

Where business comes to life

## NMR86

Business Technology Consulting
Nodule 6

The BTC Framework (part 1)

Dr V Michell

### Nodule Unit 6:

An Introduction to the:

## Business Technology Consulting (BTC) Framework

- consulting methods and techniques

**Dr V Michell** 



#### Unit 6 - Content

- Business Technology Consulting (BTC) Framework
  - Business Analysis
  - Technology Analysis
  - Business and technology alignment Analysis
- Structure of BTC
- A set analysis techniques and how to apply them

#### Learning objectives:

- To understand the client enterprise
- To understand the client thinking
- To make client being aware of their competitive position
- To draw up a holistic view of the enterprise's portfolio of IT applications which enable the strengthens, competences, productivities and performance of the enterprise

Business Technology Consulting (BTC) Framework was jointly developed by BISA and Capgemini.





Where business comes to life

## NMR86

Business Technology Consulting
Nodule 6.1

Introduction to the BIC Framework

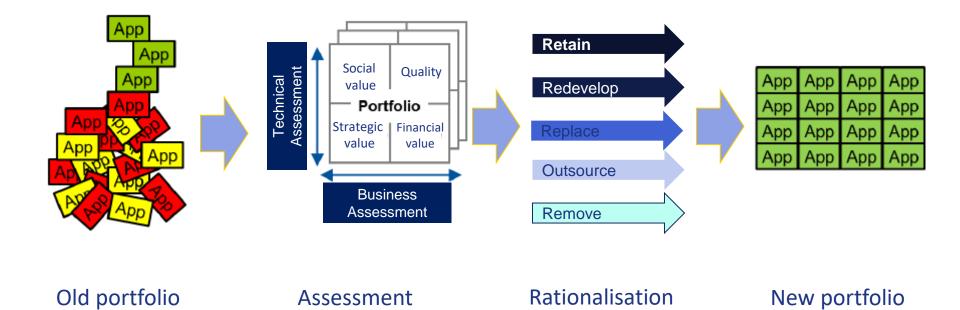
Dr. V. Michell

### **Business Technology Consulting Framework**

- What is the BTC Framework?
  - analysis framework for business, technology, and business technology alignment in an enterprise, using enterprise architecture techniques
- Who is it for (beneficiaries)?
  - Business technology consultants
  - Supports consulting activities for determination of how to improve IT apps and an overview of their relationship and support for business
- Why is it useful?
  - Organisations continue introducing IT applications, its IT landscape becomes more complex
  - Apps become duplicated, redundant and not costs effective
  - Organisations need to monitor their IT landscape and make sensible decisions for the business sustainability and improvement



## An Overview of the Business Technology Consulting Framework



(adapted from Gartner, 2013)

### **Business Driving Force for BTC**

- Pressure from enterprise requirements
  - Complex business system comprising goals, people, structure, processes, IT, resources and constraints of a business
  - Multi-stakeholders with their concerns and needs
  - Conflicts from different interests and priorities
  - Need to make apps and IT efficient and effective
  - Changes driven by the business environment (customers, suppliers, competitors, economic climate) over time
- How is BTC devised?
  - IT as services and apps supporting a business
  - IT applications become increasingly mission-critical
  - ROI becomes more difficult to maintain if an IT portfolio cannot be effective analysed
  - Expertise developed by academics and practitioners in consulting
  - Proven useful from experience from industry use



### Basic Theoretical Foundations of BTC Framework

#### Organisational Semiotics

- Information provision
- Information management
- Social view of business

#### Service-oriented Architecture

- Business services (integral of business strategy, process, stakeholders)
- IT services (integral of technical capabilities, components, infrastructure)
- IS services (aligning the IT service with the business service for business value)

#### Business Systems Theory

- Business and IT alignment
- Business value of IT

#### Enterprise Architecture

- Enterprise Architecture
- Architecture Development Method (ADM) in TOGAF



### The Semiotic Organisational Onion

#### **Informal System**

the business organisation; a sub-culture where meanings, intentions, beliefs, commitments and responsibilities are key elements

#### **Formal System**

bureaucracy where form and rule replace meaning and intention

#### **IT System**

automated part of the formal system

(Stamper 1992)



## Information Requirements (semiotics)

Enterprise architecture

**Informal Systems** 

Formal Systems

**IT Systems** 

Enterprise requirements

Organisational culture, vision, mission, Strategies
Articulation of norms (i.e. communication norms, control norms)

Organisational structure, business processes, procedures, regulations functions, capability of services

Systems requirements

Guidelines, policy documents Behaviours and use Staff handbook, operating manual, process specification, workflow design

Functional requirements, Non-funct'l requirements, systems design



### Service-oriented Architecture (recap)

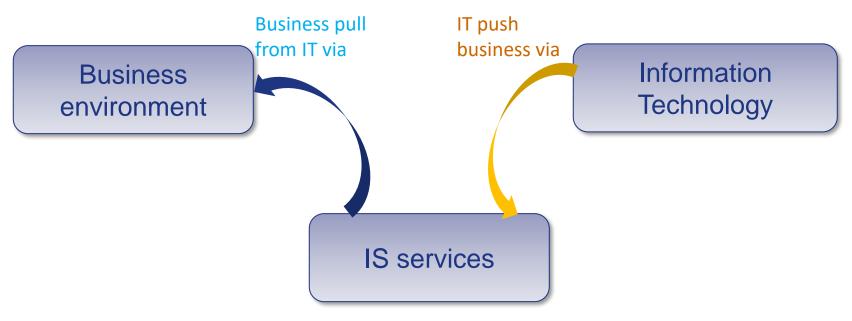
#### Service

- A unit of solution logic to which service orientation has been applied to a meaningful extent
- It could be a set of business or technical solution values as delivered to a client in an organisation
- Service orientation a paradigm for organising and utilising distributed capabilities that may be under the control of different ownership domains
  - support integration and consolidation activities within complex enterprise systems
  - does not specify or provide a methodology or framework for documenting capabilities or services
- Providing a uniform means to offer, discover, interact with and use capabilities to produce desired effects consistent with measurable preconditions and expectations
- A design for linking business and computational resources (principally organisations, applications and data) on demand to achieve the desired



