

Where business comes to life

**INMR86**  
**Business Technology Consulting**  
**Nodule 7**

**The BTC Framework: part 2**

Dr V Michell



Where business comes to life

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**Business Technology Consulting**  
**Nodule 7**  
**The BTC Framework:**  
**7.1 Information Service Analysis**

Dr V Michell

# IS Service Analysis (ISA)

- Purpose of ISA
  - use the **IS Criticality to Business Service (ISCB)** documented in the business service profiling (BSP), and
  - Mapping mechanism between business services and IT applications
  - To derive the **IT application rating** that decides what changes to be made to a particular IT application
- An IS service is measured by a set of tangible values
  - costs
  - benefits

# Technique of IS Service Analysis (ISA)

IS Services Analysis									
IS service name:		Date:				Version no:			
IS service description:									
Issue driver(s):									
Business Indicators		IT Application Indicators							IT application rating (R_Net_b_c)
				benefits					
Business service name (i)	IS service (l)	IT Application name (j)	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)	



# Technique of IS Service Analysis (ISA) (cont.)

- IT Application rating is computed by
  - Cost-benefit analysis for IT applications in supporting the business

$$CBA_{i,j,k} = \text{relative\_Benefit}_{i,j,k} - \text{relative\_Cost}_i = \left( \sum_{j,k} (ISCB_{j,k}, UPV_{j,k}, ITU_{j,k}, FGV_{j,k}) + ITQ_i \right) - \sum_i (OTC_i, PUC_i)$$

where

*relative\_Benefit*:

$ISCB_{j,k}$ : the criticality value of  $IS_j$  which incorporates  $ITA_i$  to  $BS_k$

$UPV_{j,k}$ : user perceived value of  $ITA_i$  to support work performance

$ITU_{j,k}$ :  $ITA_i$  usage (frequent, average, dormant)

$ITQ_i$ :  $ITA_i$  technical quality

$FGV_{j,k}$ : financial gain by using  $ITA_i$  to increase  $BS_k$ 's value

*relative\_Cost*:

$OTC_i$ : total operation cost of  $ITA_i$

$PUC_i$ : per-usage cost of  $ITA_i$

# IS Service Assessment → IS Service Analysis (ISA)

IS Services Analysis							
IS service name:		Date:			Version no:		
IS service description:							
Issue driver(s):							
Business Indicators	IT Application Indicators					IT application rating (R_Net_b_c)	
		benefits					
	on	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)

**We want to calculate ISA as the overall IT application rating made up of**

- ITA criticality to IS capability (ISCB)
- ITA technical quality (ITQ)
- ITA usage (ITU)
- ITA financial gains (FGV)
- ITA user perception (UPV)

**IS Service Assessment**

# IS Service Assessment → IS Service Analysis (ISA)

ITA criticality to IS capability (ISCB)

IS Services Analysis									
IS service name:			Date:			Version no:			
IS service description:									
Issue driver(s):									
Business Indicators		IT Application Indicators							IT application rating (R_Net_b_c)
			benefits						
Business service name (i)	IS service (l)	IT Application name (j)	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)	



Refer to the ISCB value in BSP

# IS Service Assessment → IS Service Analysis (ISA)

- ITA technical quality (ITQ)

IS Services Analysis									
IS service name:		Date:						Version no:	
IS service description:									
Issue driver(s):									
Business Indicators		IT Application Indicators							IT application rating (R_Net_b_c)
				benefits					
Business service name (i)	IS service (l)	IT Application name (j)	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)	

ITA Technical Quality



# IS Service Assessment → IS Service Analysis (ISA)

## - ITA technical quality (ITQ)

IT Application Quality Assessment		
IT application name:	Date:	Version no.:
Criteria	weight	rating
Functionality		
Adaptability		
Interoperability		
Extensibility		
Maintainability		
Scalability		
Performance		
Reliability		
Security		
Ease of Use		
Quality rate: <i>(sum of rating*weight)</i>		

Note:

This assessment is to be done by the IT managers/personnel that has the authority and understanding of the technical aspects of the IT applications to support the business service.

Sum of weight = 1

Rating is on a scale of 1-5

1: Not important at all

2: Of little importance

3: Moderately important

4: Important

5: Very important

# IS Service Assessment → IS Service Analysis (ISA)

## - ITA technical quality (ITQ)

IT Application Quality Assessment		
IT application name:	Date:	Version no.:
Criteria	weight	rating
Functionality		
Adaptability		
Interoperability		
Extensibility		
Maintainability		
Scalability		
Performance		
Reliability		
Security		
Ease of Use		
Quality rate: <i>(sum of rating*weight)</i>		

# IS Service Assessment → IS Service Analysis (ISA)

- ITA technical quality (ITQ) (cont.)

