# **Telecom Product Development:**

# Industry Best Practices, Business Cases and Product Cost Modelling

### 3<sup>nd</sup> Annual CANTO Sales, Marketing & Customer Care Forum

Igor Glavanic Managing Director Parcus Group



### Agenda

- 1. Telecom product development:
  - a) Why are new products required
  - b) Product development issues
  - c) End-to-end process overview
  - d) Importance of framework and market focus
  - e) Steps in product cost model development
  - f) Key data required
  - g) Modelling approach
  - h) Next steps post modelling
  - i) Product development process improvements



### Why are New Products Required?





### **Product Development Issues**



The cost of lost revenue & opportunities needs to balance or outweigh the cost of doing the work, including the consideration of timing & resource availability.



### Importance of Framework



### Example Product Development Framework





### **Creation of Best Practice Development Framework**

Telecom Project Example	<b>Requirements Characteristics</b>	Impact
Complex Product (eg. New fibre IP VPN network required)	High CAPEX spend, lots of planning & design required, strong product management, vendor and engineering engagement required.	Suggest use of traditional waterfall framework and workflows with stages and approval gates and dedicated project management resource.
Simple Product (eg. Change of CPE model on ADSL service)	Low CAPEX, small amount of planning and design, some vendor and engineering engagement required.	Use waterfall framework for the overall project while applying agile for specific project tasks or sub-tasks such as development of new CPE test plan, CPE testing, and documentation.
Product Feature (eg. New online product reporting portal functions)	Low CAPEX, some amount of planning and mainly IT design, some vendor and IT engagement required.	Use agile based workflow given software product component and IT systems impact. Overlay with gating stages to ensure quality and consistent documentation of deliverables.
Product Pricing Papers (eg. change to Broadband Internet price plans)	No CAPEX, no planning & design and no engineering or external vendor engagement. Finance approval may be required.	Due to relative simplicity of the task and non-iterative nature of tasks, a simple waterfall workflow would be sufficient to cover all the tasks and gate approvals.
Product Exit (eg. exit legacy ATM product)	No CAPEX, some planning & and low amount of engineering or external vendor engagement. Very significant impact on existing customers.	Simple tasks but requiring precision around execution due to customer impact. Waterfall workflow would work best lead by an experienced project manager to ensure minimal customer impact.
Product Lifecycle (eg. ongoing management of a living product)	Some lifecycle CAPEX, limited engagement of engineering, IT & vendors. Senior management high visibility.	Considering repetitive nature of lifecycle tasks such as monthly reporting, forecasting, market reviews etc a simple agile workflow can be used

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- 1. Start with Structure
- 2. Review and complete
- 3. Improve with Agile (for some sub-tasks)
- 4. BU buy-in and agreement

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#### See: <u>http://parcusgroup.com/blog/best-telecom-product-management-framework</u>



### **Business Case Financial Analysis**

The purpose of financial analysis is to as accurately as possible identify and estimate future revenues and costs from the new product, thus having a direct impact on the <u>return on capital</u>, which is being sought.

Business Case Cost Factors:



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- Link to Service Creation Guide: Section 2.04 (MS Word)

#### Key Tips:

- Where do you get each of the above components?
- How reliable and 'market based' is your data?
- Depth of view?



### Step 1: Model Alignment to Product Portfolios



<u>Data gathering note</u>: must gather all the billable product entities in the business and consolidate to an agreed view



### 2: Define Product Unit Cost View

<u>Data gathering note:</u> must gather all product unit options available for inputs into modelling (eg. number of services, minutes of use, bandwidth, download...)

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### 3: Define Per Product Complete BUs View

#### Includes:

- Variable & Fixed Cost Views
- Business Unit Costs Views per Product (eg. engineering, marketing etc...)
- Product Profitability Margins in \$ and %

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### 4: Define Key Platforms Costs View

#### MAIN MENU SAMPLE - PLATFORM UNIT COST MODEL

Developed by: Parcus Group

Parcus Group

#### **PLATFORM UNIT COST**

										PLATE	ORM						
	•				ADSL	CDMA	Fibre	Internet	MPLS	PSTN	Radio	Satellite	Wimax		MSAN	CABLE	CABLE 2
Total Attributable platform costs				#	*****	##########	###########	##########	###########	##########	###########	###########	########	# £	-	###########	##########
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### **Required Financial Data**

You will require:

- Full GLs for the business including summary as well as source GL data
- COGS Data
- Access to staff, managers and other experts who may be able to assist with sourcing of required information

- Key categories of costs where detailed breakdown would be recommended:
  - Depreciation breakdown
  - $\circ$  Electricity breakdown
  - $\circ$  Motor vehicles
  - Network support contracts
  - Staff costs and HR Org charts details
  - Property costs, water, insurance, rates etc
  - Financial costs, loans, interest, bad debts, impairments
  - Marketing spend breakdown or budgets
  - $\circ$  Other costs



### Required Engineering & Other Data

#### Engineering / Operations Data Required:

- a) Network platforms types & details (network & design diagrams, BOMs..)
- b) Key network platforms usage (based on engineering traffic usage stats)
  - a) Key links by type eg. fibre, copper, satellite...
  - b) Traffic stats and usage on all key links
  - c) Traffic stats by type on key links (data, internet, mobile, voice...)