## Socio-Technical Systems

- Interaction between people and technology
- In the context of BTC, IS services represent the capability of IT toward the business

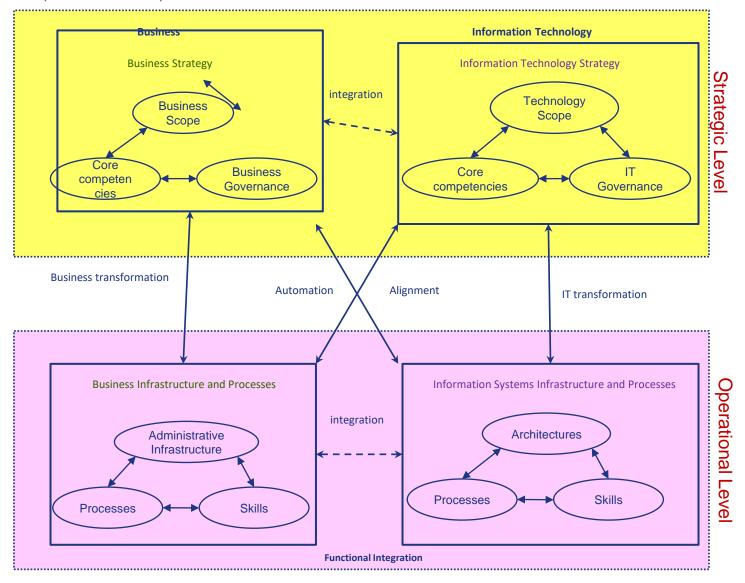


The solution provision and how it is provided



### Strategic Alignment Model (SAM)

(Henderson et al)



# Strategic Alignment Model (SAM) (cont.)

- SAM as the skeleton for establishing the business and IT alignment between two levels:
  - Strategic: to form an integrated strategy by articulating the relationship between
    - the business and IT scope
    - their competencies
    - o governance

to derive issue drivers

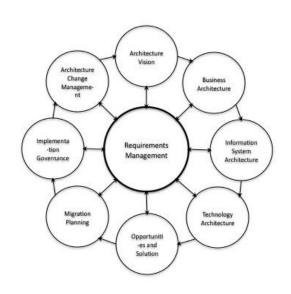
- Operational: to integrate business and IT operations that comprises of its
  - Infrastructures
  - Processes
  - o skills

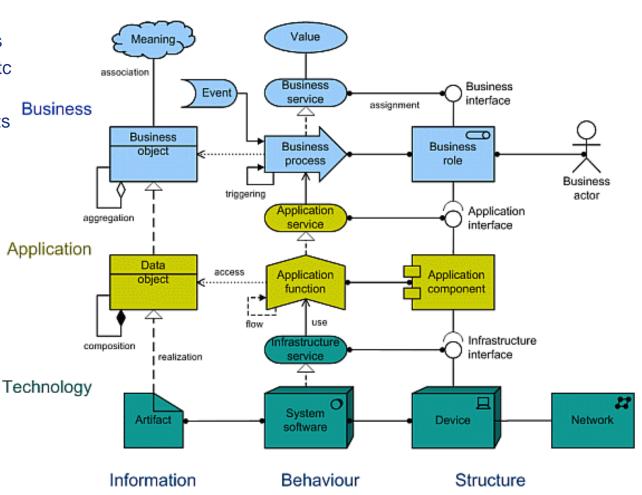
to derive cause of actions in relation to issues drivers



### Enterprise Architecture – a model of the business

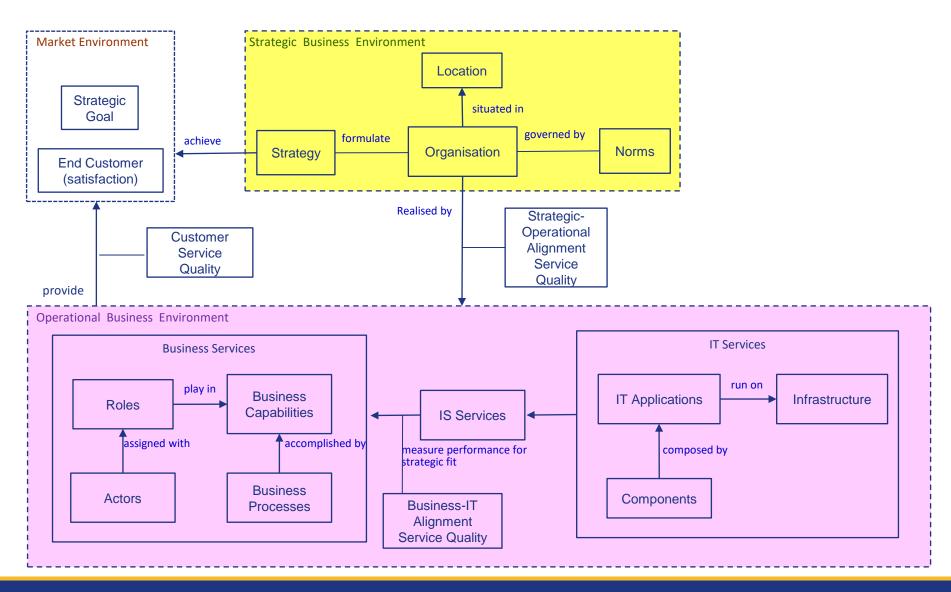
- Who is involved
- What objects/things are to be addressed
- · Where places/locations/positions
- · When times, schedules, dates etc
- Why reasons, goals, intentions
- How actions taken/steps, events leading to the problem





