Synergy evaluation for M&A in mobile operators

Framework to calculate synergies with worked example

synergy

/ˈsɪnədʒi/

noun

noun: **synergy**; plural noun: **synergies**; noun: **synergism**; plural noun: **synergisms**

the interaction or cooperation of two or more organizations, substances, or other agents to produce a combined effect greater than the sum of their separate effects.

"the synergy between artist and record company"

Agenda

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Executive Summary

- Synergies play a pivotal role in M&A’s
- Synergies equate to improvement in financial, operational or business value
- Imperative for the purchaser to extract maximum value
- Key component that drives the cost of goodwill and premium
- Synergy drives valuation figures
- Three types of synergies
  - *Revenue Synergies:* The value of getting access to a larger in-country market share
  - *Cost Synergies:* Improvements achieved by leveraging scale in operations and business
  - *Working Capital Synergies:* Causal to the first two synergies
- Synergy calculation forms a key input in planning merger and acquisition scenarios
- Firms and analysts use synergy calculation to assess the viability of the project
- This guide acts as tool that analysts could use when calculating synergies
- This is a framework to assess all components in isolation and reach a synergy value
- All M&A scenarios are different and this blueprint helps to ask the relevant questions

Understanding new operating model & synergy drivers shape the synergy case

Duplication and economies of scale are the key synergy drivers
Headcount reduction and infrastructure consolidation is crucial

Areas	Assumed Integration	Synergy Drivers	Headcount Based	Non-Headcount Based
Service Revenue	Medium	Opportunity to cross-sell	Not Applicable	Larger subscriber base and ARPU uplift
COGS	High	Economies of Scale	Not Applicable	Reduction in interconnect costs
Sales & Marketing	High	Duplication, Economies of Scale	Consolidated teams	Single brand, Reduced advertising and logistic spend.
Customer Services	Medium	Duplication, Economies of Scale	Duplication of roles	Synergies in infrastructure, single IPCC platform
Network	Low	Economies of Scale	Reduce support teams i.e. test, PMO, infrastructure maintenance	Remove redundant Switch site, consolidate hardware licensing
Radio and Access	High	Duplication	Reduction in field force	Outsource passive elements under single contract. Reduce active elements
IT	High	Duplication, Economies of Scale	Reduce IT support staff	Consolidate and outsource IT platform. Reduce licence spend with scale
Retail	High	Duplication, Economies of Scale	Reduce retail work force	Shut down duplicated high street stores, unify IT tools.
CAPEX				
Working Capital				

De-scoped

The Synergy Framework: Guide to calculating synergy in an M&A scenario

Aim: To guide the user to explore each component in isolation and derive synergy quantum Based on MECE Principle (Mutually Exclusive, Collectively Exhaustive)

Areas	Description	Components	1. Headcount Based	2. Non-Headcount Based	3. Action (1+2)	Result
Subscriber Growth	Models the growth of subs				Model impact of acquisition on gross ads & churn	A new subscriber growth model
Service Revenue	Revenue generated by service	• # of subs/ segment • ARPU of subs/ segment	NA	• New Subs numbers (/churn) • Uplift in ARPU	• Model service revenue based on subs • Calculate impact of ARPU	New Service revenue
COGS	Variable cost. Generally tied into subscriber numbers	• Interconnect/Wholesale • Channel commissions • Handset subsidies	NA	• New Interconnect & wholesale costs • Renew channel commissions	• Model new cost on new rates (Ix, channel commiss) • New sub number, MoU & gross adds.	Lower direct costs
SG&A	Cost for Selling, General & Administrative	• Marketing & Branding • Inventory & Logistics	• Reduction in marketing & sales teams. • Reduce facilities & support teams	• Significant savings in advertising & branding • Reduction in cost of logistics and inventory	Streamline logistics & inventory ops in a single unit	Reduced SG&A. Shutting down one brand.
Retail	Cost of running the retail operation	• Cost of rent of retail stores • Cost of employees • Cost of IT Platforms	• Retail shop closures will result in reducing retail employees	• Reduce cost of rent of stores and consolidate IT spend	Recalculate Retail cost with lesser number of stores and reduced employee numbers.	Lower retail spend
Network	Opex for managing the network assets	• Core Infrastructure • Licensing Cost • Vendor Maintenance • Backhaul & Transmission	• Efficiencies in sourcing, testing, design and operations team	• Create single network ecosystem • Renegotiate licensing and vendor management costs	• Identify low impact core networks that can be consolidated. • Model new lic and vendors costs on renegotiated price	Lower network cost
IT	Cost of managing all the IT platforms	• Hardware & Servers • Licensing Costs • Vendor Maintenance Costs	• Reduce design , test , maintenance and strategy teams	• Consolidate IT spend. • Renegotiate licensing and vendor management costs	• Identify systems with simple integrations. • Model new lic and vendors costs on renegotiated price • Beware of IT system mismatch	Lower IT spend
Radio	Extensive Radio Access Network	• Passive Costs- Rent, electricity, security • Active Costs- Equipment, Cables • Field Force	• RAN redesign will reduce number of heads in architecture and field force	• Optimise RAN assets • Low synergy in Urban areas • High in highway and remote coverage • Opportunity to outsource passive element management	New RAN cost will reflect fewer RAN assets (reduction in rent for sites closed)	Reduced RAN assets and spend
CS	Cost of customer services	• Salary of agents • IT Spend	• Reduce number of service agents	• Small reduction in IT spend	Optimising CS process will reduce the spend on CS costs.	Improved CS process & cost
Others	Executive Salaries Rent of Property/Office, Vehicles		• Reduce executive salaries	• Reduce rent by office/property closures. Optimise fleet	Recalculate cost on lower exec salaries and lower rents	• Lower exec salaries • Lower rent of property
			Synergies driven by headcount reduction	***+ Synergies driven by non-headcount reduction***	=	***Total Synergies for the acquisition***