Criteria	To assess whether the IT application ..
Functionality	Can it provide the functionalities which meet the needs of the business service?
Adaptability	is it flexible in reacting to the changes made in the organisation?
Interoperability	is it able to integrate with other services?
Extensibility	is it able to expand or enhance the existing functionalities based on the new business requirements?
Maintainability	is it able to sustain the changes in the requirements and functional specifications?



# IS Service Assessment → IS Service Analysis (ISA)

- ITA technical quality (ITQ) (cont.)

Criteria	To assess whether the IT application ..
Scalability	is it able to handle exponential increase of task in a stable manner?
Performance	is able to respond quickly?
Reliability	Is it able to maintain high performance level under any conditions including the unexpected circumstances?
Security	Is it secure enough to use?
Ease of Use	Is it easy to use?

# IS Service Assessment → IS Service Analysis (ISA)

- ITA Usage (ITU)

IS Services Analysis									
IS service name:			Date:				Version no:		
IS service description:									
Issue driver(s):									
Business Indicators		IT Application Indicators							IT application rating (R_Net_b_c)
				benefits					
Business service name (i)	IS service (l)	IT Application name (j)	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)	

Technique of ITA Usage

# IS Service Assessment → IS Service Analysis (ISA)

- ITA Usage (ITU)

## IT application usage analysis

IT Application name: Citrix OHMS		ISC:	Business service:	Date:	Version no.:
Date	start time	stop time	idle time	peak usage	No of users
IT usage frequency:					

### Note:

IT personnel to derive a suitable metric for IT usage frequency (e.g. the amount of users using the application)

Such that:

Higher value of usage = higher importance of the IT service to the business

*Eg hours processing/total hours in day on a scale of 1-5*



# IS Service Assessment → IS Service Analysis (ISA)

## - ITA Financial Gains

IS Services Analysis									
IS service name:		Date:				Version no:			
IS service description:									
Issue driver(s):									
Business Indicators		IT Application Indicators							IT application rating (R_Net_b_c)
				benefits					
Business service name (i)	IS requirement (I)	IT Application name (j)	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)	



# IS Service Assessment → IS Service Analysis (ISA)

## - ITA Financial Gains

Financial Gains			
IT Application name:		Date:	Version no:
ISC:			
Tangible benefits (in money term)	factor weight	target (%)	metric value
Increase profit margin (earned value for the year to date)			
Reduce time for completing tasks (e.g. hours saved) per employee			
Reduce number of employees towards labour cost			
Increase velocity (increase speed and volume of the business functions performance in a defined period of time)			
Increase innovation for business growth (able to differentiate products/services)			
Use value - financial gains ( <i>sum of metric value times factor weight</i> )			

Note: Sum of factor weight = 1

Target (%) = The percentage of achievement based on a measured target (the measurement is determined by the organisation)

Metric value = {0, 0.5, 1}

Where 0 = the target is not achieved at all, 0.5 = somewhere achieved the target, 1 = the target is achieved

# IS Service Assessment → IS Service Analysis (ISA)

## - ITA Financial Gains example

Financial Gains			
IT Application name: nuclear fusion AI 0.6control app		Date:	Version no:
ISC:			
Tangible benefits (in money term)	factor weight	target (%)	metric value
Increase profit margin (earned value for the year to date)	0.4	10% of profit	0.5
Reduce time for completing tasks (e.g. hours saved) per employee	0.1	5%	1
Reduce number of employees towards labour cost	0.1	10%	1
Increase velocity (increase speed and volume of the business functions performance in a defined period of time)	0.2	n/a	0
Increase innovation for business growth (able to differentiate products/services)	0.2	n/a	0
Use value - financial gains ( <i>sum of metric value times factor weight</i> )			0.6

Note: Sum of factor weight = 1

Target (%) = The percentage of achievement based on a measured target (the measurement is determined by the organisation)

Metric value = {0, 0.5, 1}

Where 0 = the target is not achieved at all, 0.5 = somewhere achieved the target, 1 = the target is achieved



# IS Service Assessment → IS Service Analysis (ISA)

## - ITA User Perception

- gather a collective view of the IT application users on perceived impact of IT applications to support their jobs
- select the stakeholders from the list in the business service profiling (BSP)