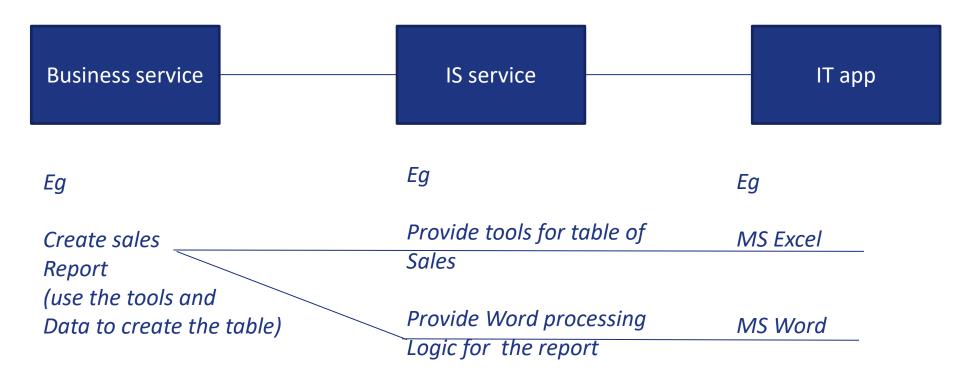


## Concepts and Principles of the BTC ©IRC



### Enterprise Architecture – a model of the business

We can approximate the key relationships between business and information systems



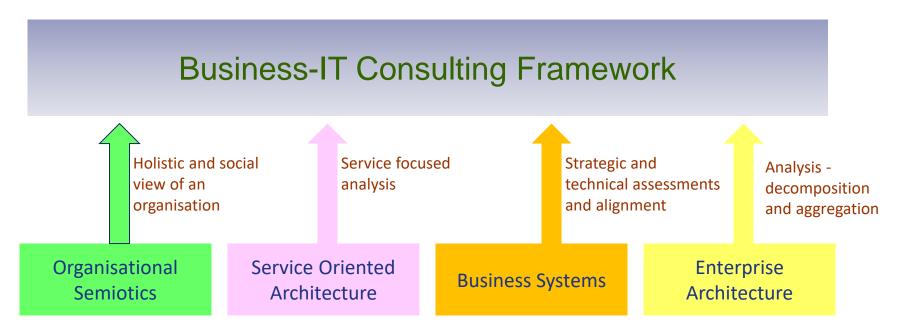
...But how do we tell how good they are?



# The Fundamentals of Business-IT Consulting

But the relationships between them will depend on formal, technical social views of how the business service is supported by the information system service and the underlying application [VAM]

so we need to consider underpinning theories and methodologies



## Basic concepts of BTC (cont.)

- Business Services
  - Scope of Business Capabilities how the Organisation is able to implement the Strategy to deliver values to their customers
  - Business Capabilities are accomplished through Business Processes which formulate a flow of events how a business service is carried out
  - Within the Business Capabilities, the right Actors with their Roles and resources are engaged in the Business Processes
  - The Business Services is supported by computing resources, i.e. IT Applications

## Basic Concepts of BTC (cont.)

- IT Services
  - Constitute IT Application(s), the corresponding technical Components and IT Infrastructure
  - A technical component
    - a software package, or a module that encapsulates a set of related functions which process data to produce the desired benefit
  - IT infrastructure refers to
    - hardware (server, devices, equipment)
    - operating systems (Microsoft, Linux)
    - data storage
    - networking
    - security (firewall)



## Basic Concepts of BTC (cont.)

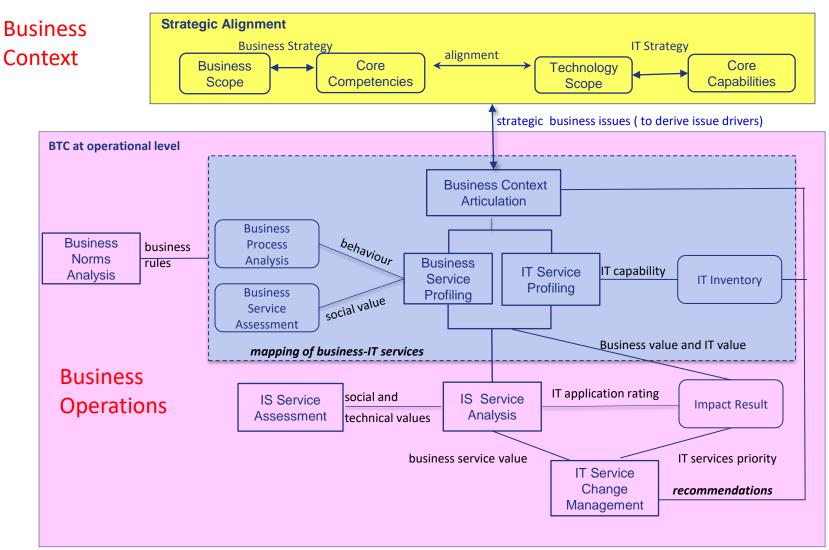
#### IS Services

- Mapping the Business Service and the IT Service to configure them to operationally produce the tangible values (e.g. products and services) and intangible values (e.g. reputation, culture, and ethics) in the Organisation
- This alignment aims for "the business value of IT investments"

### Service Quality

- Ensuring the strategic-fit measures that the IS Services delivery the customer's expectation within the organisational capabilities
- Capable of self-managing to support the responses by the business service changes and/or IT services changes

## Consulting Techniques of BTC



## TUTORIAL 6.1 Part 1: Tasks and Reading

- Read the BonzoPharma Case Study
- Review key papers
- Henderson, J. C. & Venkatraman, N. 1993. Strategic alignment:
   Leveraging information technology for transforming organizations. IBM systems journal, 32, 4-16.
- Sun, L., Liu, K., Jambari, D. I. & Michell, V. 2014. Evaluating business value of IT towards optimisation of the application portfolio. Enterprise Information Systems, 1-22.