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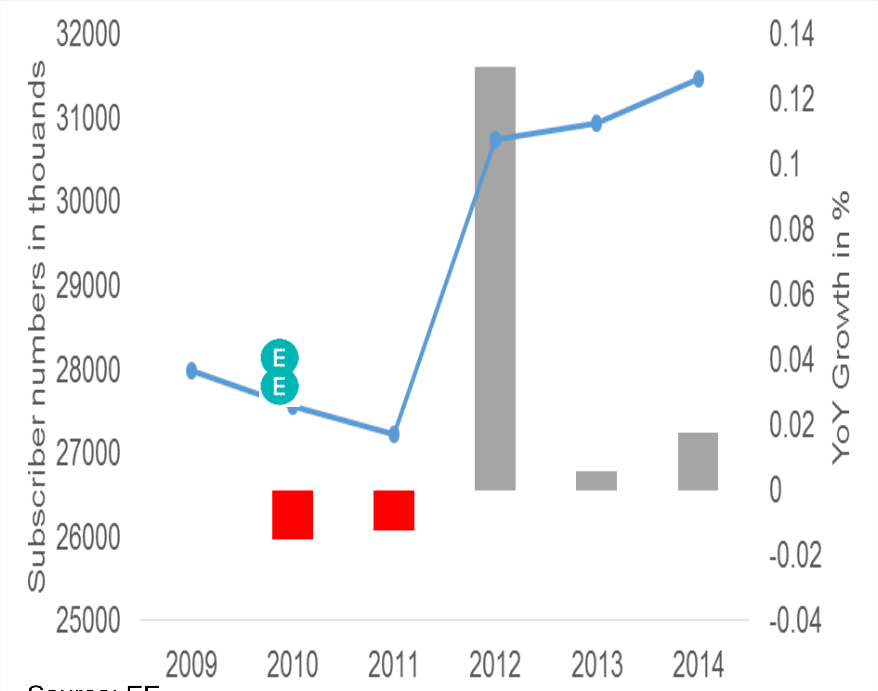
Depending on market conditions, subscriber growth can be negative in the short run…

As the NewCo concentrates on integration, competitors can assert their own brand
Crucial to keep the communication with subscriber base

- NewCo. will get access to a bigger market share
- A dominant operator can create value by
  - Cross-selling products across the combined user base
  - Drive efficiencies in its opex spend by renegotiating vendor costs
- In the short run , subscriber growth could be impacted
  - Users churn out due to uncertainty around the acquisition
  - Sales & customer facing teams underperform due to uncertainty of reorganisation
  - Indirect sales channel lose communications with NewCo
  - Post merger integration becomes the key focus of the operating units
  - Product roadmaps are often put on hold



Source: EE.

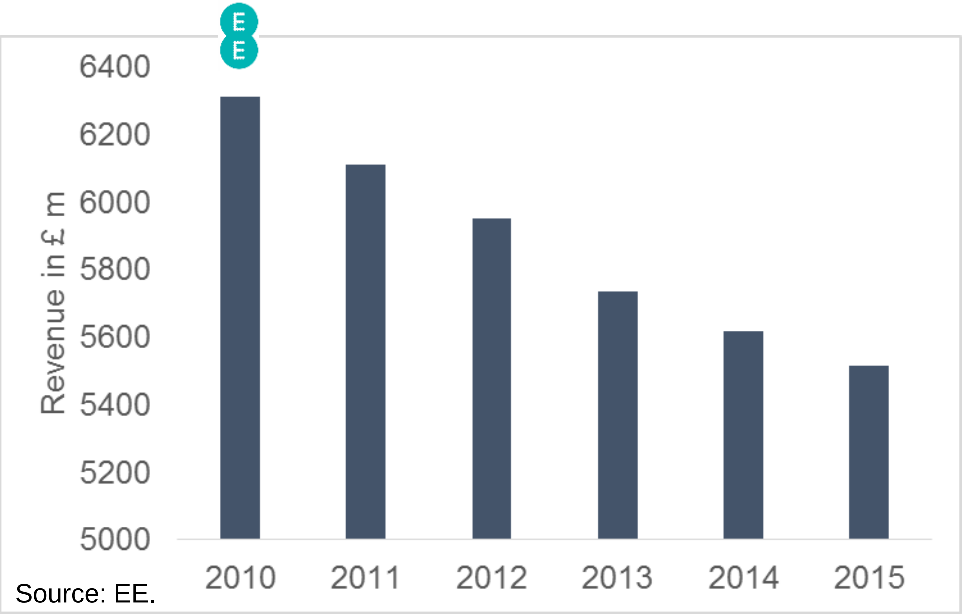
Example: Drop in subs (line) and YoY sub growth % (bar) after formation of EE in 2010

Subscriber's lost in the short run can be won back in the medium to long run

…service revenue growth could stabilise post integration

Calculating revenue growth is difficult
Uncertainty in predicting forward looking churn rate and ARPU uplifts

- Calculating service revenue is difficult due to
  - Inaccurate assumptions for churn rate
  - Inconclusive evidence for ARPU uplift
  - Uncertainty around product evolution roadmap
  - Degree of response from the competitor
  - Volatile behaviour of customer
  - Other evolving macro threats
- As uncertainties die down and integration is completed, dip in service revenue stops



Example: Drop in mobile service revenue for EE

Service revenue synergies are difficult to calculate

Interconnect and Channel Commissions will go down

Renegotiating interconnect costs will drive maximum benefit
Larger market share will drive down channel commissions