IS Services Analysis									
IS service name:		Date:				Version no:			
IS service description:									
Issue driver(s):									
Business Indicators		IT Application Indicators							IT application rating (R_Net_b_c)
				benefits					
Business service name (i)	IS service (l)	IT Application name (j)	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)	

# IS Service Assessment → IS Service Analysis (ISA)

## - ITA User Perception

User perceived IT criticality to IS service							
IT application name: Citrix OHMS						Date:	Version No:
ISC:							
Total no. of users:		Total no. of users who use the IT application:		IT application user <sub>1</sub>	IT application user <sub>2</sub>	...	IT application user
No.	Assessment criteria	sample questions	IT application user weight (uw) Assessment criteria weight (acw)	0.00	0.00	0.00	0.00
1	Reduce errors in the responsible work	How satisfied are you at performing your job correctly from using this IT application?	0.00				
2	Increase efficiency on the tasks performance and fulfilment	How satisfied are you at getting better at doing your job from using this IT application?	0.00				
3	Provide flexibility in working style/mode	How satisfied are you for your control over the way you do your job to bring the best outcome by using this IT application?	0.00				
4	Assist better and faster decision making in the job	How satisfied are you to the quality of your decisions made using this IT application?	0.00				
5	Support self-learning for problem solving on the job	How satisfied are you with the ability to learn for problem solving in your job by using this IT application?	0.00				
6	Improve communication with other people in carrying out the job	How satisfied are you with the ability to interact with other jobs to perform your job by using this IT application?	0.00				
7	Promote motivation to achieve excellent job performance	How satisfied are you with your level of motivation to be excellent in your job by using this IT application?	0.00				
8	Increase personal satisfaction in achieving the expected quality output	How satisfied are you personally in achieving the expected quality standard of your job by using this IT application?	0.00				
				$VU_i = \sum_{j=1}^{10} VU_i C_j * acw_j$			
Use value - User perception:				$V = \sum_{i=1}^{10} VU_i * uw_i$			

The rating scale follows the Valuation Framing scale: (-3 to 3)  
 -3 - Extremely not satisfied  
 -2 - Strongly not satisfied  
 -1 - mildly not satisfied  
 0 - No opinion/not satisfied  
 1 - Satisfied  
 2 - Strongly satisfied  
 3 - Extremely satisfied

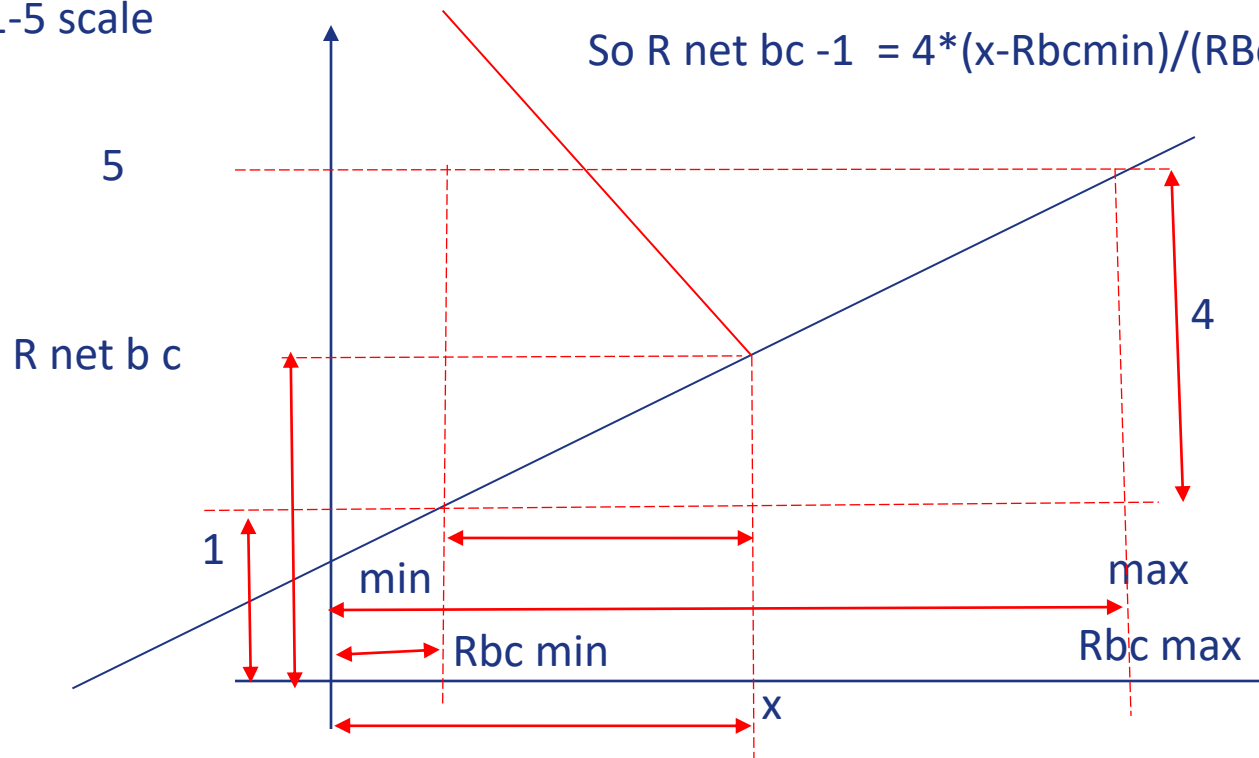
# Impact Result / IS Service Analysis (ISA) (cont.)