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## **Business Context Articulation (BCA)**

- Business Context Articulation (BCA)
  - Carry forward "strategic business issues" for a focused articulation of business operations
  - Utilises work done and strategic models in lectures 3/4
  - Based on the identified "issue drivers"
    - To examine causes for the issues



## Technique of Business Context Articulation (BCA)

	Business Conte	ext Articulation		
Organisation name:		Date:	Version No:	
Organisational aspects	Document reference	Key factors	Issue statement (Ist) / Issue metric (Im)	
Description of organisation				
Vision and mission				
Business strategy				
Business drivers				
Core competences				
Principles (code of practice)			ISSUE	
Relevant historical facts			STATEMENTS	
Business structure			STATEIVIENTS	
Organisational chart			1	
Strategic units			1	
External stakeholders			]	
Financial summary			1	
Statement of cash flows				
Income statement				
Statement of financial position				
Issue drivers (Idr)	Descri	ption	Notes	
variable cost issue	the variable cost (business operations + IT resources) is x% higher than last 3 years.			
ROI issue	the return based on capital ( invested need to be examine			
Recommendations to IT Application	RECOMMENDATION	S OF WHAT TO		
	(i) OUTSOURCE B) R	EPLACE C) REMO	OVE D) REDEVELOP E) RETA	





# Business Context Articulation (BCA) (cont.)

- Business strategy
  - Identification of a long term plan to meet long term business objectives
  - deal with external forces from the market place

#### Business drivers

 represents an internal business force which influences the success of a business strategy

#### Core competences

- result of a specific unique set of skills or production techniques that deliver value to the customer
- should not be easy for competitors to imitate
- can be leveraged to many products and markets
- must contribute to consumer's benefits



# Articulation (BCA) (cont.)

#### **Financial Health**

- Statement of cash flows
  - reports on a company's cash flow activities, particularly its operating, investing and financing activities
- Income statement
  - how the revenue (money received from the sale of products and services before expenses are taken out, also known as the "top line") is transformed into the net income (the result after all revenues and expenses have been accounted for, also known as the "bottom line")
- Statement of financial position
  - balance sheet reporting company's assets, liabilities, and ownership equity at a given point in time



# Business Context Articulation (BCA) (cont.)

- Issue Statement
  - Derived from the 'problems' facing the business that is the focus of The analysis
  - from the business or operational environment
  - Define a target problem of a consulting project
  - Deliberated by the business and stakeholders
- Issue Metric
  - A measurement for the issue statement, e.g. costs of resources
- Issue Drivers
  - Generated from the issue statement and issue metric, e.g. business drivers,
     IT drivers



## Example of Business Context Articulation BCA

#### **Council Example**

Business Context Articulation					
Organisation name: Date:		Date:	Version No:		
Organisational aspects	Document reference	Key factors	Issue statement (Ist) / Issue metric (Im)		
Description of organisation	Regional Council				
Vision and mission	The best value for money for residents				
Business strategy	reduce costs and waste				
Business drivers	Government cuts				
Core competences	housing, waste, green spaces mgmt				
Principles (code of practice)	the citizen is right		Issue statement: The council business		
Relevant historical facts	incorporated in 1327		operation is currently instructed by the central government to cut £ 3 million of IT		
Business structure			spending within three years		
Organisational chart			Sponding Within theo yours		
Strategic units	housing, green spaces, waster and municipal		Issue metric: costs of the IT resources		
External stakeholders	citizen, government				
Financial summary					
Statement of cash flows	see statement 1				
Income statement	see statement 2				
Statement of financial position	see statement 3				
Issue drivers ( <i>Idr</i> )	Description		Notes		
The high cost of IT resource management	The high cost indicates the poor management of the IT resources in the business operation				
The value of IT resources	The value of the IT resources indicates the fit of the requirements for automation by the business operation				
Recommendations to IT Application					

## Business Service Profiling (BSP)

The process and system users know their tools best as they to use them to do their work!

- But we need a 'repeatable', systematic method based on best practice => theory

Business Service

What is the relative value of the Business Service to the

business? (BSSV)

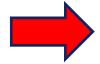


What theories of criticality? (Henderson and Ventrakaman, 1993))

What theories of value adding? (value analysis)

What theories of how services serve the business? (Systems theory etc, Hall)

How well do you think (perception) the Business Service performs? (PBSP)



Theories of systemised Voting (Pugh)



(PBSP)
Interviews and
Multivoting
matrix

(BSSV)

Scale of

importance Values 1-5

[VAM]



## Business Service Profiling (BSP)

- Purpose of BSP
  - To break down the business operations in to business services
  - To describe a business service and its position within an organisation
  - To assess both strategic value of the business service to clients and the perceived (PBSP) value of each business service contributing to the organisation's strategic goals from business and social perspective
  - To *identify* the IT applications embedded in each business service and their relationship to each business service
  - To identify the business processes and behaviours (norms) to maintain its competitive advantage
- BSP is produced by three analyses:
  - Business Service Assessment (BSA)
  - Business Process Analysis (BPA)
  - Business Norm Analysis (BNA)