- Typically, Cost of goods sold is the variable component of the total cost
- Driven solely by average base and gross adds
- Components of COGS are
  - Interconnect costs: Costs for carrying media and signalling. E.g.. Third party transits, GRX, IPX and Interconnects with other operators
  - Channel commissions: Costs incurred for paying commissions to the channel partners. Generally tied in gross additions in the time period
  - Handset subsidy*: Cost incurred by operators to subsidize handsets
  - Subscriber acquisition cost **: Cost incurred to acquire customers directly
- Post acquisition, the volume of call traffic will increase
- Opportunity to renegotiate interconnect costs with partners
- Larger market share of the domestic market will enhance opportunity to improve on channel commission costs

Example of transit partners

Example of channel partners

Scale gives leverage to renegotiate interconnect costs & channel commissions

* Handset subsidy has been de-scoped due to complicated modelling parameters

** Subscriber acquisition cost: SAC is treated as a part of fixed cost and is covered in Retail.

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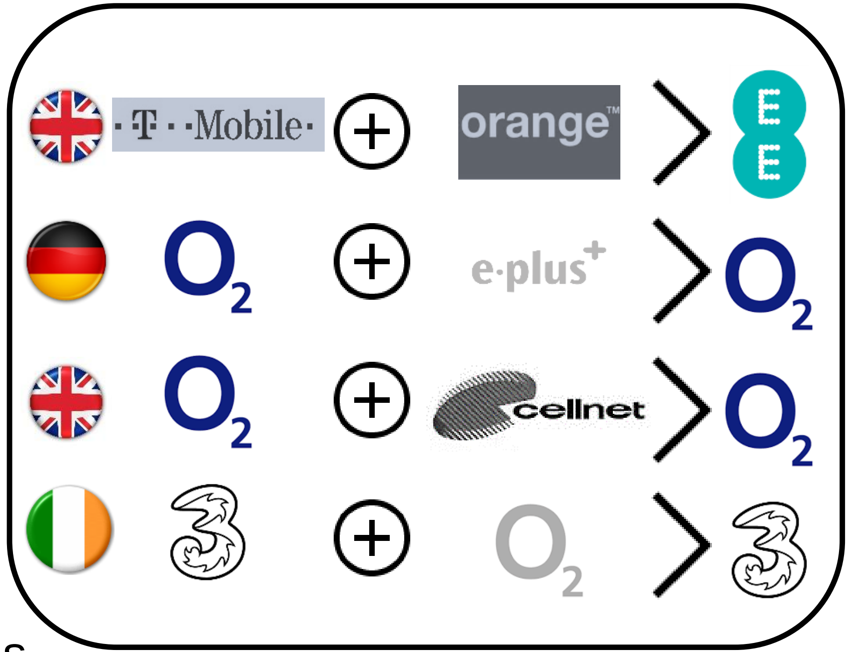
Synergies in marketing costs are driven by brand consolidation

Brand rationalisation offer biggest synergy opportunity in marketing cost
Crucial to manage communications with customer and employees

- Brand awareness & product differentiation is key to control churn rates
- Components of Marketing Costs are
  - Advertising:
    - Digital media
    - Traditional media
  - Brands: Cost incurred to manage the brand
  - Logistics: Costs of distribution of SIM's & services
  - Inventory: Manage supply chain of SIM's, handsets and network elements.
- Killing of one brand provides a key synergy element
- A quick brand cull gives the buyer quick win. E.g. EE updated the entire branding and comms function in the first year
- Opportunity to exploit economies of scale in logistics and inventory areas



Examples of brand consolidation

Shut down one brand to achieve maximum synergies

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Headcount Rationalisation & Salary is a medium term synergy element

Consolidation of teams, removal of duplication and retaining key talents are pivotal to gaining synergies
Retaining high performing individuals is important

- Headcount reduction is a key synergy driver in SG&A
- High degree of duplication of work force and function exists across both operators
- Assessment of rationalisation based on efficiency of function
- Cost will be incurred across restructuring, therefore a 3-year plan of phased headcount reduction is recommended
  - Year 1: Marketing & Sales, Customer Services, Executives & Directors & Support functions (HR, Finance, Facilities and Security services)
  - Year 2: Network and IT functions
  - Year 3: Radio functions
- Executive salary is also an area of synergies
- Special focus on employee moral and business continuity is critical

Functions	Roles	Degree of Synergies	Upto 1 year	Upto 2 years	Upto 3 years
Marketing Function:	Brand Managers	●	✓		
	Product Development Teams	●	✓		
	Pricing Teams	●	✓		
	Campaign Managers	●	✓		
	Handset/CPE's Account Manag	●		✓	
	Business Analytics	◑		✓	
	Logistics & Order Fullfilment	○	✓		
Sales Function	Account Management	○		✓	
	B2B Sales Teams	◑		✓	
	Channel Manager	○		✓	
Customer Services	Customer Care Agents	○	✓		
	Customer Care Managers	●	✓		
Retail	Shope Floor Employees	○	✓		
Networks Function	Roaming & carrier relations	◑		✓	
	Network Strategy	◑	✓		
	Network Architecture	○		✓	
	Network Access Design	◑		✓	
	Network Core Design	◑		✓	
	Network Sourcing	●	✓		
	Network Testing	●		✓	
Radio Access Function	RAN Design	◑			✓
	RAN Architecture	●			✓
	RAN Operations & Maintaince	◑			✓
IT Function	IT Strategy	●		✓	
	IT Architecture	◑		✓	
	IT Design	●		✓	
	IT Test	●		✓	
	IT Maintainnce	●		✓	
Facitlites & Security Functions	Real Estate/Facilities Manageme	●	✓		
	Fleet Management	●	✓		
	Security Services	○			✓
Support Functions	Finance Support	◑	✓		
	Revenue Assurance	●			✓
	Accounting Teams	○		✓	
	HR Support	◑	✓		
	Legal	◑		✓	
	Purchasing	◑	✓		