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#### Other Data

- a) Staff to complete timesheets or use survey approach
- b) Number of services by product (as per item 2)



### Modelling Approach

- 1. Obtain all data
- 2. Allocation process
  - a) Where possible allocate costs direct to products (eg. Residential Internet)
  - b) Where not possible allocate to product family (eg. Data products family)
  - c) Where not possible allocate to platform (eg. fibre, ADSL....)
- 3. Aim is to get as much into direct cost. So allocations will be done from that point only for cost where direct product attribution is not possible. Target for the final model, indirectly allocated costs will comprise <30% of total costs.
- 4. Allocations will be done on several levels
  - a) Platforms usage (based on engineering trafic usage stats)
  - b) Platform type (eg. depreciation based on line-by-line data checks of all cost items)

- c) Staff based on timesheet or survey approach
- d) Number of services by product (SIO) approach
- e) Revenue and costs weighted average approach



### Staged Development

- 1. Introduction & data collection
  - a) Identify key staff and conduct briefing on the project requirements and business impact
  - b) Data collection based on this briefing
  - c) Meetings with key business unit heads to seek their support and assistance (to be organised by CEO, COO or CFO)
- 2. Model development
  - a) Regular progress updates
  - b) Escalation and support
  - c) Work in progress communication and briefings
- 3. Finalised model presentation
  - a) Finalised model and key findings & recommendations presentation face to face

- b) Presentation to CEO and leadership team
- c) Optional presentation to board of directors



### 5: Detailed Costs By Product and all GL Input Costs Reconciled

#### Product 1

•		acomit.			
				TOTAL	
ITEM	TAIL ON	ESALE	OHL	AMOU	мот
PRODUCT REVENUE			-		
19000 I Btal Data Leare Nevenue					
18204 Mabile Carvite Revenue		*****		******	
TOTAL PRODUCT REVENUE	****	****			
ABABBAN FRAFRIGES					
PRODUCT EXPENSES	-		-		
Cart of Goods Sold					
21600 COGS - Leared Data Circuit APNG + MAINT	*****	****		*****	
21601 COGS - Lo arod Data Circuit Pipe	*****			*****	
21602 COGS -VS at IPL Data Sat. Sorv BSP Selemenr Irla	*****	****		*****	
PPL Fibro + Spoctrum Liconro Cartr + Satollito Urago	*****	\$\$\$\$	_	*****	
Tatal Cart of Goodr Sold	***	***	-		
Employee Related Expenses					
Direct Salarier	*****	****		*****	
Indirect Salarier					
Tutal Employee Related Expenses			_		
numan nornur cor Kolatod Exponsor			-		
Training Exponent				*****	
Other HB Belated Expenses					
Tatal Human Barnurcar Balatad Expansar	***				
Propery Related Expenses			_		
Tatal Property Rental Expenses					
Property Charges	*****	****		*****	
Online Press rate Pulate d Francesco	*****	****		*****	
Tetal Preserv Balated Expenser	***	***	-		
Finance Related Expenses					
Finance Charger	*****	****		*****	
Fareign Exchange Gain/Lazz					
Insurance & Laxation Charges	*****	****		*****	
Bad & Daubtrul Dobtr Daine V. an A Jimater an te					
Other Finance Carty					
Tatal Financo Rolatod Exponsor	***	***			
Professional Fees			_		
ConrultantFoor	*****	****		*****	
Audition					
Other Professional Feer					
Total Professional Fees	***				
Matar Tohiclo Cartr			_		
Vohicle Running Carts	*****	****		*****	
Other Vehicle Carts			-		-
TREAT FIRE TABLES COPE	•••				
Duty Travel Related Expenses					
Air Chartor Carts	*****	****		*****	
Vehicle Hire Carts					
Duty Travel	*****	****	_	*****	
Tutal Duty Travel Related Expenses		288	-		
Matarial Balatad & Admin Expanses					
Direct Purcharer of Material Related & Admin			-		
Office Admin Purcharer					
Other General Admin Expenses & Partage	*****	****		*****	
Stores Issues & Goods in Transit & Write/Off					
Freight & Duty Carts					
Other Sturer Related Expenses			_		