# Technique of Business Service Profiling (BSP)

	Bus	siness Service	e Profiling		
Business service name:			Date:	Version no:	
Business service goal:			Business norms:		
Business service des	cription:				
Issue drivers ( <i>Idr</i> ):					
Business capability	Business service strategic value (BSSV):				
	Perceived business service performance (PBSP):				
	Business process models:				
	Stakeholder	Actor	Role	Responsibility	
IS Service ( <i>ISC</i> )		IS criticality to business service (ISCB)			

## Business Norms Analysis → Business Service Profiling (BSP)

- Purpose of Business Norms Analysis
  - to identify norms governing the dynamics of the business domain
    - o organisational level
    - business service level
    - o business process level
  - to assert business rules and influence the organisations behaviour and decisions towards their IT strategy
- Business Norms Analysis
  - For each context or situation, identify relevant norms
  - Business norm specifications:

Whenever < context>

If <state>

Then <agent>

Is <deontic operator>

To <action>

Are the norms aligned with business strategy?

#### **Deontic operators:**

Should/must: obliged

Must not: prohibited

May: permitted



## Business Norms Analysis → Business Service Profiling (BSP) (cont.)

#### **Business Norms Specification**

- Whenever <context>
   the circumstance in which the rule should be applied
- If <state>

   complements the condition statement considering the particular time.
   It comprises the starting point of the rule, i.e. the trigger for the action
- Then <agent>
   those that are going to perform the action. Agents are also those who take responsibilities of their own actions or the actions of others
- Is <deontic operator>
   establishes if the action 'must', 'may' or 'must not' be performed
- To <action>
   achievement that will be performed

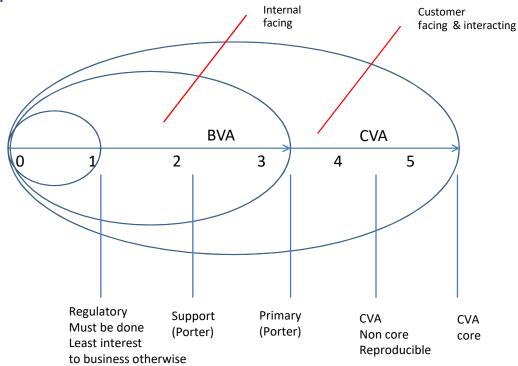
## Business Service Assessment → Business Service Profiling (BSP)

	Bus	iness Service	Profiling		
Business service name:		Date:	Version	no:	
Business service goal:			Business norms:		
Business service des	cription:				
Issue drivers (Idr):					
	Business service strategic value (BSSV): 4				
	Perceived business service performance ( <i>PBSP</i> ): 1.92				
	Business process models:				
	Stakeholder	Actor	Role	Res	Business Service Assessment
		S criticality	to business servic	o (ISCR)	
is service (130)		13 Chilcality	to publiless selvio	e (ISOD)	

#### Business Service Assessment in Business Service Profiling (BSP)

#### **Description of BSSV**

- Business service strategic value
  - adopted from Business Service Value Model (BSVM)
  - Represents value or worth of the service to the business and to the customer



#### Business Service Assessment in Business Service Profiling (BSP)

- Business service strategic value (BSSV):
  - Position (1-5) of a business service in the organisation
  - IT REPRESENTS THE IMPORTANCE OF THE BUSINESS SERVICE STRATEGICALLY AND TO CLIENTS [VAM]
  - The scale does not represent the performance of the business service

Business Servi	ce		Business service strategic value	Example of a local council
Customer = citicouncil busines		l council customers in non profit		Housing service Customer service
		customer_value_adding.core	5	Community service
	direct	customer_value_adding.non_core	4	Business Management service
Non regulatory		business_value_adding	3	HR, Finance, IT, Business Management
		business_value_adding	2	Corporate governance
	indirect	Necessary but non_business_value_adding	1	*eg regulatory in profit making businesses (adapted from Martin, 2000)

Eg Iphone Business
BSSV of accounts? BSSV of tax mgmt design? BSSV of?



#### **BSA OVERVIEW**

#### Business Service Assessment in Business Service Profiling (BSP)

(cont.)

- Perceived business service performance (PBSP):
  - Derived from the business service assessment questionnaire
  - To assess stakeholder's view on the relative social values of the business service
  - Based on the Pugh Matrix

Cam	des Nome.		Date:		Version No:	
ness Serv	vice Name:		{Actor, Role} <sub>1</sub>	{Actor, Role} <sub>2</sub>		{Actor, Role) <sub>m</sub>
No.	Criteria	cw	0.00	0.00	0.00	0.00
1	Contribution to the business niche	0.00				
2	Ability of know-how	C/W 00	Cell V	Uj j=1	ARWi	
3	Service timeliness	0.00	1	Answer a	s below in	each Cel
4	Communication protocols	0.00		711134461 0.	DCIOVV II	Caci CC
5	Efficiency of production	0.00		The rating scale	follows the Val	uation
6	Contribution to end consumer's expectation	0.00		Framing scale:		
7	Adequate knowledge/skills acquired	0.00		-3 - Extremely n		
8	Risk to operations	0.00		-2 - Strongly no		
9	Risk affecting the business network	0.00		-1 - mildly not sa		
10	Risk impacting on business sustainbility	0.00		<ul><li>0 - No opinion/n</li><li>1 - Satisfied</li></ul>	lot satisfied	
11	Security risk	0.00		2 - Strongly sati	sfied	
12	Business adaptability/leveragability	0.00		3 - Extremely sa		