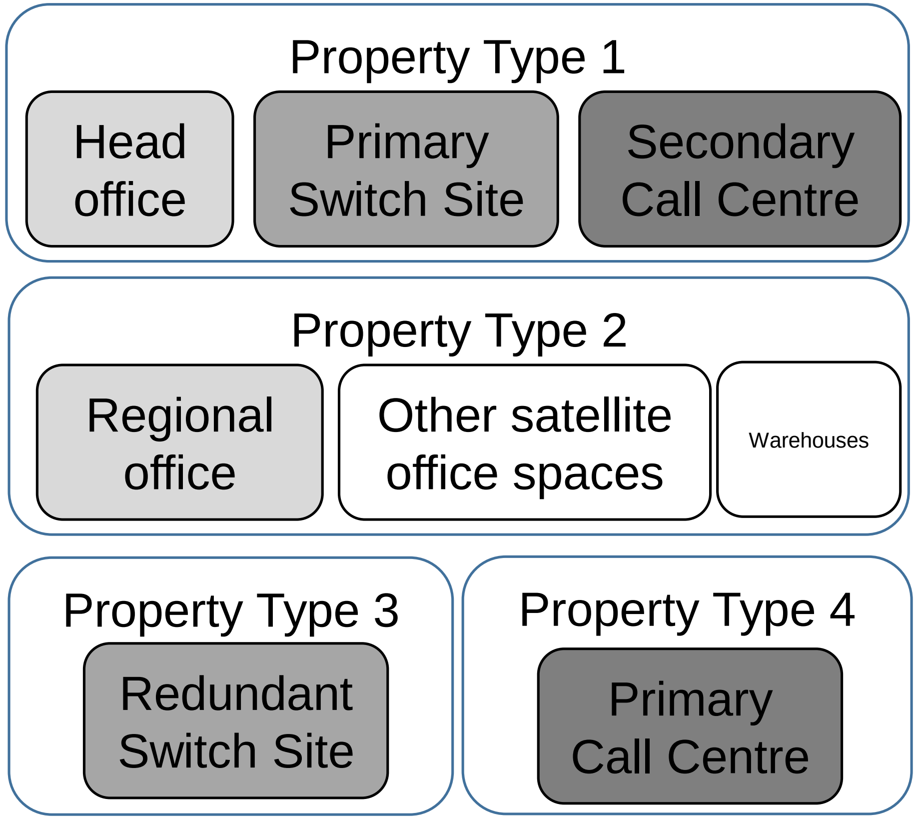
Legend
- ● *Maximum Synergy*
- ◕ *High Synergy*
- ◑ *Medium Synergy*
- ◔ *Low Synergy*
- ○ *No Synergy*

Phased approach to headcount reduction is recommended

More synergies in Property, Vehicles & Overheads cost items

Re-evaluate the property and office locations
Opportunity to shut down one primary and one secondary switch site

- Property, overheads and vehicles form core of this cost item
- Post merger, relocating office space will reduce opex. E.g.. One head office for the NewCo
- Consolidation of vehicles and fleet will further drive the cost base down
- Opportunities to shut down Primary Switch sites is also advised



Property Portfolio of a typical telco

Synergies achieved in rent of property and cost of vehicles

Retail stores and RAN sites are excluded here and accounted for in later sections.

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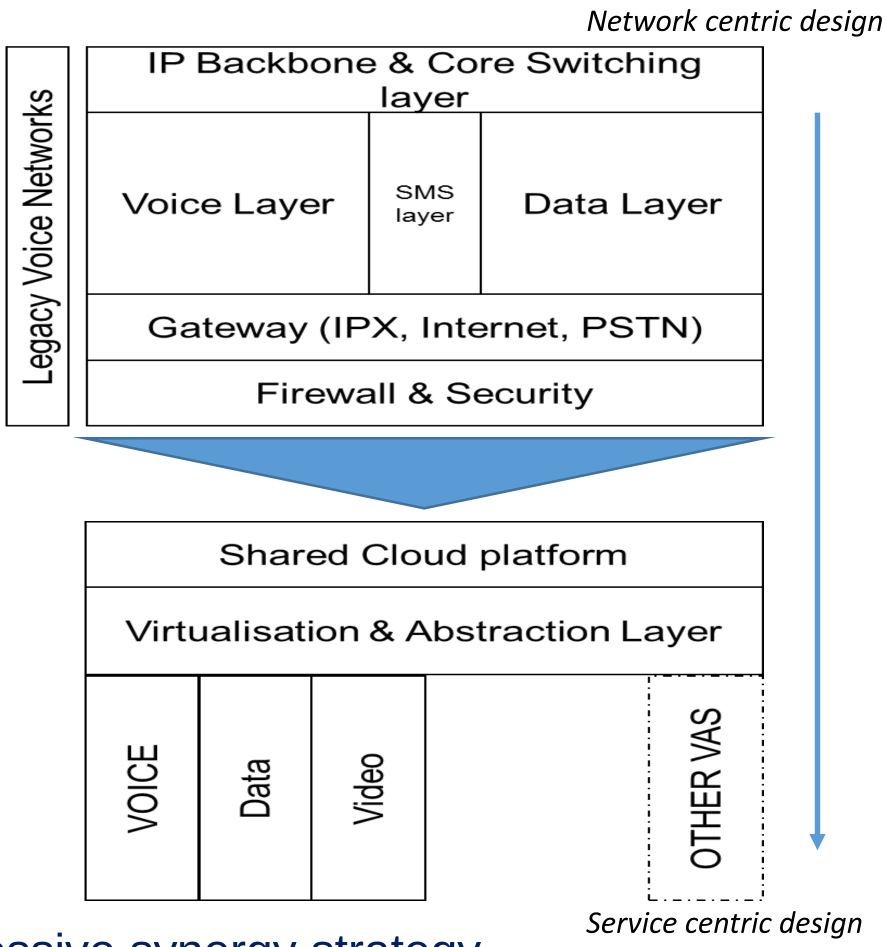
In country acquisition provides limited opportunities for network synergies