## R net b c

Is the relative value of R b c over a 5 point scale (where 1 is min)

by similar triangles  $R_{net\ bc} - 1 / (x - R_{bcmin}) = f(x) = 4 / (R_{bcmax} - R_{bcmin})$

1-5 scale



ie at  $x = R_{netbc} = 1$  at  $x = R_{bcmin}$

So  $R_{netbc} = f(x) = [4 * (x - \text{lowest}) / (\text{highest} - \text{lowest})] + 1$



# Technique of IS Service Analysis (ISA) (cont.)

- Values for those columns that are not in the range of 1-5 will be scaled to 1 - 5

To scale them use:

Value to scale =  $x$

$$f(x) = [4 * (x - \text{lowest}) / (\text{highest} - \text{lowest})] + 1$$

# Analysis (ISA)

Business aligned IT				Relative benefit factors and asset value of ITA				ITA cost-benefit analysis		CBA results			
No	ITA	ISC	BS	ISCB	ITQ	ITU	UPV	ITA asset value (£)	Total R_b	Total R_c	Net_b_c	R_Net_b_c	Alert
BSIT1	Citrix OHMS	Council Housing Management	Housing Service	5.0000	3.8000	3.3000	3.8000	18218.00	15.9000	1.1088	14.7912	4.1946	Green
BSIT2	Housing Sybase	Case Management	Housing Service	3.0000	2.5000	1.0000	1.1000	597.00	7.6000	1.0000	6.6000	2.0155	Amber
BSIT3	Iclipse	Scanning and Imaging	Housing Service	5.0000	1.5000	1.0000	1.3000	165332.00	8.8000	2.0170	6.7830	2.0642	Amber
BSIT4	MS Dynamics CRM	Customer Relations	Housing Service	4.0000	4.5000	5.0000	4.6000	208000.00	18.1000	2.2804	15.8196	4.4682	Green
BSIT5	iCasework	Case Management	Business Management Service	5.0000	3.3000	2.0000	2.6000	94395.00	12.9000	1.5790	11.3210	3.2714	Amber
BSIT6	Morello	Web Content Management	Business Management Service	5.0000	3.3000	1.0000	2.6000	39040.00	11.9000	1.2373	10.6627	3.0963	Amber
BSIT7	iWorld Revenues and benefits	Council Tax Management	Customer Service	4.0000	3.6000	3.0000	3.6000	153900.00	14.2000	1.9464	12.2536	3.5195	Amber
BSIT8	Oracle CRM	Customer Relations	Customer Service	4.0000	3.2000	3.0000	3.0000	648542.00	13.2000	5.0000	8.2000	2.4411	Amber
BSIT9	FileNet IE Registry	Document Management	Customer Service	5.0000	4.2000	4.0000	4.8000	450000.00	18.0000	3.7743	14.2257	4.0442	Green
BSIT10	Iclipse	Document Management	Customer Service	5.0000	1.5000	1.1000	1.1000	165332.00	8.7000	2.0170	6.6830	2.0375	Amber
BSIT11	Iclipse	Scanning and Imaging	Customer Service	1.0000	1.5000	1.0000	1.3000	165332.00	4.8000	2.0170	2.7830	1.0000	Red
BSIT12	Uniform	Licensed Premises Management	Community Safety Service	5.0000	4.0000	5.0000	5.0000	30000.00	19.0000	1.1815	17.8185	5.0000	Green
BSIT13	MS Dynamics CRM	Customer Relations	Community Safety Service	4.0000	4.6000	5.0000	4.7000	208000.00	18.3000	2.2804	16.0196	4.5214	Green
									Red: 1-1.9		Amber: 2-3.9		Green: 4-5

# Analysing ISA Results

*From the previous example data set:*

*Lowest Netbc = 2.783 (we want this to be a 1 on the relative scale)*

*Highest Netbc = 17.815 (we want this to be the highest on the relative scale)*

$$f(x) = [4 * (x - \text{lowest}) / (\text{highest} - \text{lowest})] + 1$$

$$= [4 * (x - 2.783) / (17.815 - 2.783)]$$

<i>Rbc</i>	<i>Rnetbc</i>
------------	---------------

14.7912	4.2
---------	-----

6.6	2 etc
-----	-------

(VAM)

What decisions you could make for the IT applications based on the results?