#### **BSA OVERVIEW**

### Business Service Assessment in Business Service Profiling (BSP) (cont.)

- Perceived business service performance (PBSP):
  - Derived from the business service assessment technique (questionnaire)

	\/	Λ	N /	1P	
$\overline{}$	Λ.	н	IV	יאו	

	LARIVIFEL		Date:		Version No:		
Business Service Name: Street Scene & Highways (CMTY department)			Les Haines, Actor	Paul Stewarts, Facilitator	Julie Jones, Actor	Kif Paddon, Actor	
No.	Criteria	arw	0.15	0.55	0.15	0.15	
110.	Ontona	CW	0.10	0.00	0.10	0.10	
1	Contribution to the business niche	0.10	2.00	3.00	3.00	2.00	
2	Ability of know-how	0.10	3.00	-1.00	3.00	3.00	
3	Service timeliness	0.10	3.00	2.00	2.00	3.00	
4	Communication protocols	0.10	2.00	1.00	3.00	3.00	
5	Efficiency of production	0.10	1.00	3.00	1.00	2.00	
6	Contribution to end consumer's expectation	0.10	2.00	3.00	3.00	3.00	
7	Adequate knowledge/skills acquired	0.10	-3.00	3.00	1.00	2.00	
8	Risk to operations	0.10	-2.00	2.00	3.00	1.00	
9	Risk affecting the business network	0.05	1.00	3.00	3.00	3.00	
10	Risk impacting on business sustainbility	0.05	3.00	-2.00	3.00	3.00	
11	Security risk	0.05	3.00	3.00	3.00	3.00	
12	Business adaptability/leveragability	0.05	0.00	3.00	3.00	3.00	
	$VU_i = \sum_{j=1}^{12} VU_i C_j * cw_j$		1.15	1.95	2.5	2.5	
Bus	iness service perceived performance value: $V = \sum_{i=1}^{m} V_i$	$U_{i}*arw_{i}$	1.995		•		

THIS VALUE = 0.1725\*.15 + 1.0725\*0.55+ 0.375\*0.15 + 0.375\*0.15



# BSA – first 6 components Business Service Assessment in Business Service Profiling (BSP)

No	Criteria Ci	To assess whether the business service
1	Contribution to the business niche	contributes to the organisation
2	Ability/know-how	has clear objectives
3	Service timeliness	is the service provided in the agreed timelines?
4	Communication protocols	has the service an open service feedback mechanism?
5	Efficiency of production	is the service efficient in providing the best service to customer?
6	Contribution to end consumer's expectation	fulfils customer's expectation

Dusiness Oct vice / (33c33) Herit in Dusiness

## Service Profiling (BSP) (cont.)

No	Criteria Ci	To assess whether the business service
7	Adequate knowledge/skills acquired	provides opportunities to the associated stakeholders to enhance their knowledge and skills in the business
8	Risk to operations	possesses risks in its operations
9	Risk affecting the business network	failure risk impact to other business service associated in the business network
10	Risk impacting on business sustainability	Is the service able to sustain to risk of change in the business environment
11	Security risk	Is the security risk of the service, e.g. information security good or bad?
12	Business adaptability/leveragability	is the service adaptable to the changes in the business environment



### Business Service Assessment in Business Service Profiling (BSP) (cont.)

#### BUT!

- Different criteria will vary in relative importance =>
- Different opinions have different value =>

#### SO WE MULTIPLY BY DIFFERENT VALUES ACCORDING TO THEIR WEIGHT/IMPORTANCE

- Criteria weight (cw)
  - value assigned by the consultant for each of the criteria's significance towards the business service
  - the sum of all the weights will be 1
- Actor's role weight (arw)
  - value assigned by each stakeholder to measure the business service against each criteria
  - the sum of the all weights will be 1



#### Business Service Assessment in Business Service Profiling (BSP) (cont.)

- The combination of BSSV (scale1-5) and PBSP (Opinion) provide a holistic view on both the management of business service and its performance
  - e.g.

a business service with high BSSV but low PBSP suggests that this business service is critical to the organisation, however it is not being managed to a satisfactory level

- $\Rightarrow$  Change is needed
- ⇒ We can change the people, but IS is more difficult and often now more important

So how does IS relate to the service and what can we change in IS?

#### Business Service Assessment in Business Service Profiling (BSP) (cont.)

- IS Service (ISC)
  - IT enabled services that supports the business service
- IS criticality to business service (ISCB)
- le general criticality of the systems <u>service in terms of its support</u>
   <u>Of the business</u>
  - A scale of importance (1-5) of the IS capability to the business service
    - 1: Not important at all
    - 2: Of little importance
    - 3: Moderately important
    - 4: Important
    - 5: Very important
  - The value is obtained from interviewing the senior IT management stakeholders such as the Chief Technology Officer (CTO)



## Business Process Analysis → Business Service Profiling (BSP)

- Purpose of Business Process Analysis
  - Focus on a Business Service
    - o produce the "as-is" business process model
    - stakeholders, their participation in the activities, and their responsibility
    - information consumption and constraints by the activities in the flow of process
  - Assess if the business norms comply with the organisational policy and procedures
  - Interface between the business process models executed by the different Business Service(s)
    - the results from other business services as the input (event) to trigger this business process OR to continue this business process
- Methods for business process modelling
  - BPMN, UML, others