Opportunity to seek technology differentiation
Merging core in life assets presents significant risks

- A typical network infrastructure comprises of legacy voice, data networks, core switching and routing assets and other support systems
- As core switching networks are fairly mature and operational, achieving synergies is difficult
- Large scale migration of core networks is high risk
- Technology upgrade provides the best opportunity for long term synergies
  - Aggressive: Exploiting advances in cloud computing and virtualization will enable the merged entity to drive synergies
  - Conservative: small synergies by sharing non core h/w infrastructure and driving better commercial deals on vendor support



Technology upgrade via network virtualization is an aggressive synergy strategy

IT consolidation could yield significant synergies

Crucial to perform detailed due diligence to maintain business continuity
Technology differentiation provides opportunities for synergy realisation

- The opex spend on IT is comprised of
  - Cost of hardware (specialised and/or general server)
  - Cost of vendor support contract for operations and maintenance
  - Cost of licensing – generally based on subscriber numbers
- Large scale IT transformation programs are expensive and can have significant impact on customer experience
- Acquisition is an opportunity to leverage technology differentiation
- Synergy drivers for IT costs
  - Conservative (short term): Drive synergies in hardware and vendor rationalisation
  - Aggressive(long term): Leverage technology (cloud and virtualisation) to create a unified next gen infrastructure with reduced TCO

Sample Example

A billing engine could run on a specialised or common server platforms.

The operational cost of a billing system is based on the number of subscriber's being billed.

Additionally the billing system vendor will charge an amount to cover of support , operations and maintenance etc.

Points to consider in PMI

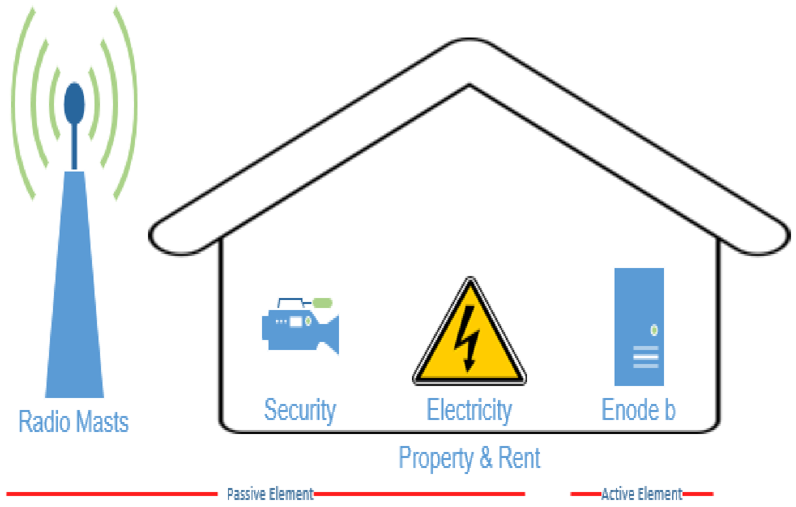
1. *Limited scope of hardware consolidation. Migration is risky*
2. *Vendor rationalisation might be difficult. Operator 1 might be using Vendor 1 and Operator 2 might be using Vendor 2.*
3. *Cost of transformation could be prohibitive.*

IT System mismatch is a major pitfall in IT consolidation

Careful redesign of RAN equates to strong synergy case

Disconnecting passive and active costs is important
Explore opportunities to share network infrastructure

- Radio Access Cost are significant proportion in an operator's cost base
- The RAN infrastructure has two key variables
  - Passive Components: Site, Antenna and Power
  - Active Components: Radio Equipment, Cables and Spectrum
- Post acquisition ,synergies can be derived from
  - Outsourcing operations and maintenance to a tower co
  - Opportunity to spin off/divest tower co
  - Switch off geographically duplicate RAN assets
- In dense urban areas "switch-off" might be limited due to capacity constraints
- Highway coverage provide a good opportunity for consolidation
- Synergies can be driven in rationalising backhaul and transmission units & vendors



Typical RAN Infrastructure

Radio Access Cost components:
1. Rent for Site and Property
2. O&M of Antennas
3. Electricity and Power
4. Equipment

RAN redesign is to be done in a phased manner and recommended to take a multi year view

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Rationalising retail stores is pivotal in realising synergies

Evaluating online sales efficiency will drive retail consolidation
Incentivise consumers to migrate towards web channel

- High cost of maintaining retail channels in consumer markets
- Conventional wisdom suggests that high street retail stores act as customer touch point
- As customer purchase moves online, significance of retail stores will continue to diminish
- Retail costs are composed of
  - Property and rent for “brick and mortar” high street shops
  - Salary of retail employees
  - IT and logistics (inventory and fulfilment) costs
- Synergy Evaluation:
  - Identify KPI for efficiency of retail stores. E.g. sales volume/store
  - Map it with geographical data or foot fall
  - Identify duplications
  - Close down redundant shops
  - Reduce work force and consolidate IT spend

Sample: Visual example of opportunity

Remove duplication of Retail stores in high footfall areas

CASE STUDY

Synergy calculation for acquisition of UK based “Blue” Operator by “Red” Operator

Management at Red has hired you to build a synergy case to acquire Operator Blue

- In this exercise an acquisition scenario has been simulated
- Two “fictional” UK based mobile operators are in play
- The Red Operator is assessing acquiring Blue Operator
- This is an in-country acquisition
- The assessment looks at calculating synergies(revenue and cost) for the acquisition
- The base case number for each operator has been modelled on real world inputs
- All information used is from publically available resources
- Both operators are mobile only play
- Handset subsidies are not accounted for
- M2M and 5G has been discounted
- Working Capital Synergies has been de-scoped
- Plan is to shut down Brand Blue after the acquisition
- Most headcount reduction will come from Operator Blue
- Impact of “Brexit” has not been modelled

Operator Red’s Management Rationale

Management’s business plan focuses on

1. *business growth, and*
2. *driving cost synergies and reduction*
3. *By eliminating duplication and*
4. *Consolidating assets and infrastructure*

To create the largest telecom operator in the UK via acquisition.