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**The BTC Framework:**  
**7.2 Assessment of Alignment**

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# Example of IS Service Assessment → IS Service Analysis (ISA)

## ITA Technical Quality (ITQ)

IT Application Quality Assessment		
IT application name: Citrix OHMS	Date:	Version no.:
Criteria	weight	rating
Functionality	0.1	4
Adaptability	0.1	3
Interoperability	0.1	2
Extensibility	0.1	4
Maintainability	0.1	4
Scalability	0.1	3
Performance	0.1	5
Reliability	0.1	4
Security	0.1	4
Ease of Use	0.1	5
Quality rate: <i>(sum of rating*weight)</i>		<b>3.8</b>

= sum( 0.1 \* 4 + 0.1\*3 etc)

# Example of IS Service Assessment → IS Service Analysis (ISA)

## ITA Usage (ITU)

IT application usage analysis					
IT Application name: Citrix OHMS		ISC: Council Housing Management		Business service: Housing Service	Date:
Date	start time	stop time	idle time	peak usage	Version no.:
					No of users
IT usage frequency:		3.3			



# Example of IS Service Assessment → IS Service Analysis (ISA)

## ITA Financial Gains (FGV)

Financial Gains			
IT Application name: Citrix OHMS		Date:	Version no:
ISC: Council Housing Management			
Tangible benefits (in money term)	factor weight	target (%)	metric value
Increase profit margin (earned value for the year to date)	0.2	20	1
Reduce time for completing tasks (e.g. hours saved) per employee	0.2	20	0.5
Reduce number of employees towards labour cost	0.2	20	1
Increase velocity (increase speed and volume of the business functions performance in a defined period of time)	0.2	20	0
Increase innovation for business growth (able to differentiate products/services)	0.2	20	1
Use value - financial gains ( <i>sum of metric value times factor weight</i> )			0.7

$$= \text{sum}(0.2 * 1 + 0.2 * 0.5 \text{ etc})$$

# Example: Analysing ISA Results

Business aligned IT				Relative benefit factors and asset value of ITA				ITA cost-benefit analysis			CBA results		Alert
No	ITA	ISC	BS	ISCB	ITQ	ITU	UPV	ITA asset value (£)	Total R_b	Total R_c	Net_b_c	R_Net_b_c	
BSIT1	Citrix OHMS	Council Housing Management	Housing Service	5.0000	3.8000	3.3000	3.8000	18218.00	15.9000	1.1088	14.7912	4.1946	Green
BSIT2	Housing Sybase	Case Management	Housing Service	3.0000	2.5000	1.0000	1.1000	597.00	7.6000	1.0000	6.6000	2.0155	Amber
BSIT3	Iclipse	Scanning and Imaging	Housing Service	5.0000	1.5000	1.0000	1.3000	165332.00	8.8000	2.0170	6.7830	2.0642	Amber
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BSIT5	iCasework	Case Management	Business Management Service	5.0000	3.3000	2.0000	2.6000	94395.00	12.9000	1.5790	11.3210	3.2714	Amber
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BSIT13	MS Dynamics CRM	Customer Relations	Community Safety Service	4.0000	4.6000	5.0000	4.7000	208000.00	18.3000	2.2804	16.0196	4.5214	Green

Red: 1-1.9    Amber: 2-3.9    Green: 4-5

What decisions you could make for the IT applications based on the results?