#### Product 2

C1. Lourod Liner (incl. PZP Over MPLS & PZ	P Over S	atellit			
				TOTAL	
ITEM	TAIL OR	ESALE	ONL	AMOU	MOTES
PRODUCT REVENUE			-		
19000 Fatal Data Loaro Hovenue 15200 Loaro Lino IP - Via Satollito	******			******	
18204 Mabile Carrite Revenue		*****		******	
TOTAL PRODUCT REVENUE	****	****			
PRODUCT EXPENSES			-	_	
Cash of Goods Said					
21600 COGS-Leared Data Circuit APNG + MAINT	*****	****	_	*****	
21601 COGS - Loarod Data Circuit Pipo				*****	
21602 COGS -VSat IPL Data Sat. Sorv BSP Salamanı Irla	*****	****		*****	
PPL Fibre + Spectrum Licenze Cartz + Satellite Uzage	*****	****		*****	
Tatal Cart of Goods Sold	***	888	_	***	
r					
Employee Kelated Expenses Direct Salaries			-		
Indirect Salarier					
Tutal Employee Related Expenses					
Human Rossurces Related Expenses					
RecruitmentExpenses					
Training Exponent	*****	****		*****	
Uther HK Kelated Expenses			-		
Property Related Expenses					
Total Property Rental Expenses					
Property Charger	*****	****		*****	
Security Casts	*****	****		*****	
Other Property Kelated Expenses			-		
Incal Frapery Relaces Expenses			-		
Finance Belated Expenses					
Finance Charger	*****	****		*****	
Foreign Exchange Gain/Lozz					
Inzurance & Taxation Chargez	*****	****		*****	
Bad & Daubtful Dabtr					
Other Einer to Caste					
Tatal Finance Belated Expenses	***	***		***	
Professional Fees					
ConrultantFeer	*****			*****	
Audit Foor					
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Tatal Professional Feer			-		
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Hutur Tokiclo Curtr					
Vehicle Running Carts	*****	****		*****	
Other Vehicle Carts					
Tatal Matar Tobiclo Cartr	***	888	-		
Data Teanal Related Frances					
Air Chartor Carts	*****	****		*****	
Vehicle Hire Carts					
Duty Travel	*****	****		*****	
Tutal Duty Travel Related Expenses	***		_		
Pieteriel Heleted & Admin Expenses			-		
Office Admin Purchaser					
Other General Admin Expenses & Partage	*****	****		*****	
Stores Issues & Goods in Transit & Write/Off					
Froight & Duty Carts					
Other Storer Related Expenses			_		
Tutal Material Rolated & Admin Expenses	***	888	_	***	

#### Product 3 ETC...

			TOTAL	
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PRODUCT REVENUE				
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19200 Loaro Lino IP - Via Satoliito	•••••			
TOTAL PRODUCT REVENUE	****	****		
PRODUCT EXPENSES				
Cart of Goods Sold				
21600 COGS - Leared Data Circuit APNG + MAINT	*****	****	*****	
21601 COUS-Laura Data Circuit Pipa		****	*****	
21602 COUS-VSatin C Data Sat. Saro BSP Selament Dia PPI Files & Sectore License Contra Satellite License				
Tatal Cart of Goods Sold	***	***		
Emplayee Related Expenses				
Direct Salarier	*****	****	*****	
Indirect Salarier				
Tutal Employee Related Expenses				
Human Rossurcos Rolatod Exponsos			_	
Rocruitmont Exponeor				
Only a MR Palata d Fuerance				
Tatal Human Revenues Related Eveneses				
Property Related Expenses				
Tatal Property Rental Expenses				
Property Charger	*****	****	*****	
Sacurity Carts	*****	****	*****	
Other Property Related Expenses				
Tutal Propery Related Expenses	***	***		
Fla B-1-+ 4 F				
Finance Charaer	*****	****	*****	
Foreign Exchange Gain/Lozz				
Insurance & Taxation Charges	*****	****	*****	
Bad & Daubtful Dabtr				
Prior Year Adjurtmentr				
Other Finance Carts				
Tutal Financo Rolatod Exponsos	***	***	***	
Proterrinnel teer				
Conruitant reer				
Logal Foor				
Other Professional Fees				
Tutal Professional Fees		***		
Matar Tohiclo Cartr				
Yehicle Bunning Cartr	*****	****	*****	
Other Vehicle Carts				
Tutal Matar Tobiclo Carts	***	***	***	
n				
Air Charter Carts	*****	****		
Vehicle Hire Costr				
Duty Travel	*****	****	*****	
Tutal Duty Travel Related Expenses	***			
Matorial Rolatod & Admin Exponsor				
Direct Purcharer of Material Related & Admin				
Office Admin Purcharer				
Uther laoner al Admin Expenses & Partage	*****	****	*****	
stores usues ≈ Goods in Transit ≈ WritefOff				
C. C. LAND D. C. C. LAND				
Freight & Duty Carts				

