging & modeling systems	
Supply Network Solutions	Demand planning systems, total order management, physical distance systems	
Consumer Solutions	Prime prospect research, CRM systems, advertising & media measurement	
Customer Solutions	Shopper intelligence, in-store action planning, trade fund management systems	
Initiative Management	Technical package & materials design, package artwork process, portfolio tracking & reporting	
Business Performance Solutions	Decision cockpits, market mix modeling, competitive intelligence, ad-hoc business analyses	

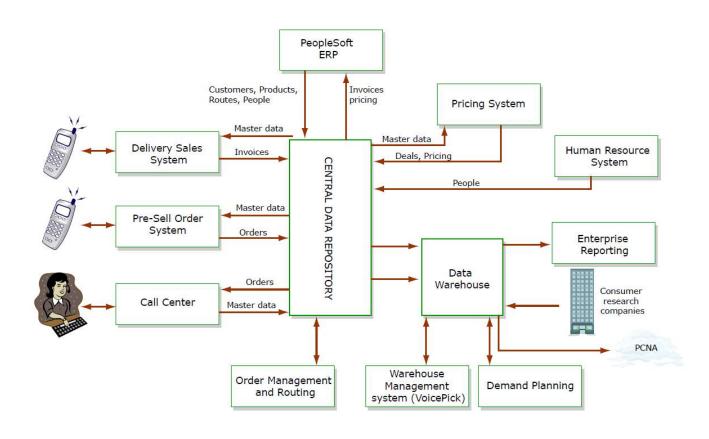
#### Diversification Model

P & G example

#### MetLife's Coordination Operating Model **Application Presentation Tier** Application Business Logic and Data Tier Licensing Rates & Security & Suitability Portal: Forms & Entitlements Calcs Presentation Requirements Integration Screen Entry Customer -& Validation Marketing Sign-On Business Operational Producer -Illustrations Data Store Navigation Rules Order Entry Search Sales Underwriting Party Integration Sessions Office ACORD XML Management Billing/Payment Underwriter -Service Underwriting & Issue Eligibility Call Center -Claims Product Admin Partner Service **Portals** Workflow Service Events Provider Recording

#### Coordination Operating Model

MetLife's example



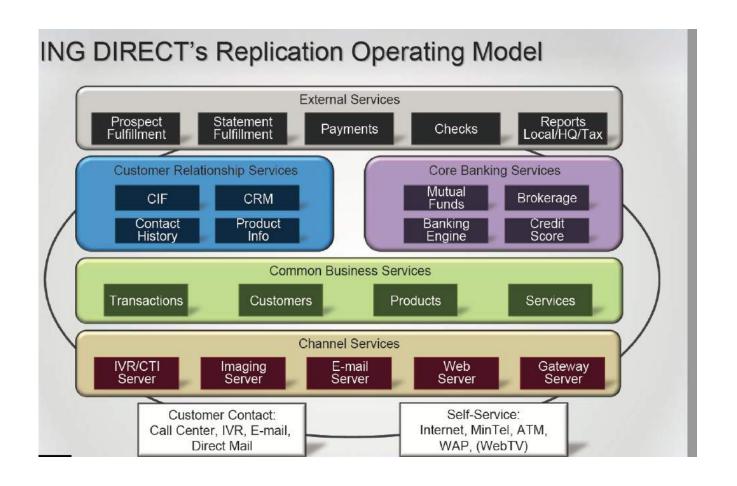
Coordination Operating Model

**Pepsi Americas** 

Information backbone integraiton

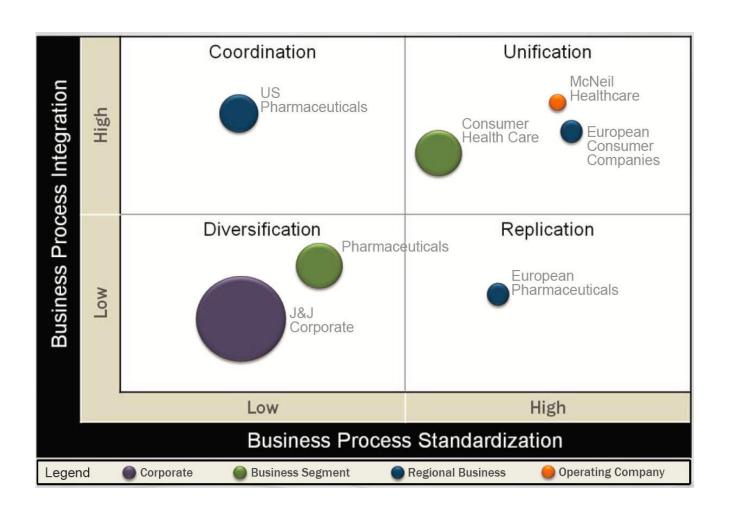
# The Coordination Operating Model Platform