Key Findings

- Operator Red is planning to acquire Operator Blue to form a NewCo
- Based on the calculation the NewCo will realise significant synergy upside in the acquisition
  - *Total synergy achieved over three year period is ~£9b*
  - *Operator Red's EBITDA Margin will jump from 31% (baseline) to 45% (NewCo) at the end of 3rd year*
  - *Headcount reduction is ~ 10% of total synergies at £938 m*
  - *Total cost of Implementation is £230m*
- The work is focused on building the synergy case contained within the cost element in the NewCo for a 3 year plan (Y1-Y3) for the combined business
- The scope of work did not include a review of the historic results
- Overall phasing of synergy savings of £2.9b (/Y1), £2.9b(/Y2) and £3b (/Y3)

Some Key numbers

1. *Total synergy over 3 Yr period: ~£9b*
2. *EBITDA margin to go from 31% (Y0) to ~ 45% (Y3)*
3. *NewCo will have an employee base of ~ 17,400*
4. *Revenue for NewCo in Y3 will be £11b*

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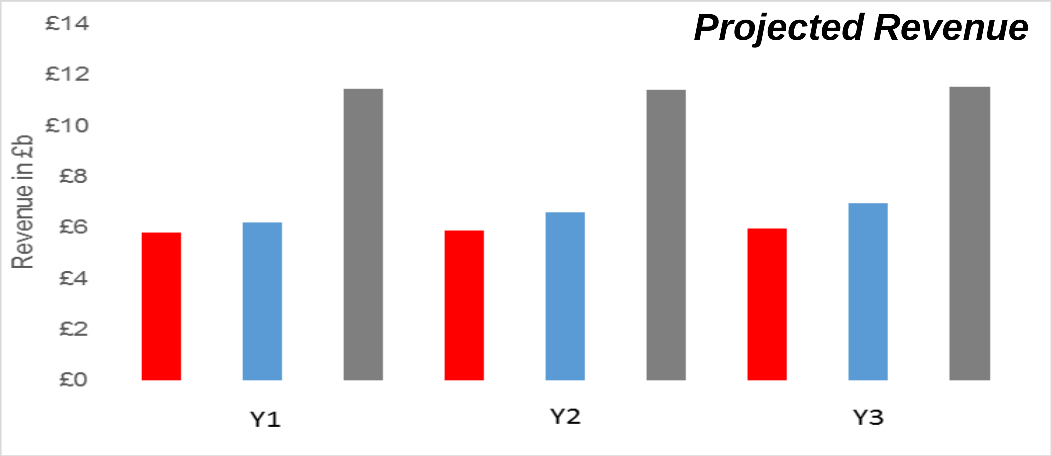
Significant Synergy case for Red at the end of three year period

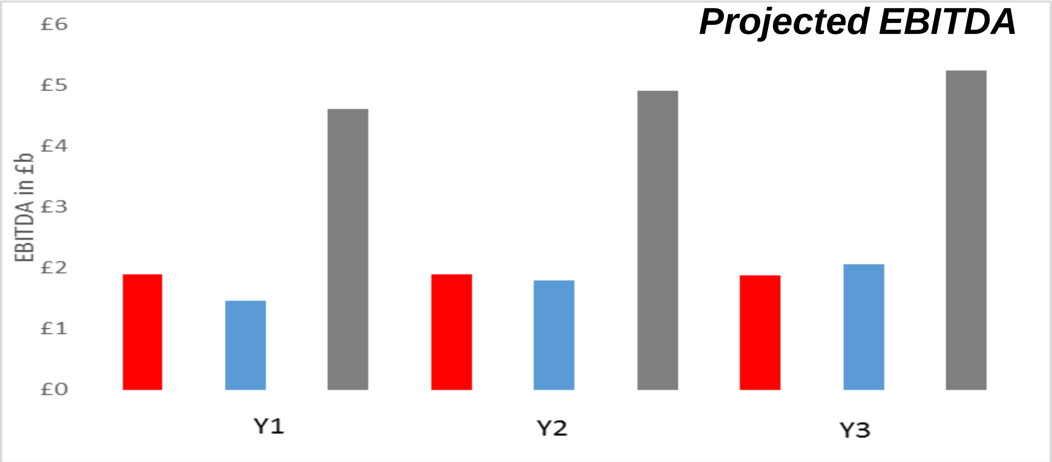
CAGR for Revenue growth is ~41% for Red (Baselined at Y1 to NewCo Revenue in Y3)
Formation of the NewCo gives red a significant uplift as compared to its baseline

Y1(£m)	RED	Blue	NewCo
Revenue	£5,820	£6,194	£11,469
COGS	£1,481	£1,107	£1,401
Gross Profit	£4,339	£5,087	£10,067
Employee Costs	£423	£556	£779
Non staff costs	£2,015	£3,059	£4,681
Operating Expense	£2,439	£3,616	£5,459
EBITDA	£1,901	£1,471	£4,608
EBITDA Margin (%)	33%	24%	40%

Y2(£m)	RED	Blue	NewCo
Revenue	£5,901	£6,601	£11,417
COGS	£1,494	£1,111	£1,422
Gross Profit	£4,407	£5,490	£9,995
Employee Costs	£458	£602	£748
Non staff costs	£2,049	£3,095	£4,326
Operating Expense	£2,507	£3,697	£5,074
EBITDA	£1,900	£1,793	£4,921
EBITDA Margin (%)	32%	27%	43%