### Profiling (BSP)

	•	Business Service	Profiling				
Business service name: House	sing Service		Date: 03/05/2010		ersion no: 1		
Business service goal: To provide the council comm	agement functions	Business norms: BN 10.1; BN 20.1; I					
Business service description: The housing management co		g, private housing,	and land and premises	s within the j	urisdiction of the council		
Issue drivers ( <i>Idr</i> ): The high cost of IT resources Microsoft platform	management; The IT re	esources inadequat	ely add business valu	e to satisfy o	citizens; IT applications on		
	Business service strate	egic value ( <i>BSSV</i> ):	3 BSSV?				
	Perceived business service performance ( <i>PBSP</i> ): 1.31 PBSP?						
	Business process (model): home ownership process; adapting home process; leasing process						
		Actor	Role		Responsibility		
		Mgr 1, Mgr 2	Service manager	_	e housing services provision, the business strategies		
Business capability		KW1	Knowledge worker	Process th	e council housing placemen		
	Stakeholder	KW2	Knowledge worker	Handle res	sidents in adapting the me		
		KW3	Knowledge worker	Process the management	e private housing ownership ent		
		KW4	Knowledge worker	Handle the manageme	e private housing leasing ent		
		KW5	Knowledge worker	Handle the manageme	e land and premises ent		
IS Service (IS)		ISS criticality to	business service (ISC	CB)			
Council housing management	nt	5	ISCD2				
Case management		1	1 ISCB!				

#### An Application of Business Service Assessment → Business Service Profiling (BSP)

perceived performance (PBSP)

vote	X
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	D : 0 : 4			$\perp$	,					
	Business Service Asse	essment: Pe	erceiv	ed p	erformance		D	4/0045		
				+			Date: 29/0	4/2015	Version N	o: 1
Business Service Name: Housing Service			Mge Sen man	ice	Mger2: Service manager	. •	KW2: knowledg e worker		KW4: knowledg e worker	
		arw	. /							
No.	Criteria	cw	0/3	30	0.20	0.10	0.10	0.10	0.10	0.10
1	Contribution to the business niche	0.17	3.0	00	3.00	3.00	3.00	3.00	3.00	3.00
2	Ability of know-how	0.10	2.0	00	2.00	2.00	2.00	2.00	2.00	2.00
3	Service timeliness	0.10	1.0	00	1.00	0.00	-1.00	-1.00	-1.00	0.00
4	Communication protocols	0.10	2.0	00	2.00	2.00	2.00	1.00	1.00	1.00
5	Efficiency of production	0.15	1.0	00	1.00	-1.00	-1.00	-1.00	-1.00	-1.00
6	Contribution to end consumer's expectation	0.14	2.0	00	2.00	1.00	1.00	1.00	1.00	1.00
7	Adequate knowledge/skills acquired	0.05	1.0	00	1.00	-1.00	-1.00	-1.00	-1.00	-1.00
8	Risk to operations	0.02	2.0	00	2.00	1.00	1.00	1.00	1.00	1.00
9	Risk affecting the business network	0.10	1.0	00	1.00	-1.00	-1.00	-1.00	-1.00	-1.00
10	Risk impacting on business sustainability	0.02	2.0	00	2.00	2.00	2.00	2.00	2.00	2.00
11	Security risk	0.02	2.0	00	2.00	2.00	2.00	2.00	2.00	2.00
12	Business adaptability/leveragability	0.03	3.0	00	3.00	3.00	3.00	3.00	3.00	3.00
	$VU_i = \sum_{j=1}^{12} VU_i C_j$		- 1.8	30	1.80	0.94	0.84	0.74	0.74	0.84
<b>-4</b>	$V = \sum_{i=1}^{m} V U_i * ar$	Ms.	0.5	54	0.36	0.09	0.08	0.07	0.07	0.08
	es X service perceived performance value:			1 2	0					

Sum

crite in weights cw

Eg sum 0.17\*3 +

0.10\*2 etc

1.8\*0.3

THIS VALUE = 0.54 + 0.36 + 0.09 + 0.08 + 0.07 + 0.07 + 0.08

#### Exercise Tutorial 6.2

As a business technology consultant, you are required to establish a holistic view of the client's organisation:

PHARMACEUTICAL COMPANY - BONZO PHARMA 2

#### **BONZO2 EXERCISE 1**

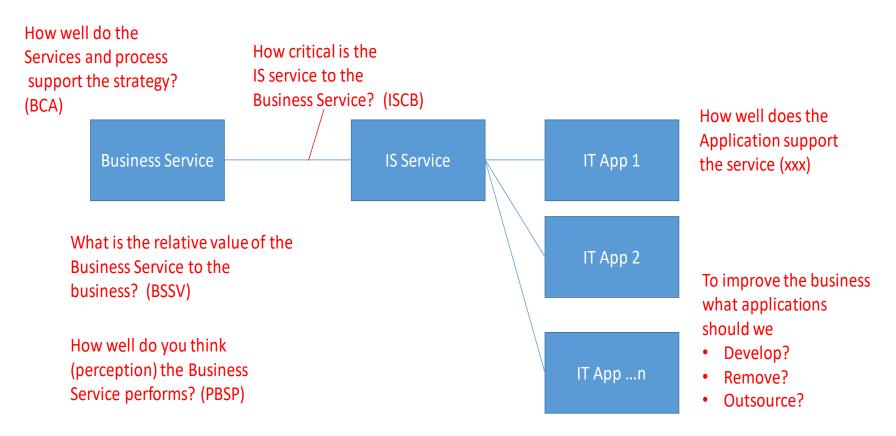
- 1. Conduct analysis for Business Context Articulation BCA
- 2. Calculate BSP for the services Clinical Trials Mgmt and Data Capture and Processing
- 3. Discuss the relationship between *BSSV* and *PBSP* and provide plausible reasons/decisions for the business service to be improved and why this may be the case