# Impact Result → IS Service Analysis (ISA)

IS Services Analysis														
IS service name:		Date:					Version no:							
IS service description:														
Issue driver(s):														
Business Indicators		IT Application Indicators							IT application rating (R_Net_b_c)	Alert	Business service strategic value (BSSV)	Perceived business service performance (PBSP)	Customisation Result	Impact Result
				benefits										
Business service name (i)	IS service (I)	IT Application name (j)	Cost factor	ITA criticality to IS capability (ISCB)	ITA technical quality (ITQ)	ITA usage (ITU)	ITA financial gains (FGV)	ITA user perception (UPV)						

# Technique of IS Service Analysis (ISA) (cont.)

- IT Application rating is computed by
  - Cost-benefit analysis for IT applications in supporting the business  
(for a specific service)

$$CBA_{i,j,k} = \text{relative\_Benefit}_{i,j,k} - \text{relative\_Cost}_i = \left( \sum_{j,k} \left( \overset{\text{\textcolor{red}{RELATIVE BENEFIT}}}{ISCB_{j,k}, UPV_{j,k}, ITU_{j,k}, FGV_{j,k}} \right) + ITQ_i \right) - \sum_i \left( \overset{\text{\textcolor{red}{RELATIVE COST}}}{OTC_i, PUC_i} \right)$$

where

*relative\_Benefit:*

$ISCB_{j,k}$ : the criticality value of  $IS_j$  which incorporates  $ITA_i$  to  $BS_k$

$UPV_{j,k}$ : user perceived value of  $ITA_i$  to support work performance

$ITU_{j,k}$ :  $ITA_i$  usage (frequent, average, dormant)

*ITU = 3.3 Eg IT application Citrix OHMS*

$ITQ_i$ :  $ITA_i$  technical quality

*ITQ = 3.8 Eg IT application Citrix OHMS*

$FGV_{j,k}$ : financial gain by using  $ITA_i$  to increase  $BS_k$ 's value

*FGV = 0.7 Eg IT application Citrix OHMS*

*relative\_Cost:*

$OTC_i$ : total operation cost of  $ITA_i$

$PUC_i$ : per-usage cost of  $ITA_i$

# Impact Result → IS Service Analysis (ISA) (cont.)

- Four impact factors for analysis:
  - *IT Application Rating (R\_Net\_b\_c)*
  - *Business Service Strategic Value (BSSV)*
  - *Perceived Business Service Performance (PBSP) (for multichoice)*
  - *Customisation Result*
- Nine categories of Impact Result:
  - Retain
  - Retain / Redevelop (marginal impact class)
  - Redevelop
  - Redevelop / Replace (marginal impact class)
  - Replace
  - Replace / Outsource (marginal impact class)
  - Outsource
  - Outsource / Remove (marginal impact class)
  - Remove

# Impact Result → IS Service Analysis (ISA) (cont.)

- The analysis is conducted in four steps:
  - Step one: Analyse the pairing between IT Application Rating and BSSV
  - Step two: Analyse those IT applications which fall into marginal impact class by referring to Customisation Result
  - Step three: Analyse those IT applications that have multiple impact results with PBSP
  - Step four: Propose the recommendation for the IT applications based on its impact results



# Impact Result → IS Service Analysis (ISA) (cont.)

Step one: Analyse the pairing between IT Application Rating and BSSV

... **USES A SET OF RULES FOR VALUES OF IMPORTANCE OF IT**

**RATING AND BUSINESS SERVICE VALUE BSSV** *Importance and uniqueness of app*

Hi



Lo

Impact result	Algorithm	Description
Retain	If $(4.10 \leq IT \text{ rating} \leq 5.00)$ OR If $((4.00 \leq IT \text{ rating} < 4.10) \text{ AND } (BSSV = \{5\}))$	The IT application is fully optimized in supporting the business service.
Retain/Redevelop	If $((4.00 \leq IT \text{ rating} < 4.10) \text{ AND } (BSSV = \{1,2,3,4, 5\}))$	The IT application optimally supports the business service but may be optionally enhanced or upgraded to fully be optimized to support the business service.
Redevelop	If $((3.90 \leq IT \text{ rating} < 4.00) \text{ AND } (BSSV = \{3,4,5\}))$	The IT application optimally supports highly strategic business service but requires upgrading to fully support the high valued business service.
Redevelop/Replace	If $((3.90 \leq IT \text{ rating} < 4.00) \text{ AND } (BSSV = \{2\}))$ OR If $((2.10 \leq IT \text{ rating} < 3.90) \text{ AND } (BSSV = \{3,4,5\}))$	The IT application that optimally supports lowly strategic business service and IT application that moderately supports highly strategic business service that requires change for upgrading or replacement.
Replace	If $((3.90 \leq IT \text{ rating} < 4.00) \text{ AND } (BSSV = \{1\}))$	The IT application that optimally supports lowly strategic business service requires to be replaced.
Replace/Outsource	If $((2.10 \leq IT \text{ rating} < 3.90) \text{ AND } (BSSV = \{1,2\}))$ OR If $((2.00 \leq IT \text{ rating} < 2.10) \text{ AND } (BSSV = \{2,3,4\}))$	The IT application moderately supports the lowly strategic business service and IT application that moderately weak supports the highly strategic business service requires changes for potential replacement of being outsourced.