Y3(£m)	RED	Blue	NewCo
Revenue	£5,968	£6,987	£11,542
COGS	£1,505	£1,120	£1,441
Gross Profit	£4,463	£5,866	£10,102
Employee Costs	£501	£658	£734
Non staff costs	£2,088	£3,142	£4,124
Operating Expense	£2,588	£3,800	£4,858
EBITDA	£1,875	£2,066	£5,244
EBITDA Margin (%)	31%	30%	45%





RED

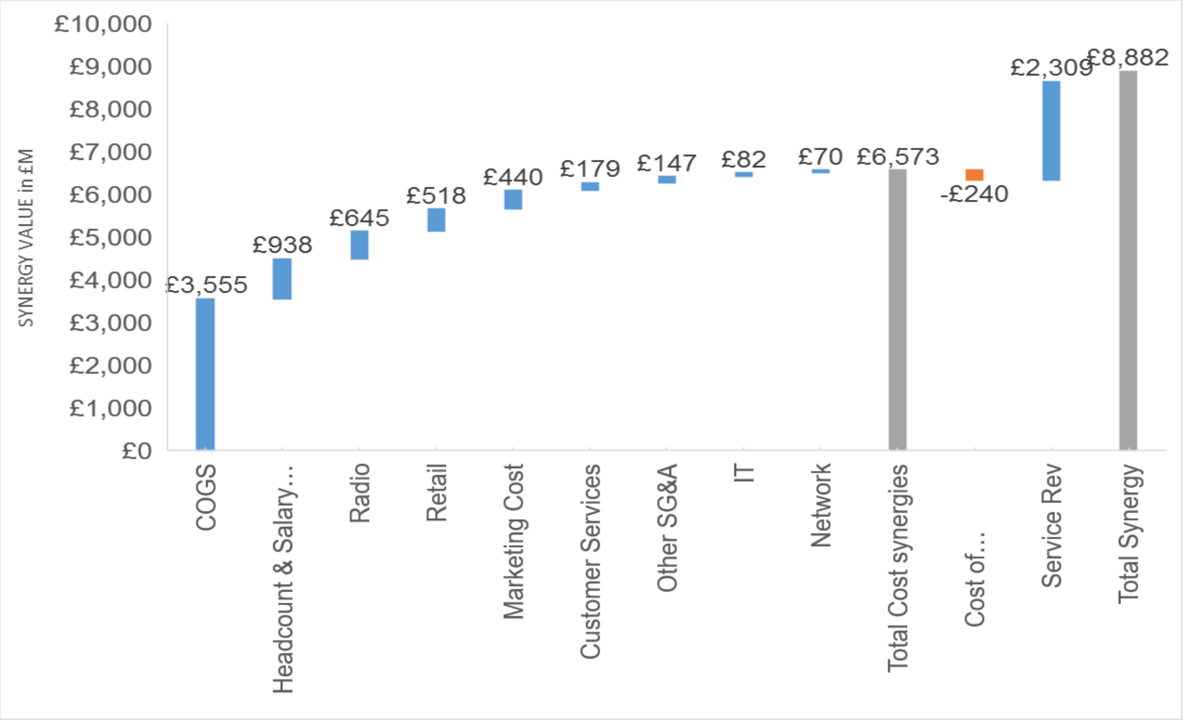
BLUE

New Co

Direct, radio, retail & marketing costs drive the synergy case

Scale gives leverage over suppliers
Limited scope of synergies in Networks & IT Costs

Area	Synergy Value	Reduction
Service Rev	£2,309	7.2%
COGS	£3,555	45.5%
Marketing Cost	£440	27.4%
Headcount & Salary (incl Executive)	£938	29.3%
Other SGA	£147	31.4%
Retail	£518	15.5%
Network	£70	17.7%
IT	£82	15.5%
Radio	£645	9%
Customer Services	£179	9%
Total	£8,882	

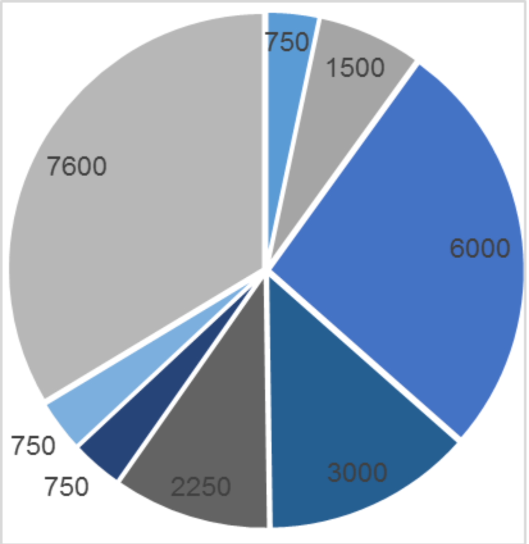


Reduction*% = Synergy/Combined Base Case

Headcount will reduce to 17,380 from 22,600 over three year period

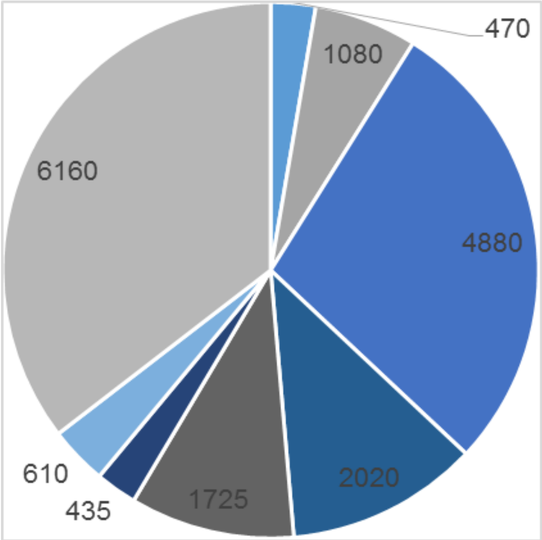
Headcount reduction will take place over a three year period
30% reduction in executive salaries realised in first year