- Focuses on providing data visibility to meet customer needs
  - single face to customer
  - End-to-end business processes
- Allows customisation of services according to customer needs and encourages local expertise while leveraging global products and services
- The platform can be extended as firms add markets or products
- The platform demands disciplined use of data preservation of data standards; timely input of data
- As products and services become commodities, can move toward unification; coordination is not a low-cost model
- Less prone to disruption than unification and replication models



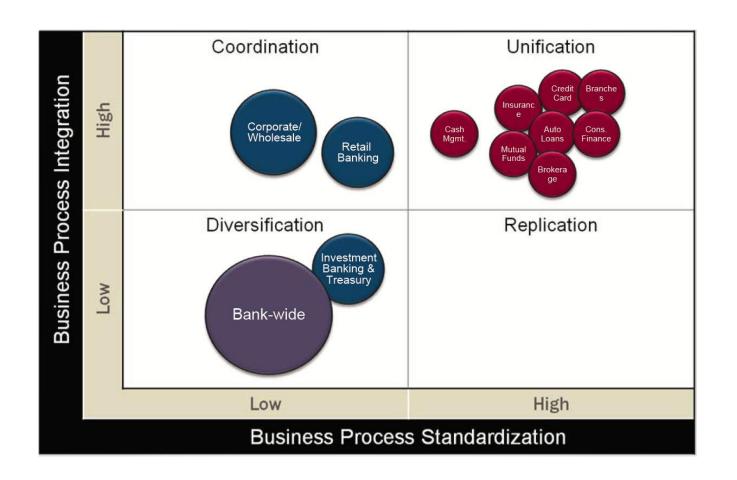
#### ING Directs's

## Replication Operating Model



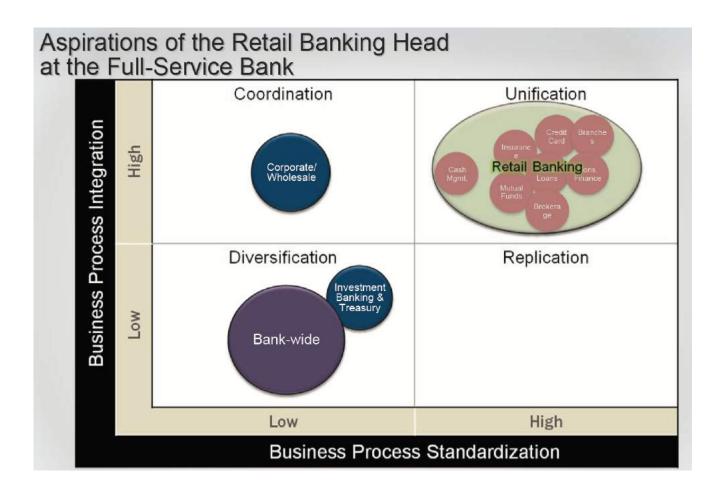
# Johnson & johnson's

#### Multiple Operating Models



#### Target's

#### Operating Model of One Full-Service bank



# Aspirations of the Retail head at the Full-Service bank

#### Toyota's Operating Model Transitions Coordination Unification with a need ■ Single busine dobal process Unique busin **Business Process Integration** to kne ctions stand "Required": "Desirable": High Standardized Transparency for Exa Virtual Supply and Systems to Reduce **Demand Chain** Cost ■ Kev h ■ Kev stems mology reinforcing data, through sses and providing global data access interfaces Divers cation Replication Independent business units with Independent but similar business units expertise different 1999 Position: GE ■ Examples: Marriott, CEMEX, ING ■ Exa/ Decentralized DIRECT Independent ■ Key IT capability: provide standard **Country Operations** ndence infrastructure and application of scale components for global efficiencies High Low **Business Process Standardization**