### **Allocations Reconciliation**





### Next Steps Post Cost Modelling

# Establishment of Activity Based Costing to enable future automation of product costs capture

### Example High Level Dictionary For Data Capture

Activity Based Costing - Dictionary For Data Capture		
Activity (mandatory)	Product (and/or)	Portfolio/Platform (and/or)
Billing (including credit check, collections)	A1. Landline Voice	A. VOICE
Engineering (all activities)	A3. Fixed Line PBX	B. WHOLESALE SERVICES
Finance (all activities incl. pricing)	B1. Co-Location	C. DATA PRODUCTS
IT (general systems work)	B2. Internet Wholesale	D. INTERNET PRODUCTS
IT (product specific projects/platforms work)	BC1. Leased Lines (Wholesale)	E. MOBILE PRODUCTS
Management (HR, staff, strategy, planning)	C1. Leased Lines (Retail)	F. OTHER
Marketing (all activities)	C2. IP VPN	Access - Radio
Operations: Service Assurance (all activities)	D1. Internet (ADSL)	Access - Copper
Operations: Service Implementations (all activities)	D2. Internet (Satellite)	Access - Fibre
Other not listed	D3. Internet (Mobile)	Access - Satellite
Product Management (all activities)	D4. Internet (WiMax)	Access - Mobile
Project Management (all activities)	D5. VAS Offerings	Transmission - Radio
Property management and related property activity	E1. Mobile 3G/4G	Transmission - Copper
Sales Retail (all activities)	F1. Other revenue	Transmission - Fibre
Sales Wholesale (all activities)		Transmission - Satellite
		MPLS & IP VPN
		ADSL Network
		ISDN Network
		Property (Commercial and Residential)
		IT Systems (all)
		Other



### Product Development Improvements

#### Manual:

- Develop and implement detailed product development framework and process
- Include templates for each activity
- Seek business agreement and alignment from other business units

#### Automated:

- Software based product management platform
- <u>http://parcusgroup.com/product-management-software</u>

e / Projects / Lifesize Video Conferencing					6	Reeda
mmary Financials Tasks Reports Risk	s & issues				Followers:	, AD
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Business Strategy and Portfolio Planning		Overshae	0%	Jan 01, 2016	Jan 14, 2016	Vie
Customer Needs Analysis		Overdue	0%	Feb 01, 2016	Feb 09, 2016	Vie
Market Segmentation		Oventue	0%	Feb 09, 2016	Feb 17, 2016	Vie
Competitor Analysis		Overdue	0%	Feb 18, 2016	Feb 26, 2016	Vie
Product Feasibility Study		Overdue	0%	Jan 15, 2016	Jan 20, 2016	Vie
High Level Project Planning	Adi Rahman	Overdue	0%	Feb 15, 2016	Feb 18, 2016	Vie
Present to Product Development Forum to proceed to BC (MS)		Overdue	0%	Feb 18, 2016	Feb 10, 2016	Vie
usiness Case		Not started	0%	Feb 22, 2016	Mar 24, 2016	
Develop Business Case		Not started	0%	Feb 22, 2016	Mar 09, 2016	Vie
Present BC to Product Development Forum for Signoff		Not started	0%	Mar 10, 2016	Mar 11, 2016	Vie
Present to PEC		Not started	0%	Mar 14, 2016	Mar 15, 2016	Vie
PEC Approval (MS)		Not started	0%	Mar 16, 2016	Mar 24, 2016	Vie
oduct Requirements Document (PRD)		Not started	0%	Mar 25, 2016	May 11, 2016	
Develop Detailed Project Plan (MS)		Not started	0%	Mar 25, 2016	Apr 02, 2016	Vie
Develop PRD		Not started	0%	Apr 04, 2016	Apr 29, 2016	Vie
Stakeholder Agreement on PRD (MS)		Not started	0%	Apr 21, 2016	Apr 22, 2016	Vie
Vendor Engagement		Not started	0%	Apr 25, 2016	May 11, 2016	Vie
olution Design & Planning		Not started	0%	May 12, 2016	Jun 02, 2016	T
svelopment/Duild & Product Readiness Test		Not started	0%	Jun 83, 2016	Jul 02, 2016	
unch		Not started	0%	Jul 04, 2016	Jul 05, 2016	
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### Thank You

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And for more information plerase visit:

http://parcusgroup.com/product-management-training