# Part 3: Information Service and Information Application

# Understanding the IS Service and Applications

Decisions about the way the services and it applications are treated eg improved, removed will depend on reasoning about:

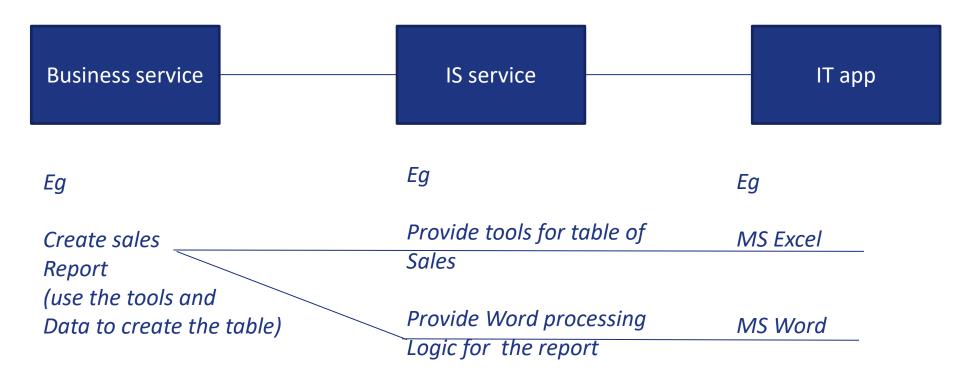


...The process and system users know best as they have to use them to do their work! [VAM]



#### Enterprise Architecture – a model of the business

- recap We can approximate the key relationships between business and information systems



...But how do we tell how good they are?



#### IT Service Profiling (ITSP)

- Purpose of ITSP
  - To define the computing resources (i.e. IT application and IT system requirements) consumed by the organisation and their relationships to the business services
  - IT services are business-independent technical clusters, not necessarily situated in business services, but in IT function defined groups
  - The details of each IT service can be identified through an IT Inventory (ITInv)

# Information Service relationship to IT applications

IT Service Profiling										
IT service name: Date: Version no.:										
IT service description:	IT service description:									
IT service features and benef	fits:									
IT Application name	IT systems	IT systems requirements								

# Technique of IT Service Profiling (ITSP) (cont.)

- IT service features and benefits
  - Details of the required technical components and IT infrastructure (server, networking, data storage) based upon how the IT service should function
- IT service cost
  - Total of acquisition and operating costs of each of these computing elements within the IT service



#### IT Inventory → IT Service Profiling (ITSP)

- Purpose of IT Inventory
  - central repository of IT services items within an organisation
  - capturing key attributes, such as the technical capability, and financial details of each item breakdown from the IT services
  - provide the information for an IT Service and its application relationships

	IT Inventory											
Item	ltono nono	lt a mar to mar a	Item status	Customisation Status (CS)	IT features and benefits	Cost drivers			In-stock	Nata		
No.	Item name	Item type				Acquisition cost	Cost to maintenance	Cost to change	date	Note		

1		History of Decisions on IT Applications										
n	No.	Item No.	Decision (remain/redevelop/replace/outsource/ remove)	Date of decision	IT service change management version no	Note						

#### IT Inventory → IT Service Profiling (ITSP

- Item type: application, infrastructure or technical component
- IT status: in use or obsolete
- Customisation status: bespoke, off-the-shelf, open source
- IT features and benefits
  - Technical functionality
  - The standard description from the vendor
- Cost drivers
  - pricing model of the particular item
    - Acquisition cost: up-front (purchase) cost
    - Cost to maintenance: maintenance cost
    - Cost to change: implementation cost (to be used for Change Management in BTC solution)

	IT Inventory									
Item	Item name	Item type	Item status	Customisation Status (CS)	IT features and benefits	Cost drivers			In-stock	Noto
No.						Acquisition cost	Cost to maintenance	Cost to change	date	Note

#### Example of IT Service Profiling (ITSP)

IT Service Profiling							
IT service name: Customer Relations	Date: 03/05/2010	Version no.: 1.0					

IT service description: A service for managing organisation's current and future customers.

#### IT service features and benefits:

Collaborative CRM: to directly communicate with customers without inclusion of any sales or service representatives.

Analytical CRM: to investigate customer data for a vast range of reasons and functions.

Operational CRM: deals with providing complete front office support to sales, marketing and similar services.

IT Application name	IT systems requirements	IT service cost
MS Dynamics CRM	Windows operating system Internet Explorer 8 Windows Server A Windows Server Active Directory infrastructure An Internet Information Services Website SQL Server 2008 SQL Server 2008 Reporting Services SharePoint Server (required for document management) Claims-based security token service (required for Internet-facing deployments)	
Oracle CRM	Internet Explorer 8 Microsoft Windows XP SP3 Super VGA	

## Example of IT Inventory → IT Service Profiling (ITSP)

	IT Inventory									
No.	Item name	Item type	Item status	Customisation Status (CS) (Bsk/OffS/OpS)	Status (CS)		Cost drivers  Acquisition Cost to Cost to			Note
1	Internet Explorer 8	Application	In use	Bsk	Smart address bar Tab groups Redesign new tab page Reopen last browsing session	cost	maintenance	change		
2	SQL Server 2008	Infrastructure	In use	Bsk	High scalability High availability Replication Security High manageability Management tool available Programmability Spatial and location services Integration services Data warehouse creation					
3	SQL Server 2008 Reporting Services	Infrastructure	In user	Bsk	Report authoring Report processing & rendering Service architecture and tools Report programmability					

#### **Tutorial 6.3**

#### Bonzo 2 Exercise 2

continue the analysis for IT Service Profiling

Generate ITSP and an IT inventory from the data