# Impact Result → IS Service Analysis (ISA) (cont.)

Step one: Analyse the pairing between IT Application Rating and BSSV

Higher

Outsource	<i>If ((2 ≤ IT rating &lt; 2.10) AND (BSSV = {1})) OR If ((1.90 ≤ IT rating &lt; 2.00) AND (BSSV = {3,4}))</i>	The IT application moderately weak supports the lowly strategic business service and IT application that weakly supports highly strategic business service requires to be outsourced.
Outsource/Remove	<i>If ((1.90 ≤ IT rating &lt; 2.00) AND (BSSV = {1,2})) OR If (1.00 ≤ IT rating &lt; 1.90) AND (BSSV = {2,3,4,}))</i>	The IT application that weakly supports the lowly strategic business service and IT application that very poorly supports the highly strategic business service requires to be outsourced or considered obsolete and must be removed.
Remove	<i>If (1.00 ≤ IT rating &lt; 1.9) AND (BSSV = {1})</i>	The IT application that very poorly supports the lowly strategic business service is considered obsolete and must be removed.

VLo

# Impact Result → IS Service Analysis (ISA) (cont.)

Step two: Analyse those IT applications which fall into marginal impact class by referring to Customisation Result

Marginal impact result	Rules
Retain/Redevelop	<i>If CS = {Bsk} then impact result = Retain</i> <i>If CS = {OTS} then impact result = <b>Redevelop</b></i> <i>If CS = {OS} then impact result = <b>Redevelop</b></i>
Redevelop/Replace	<i>If CS = {Bsk} then impact result = <b>Redevelop</b></i> <i>If CS = {OTS} then impact result = <b>Redevelop</b></i> <i>If CS = {OS} then impact result = Replace</i>
Replace/Outsource	<i>If CS = {Bsk} then impact result = Replace</i> <i>If CS = {OTS} then impact result = <b>Outsource</b></i> <i>If CS = {OS} then impact result = <b>Outsource</b></i>
Outsource/Remove	In this condition, the impact result is set as Outsource regardless of the CS factor. This is to avoid premature removal of any IT applications that are classified in this marginal impact.

(cont.)

## Step three: Analyse those IT applications that have multiple impact results with PBSP

- Three priority rules:
  - *Priority 1*: if there is one impact result = *Retain* among the list of impact results, then the single impact result for the IT application is *Retain*
  - *Priority 2*: *PBSP* value = *High* has higher priority than the *PBSP* = *Medium*. Therefore, impact results with *PBSP* value = *High* is chosen as the single *impact result* for the particular IT application
  - *Priority 3*: Apply the majority values from the set of the impact results values

# Impact Result → IS Service Analysis (ISA) (cont.)

## Step three: Analyse those IT applications that have multiple impact results with PBSP

Example of impact result	Decision	Description
ITA1 = {Retain (PBSP = Med), Redevelop (PBSP = High), Redevelop (PBSP = Med)}	Single impact result = {Retain}	The decision is made using the described priority rule 1.
ITA2 = {Redevelop (PBSP = High), Replace (PBSP = Med), Replace (PBSP = Med)}	Single impact result = {Redevelop}	The decision is made using the described priority 2, as there is impact results with PBSP = High.
ITA3 = {Replace (PBSP = High), Replace (PBSP = Med), Redevelop (PBSP = High)}	Single impact result = {Replace}	In this condition, priority 3 is referred where the majority of the impact results value is chosen for the decision. Although there are impact results with PBSP = High, there are two different impact results with the PBSP = High.
ITA4 = {Replace (PBSP = High), Replace (PBSP = Medium), Redevelop (PBSP = High), Redevelop (PBSP = High)}	Single impact result = {Redevelop}	In this condition, both priority 2 and 3 is referred, as there are impact results with PBSP = High and within these set of impacts, there are a majority value of the impact results. Hence, priority rule 3 is then referred where the majority of the impact results value within the impact results is chosen.
ITA5 = {Replace (PBSP = High), Replace (PBSP = Med), Redevelop (PBSP = High), Redevelop (PBSP = Med)}	The decision is subject to discretion.	This condition creates the exception for the priority rules. This is because none of the priority rules can be applied and a single impact results cannot be determined. Therefore, in this condition, all the variables referred throughout the analysis is traced and referred.
And,  ITA6 = {Replace (PBSP = High), Outsource (PBSP = Med), Redevelop (PBSP = High)}		