#### Business Tranformation at Toyota Europe

#### Toyota Europe's Transformation

		Perforn	Business Changes	
	Units Sold	Revenue (¥)	Operating Income (¥)	
2002	727,000	1,266B	(9.9B)	<ul><li>28 autonomous marketing companies</li><li>9 manufacturing facilities</li></ul>
2004	898,000	2,164B	72.5B	<ul> <li>European delivery lead time for vehicles reduced 35%</li> <li>Inventory of spare parts reduced by almost 50%</li> <li>Operating income: 3.5% of sales</li> </ul>
2008	1,284,000	3,993B	1418	Reorganized as Toyota Europe

### Business Tranformation at Toyota Europe

- Requires that management articulate how the firm will profit and grow. It is a commitment.
- Can be implemented gradually:
  - Diversification allows for incremental layers of shared services
  - Unification allows for modular implementation \*by geography or process (of standardised and integrated processes)
  - Replication allows for evolution of new services to be rolled out to all sites
  - Coordination allows for increasingly powerful data repositories and extension to new channels
    - Creates characteristic opportunities and constraints
    - ✓ Imposes differnt demands for governance

# The Operating Model Choice

- Make Tough Choices: An operating model is a commitment to a way of doing business. It involves eliminating some strategic options in order to better deliver on others
- ☐ Consider the Off-Diagonals: As firms seek more integration and standardisation the Coordination and Replication models allow for more rapid implementation and payback than the Unification model.
- Prepare for a Transformation: Transitioning from one operating model to another will always involve a transformation. Small steps toward the targeted operating model can make changes more evolutionary than revolutionary
- There is no Substitute for Strong Senior Management Leadership: Firms getting strategic business benefits from an operating model have senior business leaders who are actively involved in its design, management and implementation.

# Operating Model Lessons from Top Performers



# Questions

https://hbr.org/2017/01/a-good-digital-strategy-creates-a-gravitational-pull

https://www.weforum.org/agenda/2017/01/jack-ma-three-trends-define-

<u>future?utm\_content=bufferc0a5e&utm\_medium=social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_ca\_mpaign=buffer\_social&utm\_source=twitter.com&utm\_social&utm\_source=twitter.com&utm\_social&utm\_source=twitter.com&utm\_social&utm\_source=twitter.com&utm\_social&utm\_source=twitter.com&utm\_social&utm\_source=twitter.com&utm\_source=tw</u>

http://www.digitalmind.ee/business-technology-trends-for-2017/

https://enterprisersproject.com/article/2016/11/2016-digital-transformation-book-contest

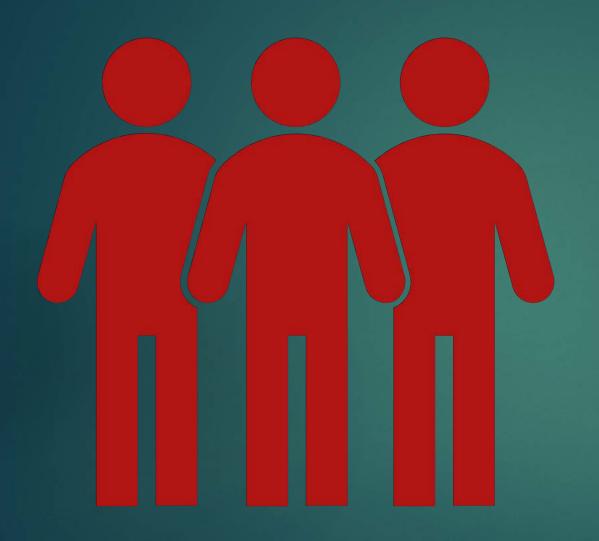
https://www.weforum.org/agenda/2016/02/davos-2016-and-the-fourth-industrial-

revolution/

https://www.weforum.org/agenda/2016/06/top-10-emerging-technologies-2016/ https://www.weforum.org/agenda/2016/10/2017s-most-in-demand-skills-according-to linkedin?utm\_content=buffer23af8&utm\_medium=social&utm\_source=facebook.com&utm\_campaign=buffer

# Links for useful resources

vw.andrewsai.com 28/03/2019



Next Session: 30.03.19

IT Governance with COBIT 5 Framework