# Example for Impact Result → IS Service Analysis (ISA)

Business aligned IT				Relative benefit factors and asset value of ITA					ITA cost-benefit analysis		CBA results			ITA impact analysis			
No	ITA	ISC	BS	ISCB	ITQ	ITU	UPV	ITA asset value (£)	Total R_b	Total R_c	Net_b_c	R_Net_b_c	Alert	BSSV	PBSP	CS	Impact result
BSIT1	Citrix OHMS	Council Housing Management	Housing Service	5.0000	3.8000	3.3000	3.8000	18218.00	15.9000	1.1088	14.7912	4.1946	Green	3	2.6000	Bsk	Retain
BSIT2	Housing Sybase	Case Management	Housing Service	3.0000	2.5000	1.0000	1.1000	597.00	7.6000	1.0000	6.6000	2.0155	Amber	3	2.6000	Bsk	Replace
BSIT3	Iclipse	Scanning and Imaging	Housing Service	5.0000	1.5000	1.0000	1.3000	165332.00	8.8000	2.0170	6.7830	2.0642	Amber	3	2.6000	Bsk	Replace
BSIT4	MS Dynamics CRM	Customer Relations	Housing Service	4.0000	4.5000	5.0000	4.6000	208000.00	18.1000	2.2804	15.8196	4.4682	Green	3	2.6000	Bsk	Retain
BSIT5	iCasework	Case Management	Business Management Service	5.0000	3.3000	2.0000	2.6000	94395.00	12.9000	1.5790	11.3210	3.2714	Amber	2	3.3000	Bsk	Replace
BSIT6	Morello	Web Content Management	Business Management Service	5.0000	3.3000	1.0000	2.6000	39040.00	11.9000	1.2373	10.6627	3.0963	Amber	2	3.3000	Bsk	Replace
BSIT7	iWorld Revenues and benefits	Council Tax Management	Customer Service	4.0000	3.6000	3.0000	3.6000	153900.00	14.2000	1.9464	12.2536	3.5195	Amber	3	4.0000	Bsk	Redevelop
BSIT8	Oracle CRM	Customer Relations	Customer Service	4.0000	3.2000	3.0000	3.0000	648542.00	13.2000	5.0000	8.2000	2.4411	Amber	3	4.0000	Bsk	Redevelop
BSIT9	FileNet IE Registry	Document Management	Customer Service	5.0000	4.2000	4.0000	4.8000	450000.00	18.0000	3.7743	14.2257	4.0442	Green	3	4.0000	Bsk	Retain
BSIT10	Iclipse	Document Management	Customer Service	5.0000	1.5000	1.1000	1.1000	165332.00	8.7000	2.0170	6.6830	2.0375	Amber	3	4.0000	Bsk	Replace
BSIT11	Iclipse	Scanning and Imaging	Customer Service	1.0000	1.5000	1.0000	1.3000	165332.00	4.8000	2.0170	2.7830	1.0000	Red	3	4.0000	Bsk	Outsource
BSIT12	Uniform	Licensed Premises Management	Community Safety Service	5.0000	4.0000	5.0000	5.0000	30000.00	19.0000	1.1815	17.8185	5.0000	Green	5	4.0000	Bsk	Retain
BSIT13	MS Dynamics CRM	Customer Relations	Community Safety Service	4.0000	4.6000	5.0000	4.7000	208000.00	18.3000	2.2804	16.0196	4.5214	Green	5	4.0000	Bsk	Retain



# IT Services Change Management (ITSCM)

- Purpose of ITSCM
  - To assist in the implementation and transition for the changes in the Business and IT alignment roadmap (from 'as-is' to 'to-be')
  - To ensure business and IT executives understand and committed to the changes
  - To be fully aware of **change cost implications** to reinforce the “**recommendation**” to the concerning IT applications (based on the results from Impact Result
  - To use the results from ITSCM for assessing whether
    - the “issue drivers” have be satisfactorily resolved, and
    - the cost saving has been achieved. If not, another round of the consulting analysis (by entering in whichever stages) will be required
  - To provide a summary of analyses in relation to the strategic level of *Organisation* for the decision making

# Change Management (ITSCM)

IT Services Change Management					
IT service change management version no:			Date:		
Description:					
Issue Drivers	IT Application name	Impact Result	Cost to change	Recommendation	Alternative IT application

# Bonzo 2 TUTORIAL 7.2

continue the analysis:

- Calculate UPV for Clintrial and Clintrace
- Calculate R net bc and customisation and impact results for these