Combined headcount pre acquisition: 22,600



Marketing	**750**	3%
Sales	**1500**	7%
Networks	**6000**	27%
IT	**3000**	13%
Radio	**2250**	10%
Facilities	**750**	3%
Support (HR, Finance, Legal)	**750**	3%
Retail	**7600**	34%

Headcount of the NewCo: 17,380



Marketing	**470**	2.70%
Sales	**1080**	6.21%
Networks	**4880**	28.08%
IT	**2020**	11.62%
Radio	**1725**	9.93%
Facilities	**435**	2.50%
Support (HR, Finance, Legal)	**610**	3.51%
Retail	**6160**	35.44%

Redundancy Plan for 3 Years

Function	Y1	Y2	Y3
Marketing	280		
Sales		420	
Networks		1120	
IT		980	
Radio			525
Facilities	315		
Support		140	
Retail	1440		
Total	**2035**	**2660**	**525**
Severance Amount	(£54m)	(£64m)	(£13m)

Headcount reduction will provide cost synergy of ~£940m over three years

One time cost of severance package will be ~£90m over three years
Severance package for executive salaries of ~£20m will yield savings of £43m

	Number of FTE Reduction					
Area	Red	Blue	NewCo	Reduction	**Rationale**	**Basis of calculation/Comments**
Marketing	400	350	470	280	• Reduction based on duplication of marketing staff	• 80% reduction in marketing staff • Brand rationalisation
Sales	800	700	1080	420	• Removal of duplication in UK and common product segments	• 60% reduction in sales staff. • Improving sales productivity
Network	3200	2800	4880	1120	• Reduction based on duplication • Creation of single network	• 40% reduction in Network teams • Consolidation of network activities.
IT	1600	1400	2020	980	• Reduction based on duplication • Consolidation of IT assets	• 70% reduction in IT teams • Roles will merge as IT is consolidated
Radio	1200	1050	1725	525	• Reduction based on Design and Operations team • Optimise RAN design	• 50% reduction in Radio design & ops • Fewer RANs will reduce need for FTE
Facilities	400	350	435	315	• Reduction based on duplication by reducing spend on property and security	• 90% reduction in Facilities Management • Consolidate teams
Support	400	350	610	140	• Reduction based on duplication of roles in finance consolidation, single legal entity, shared HR resourcing	• 40% reduction in Support teams • Single entity will need shared support
Retail	4000	3600	6160	1440	• Reduction based on duplication of retail stores and closures	• 40% reduction in retail • Rationalisation of retail stores
Total	12,000	10,600	17,380	5,220		

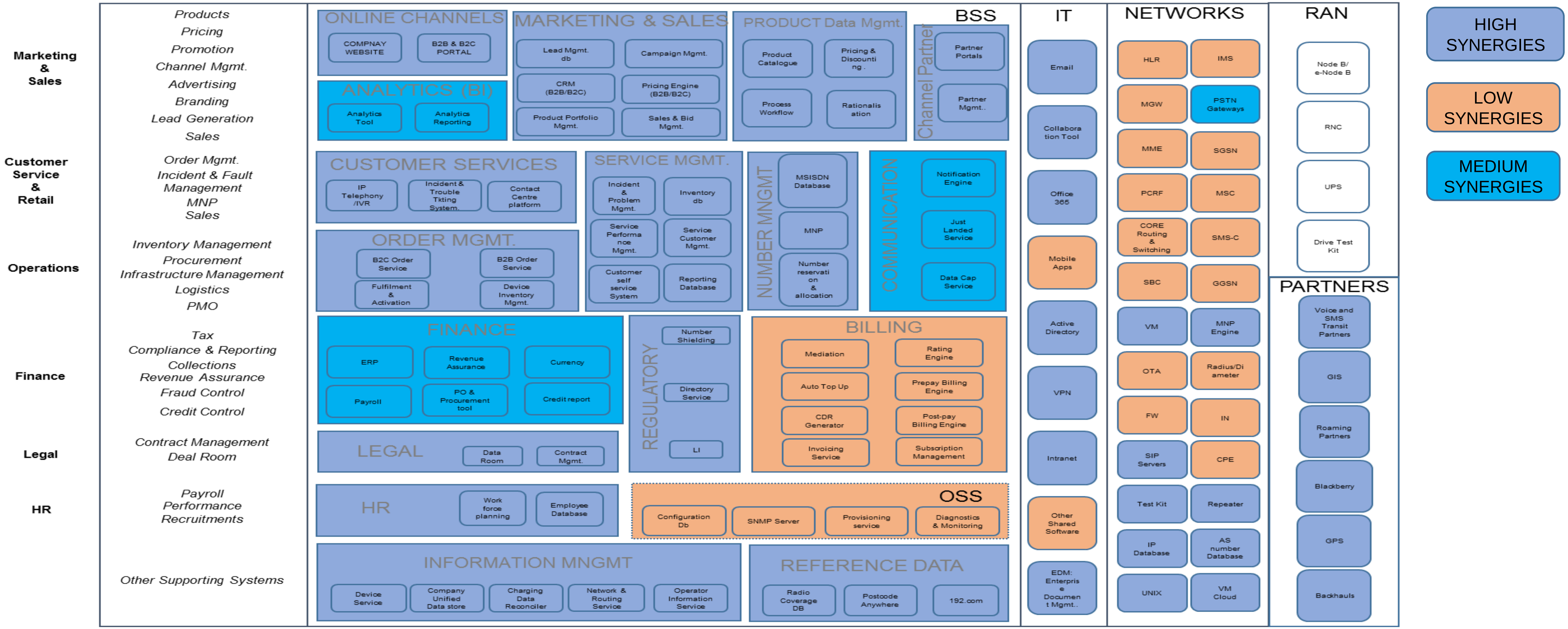
Non Headcount saving will be ~£8b over three year period

Revenue uplift of £2.3b over three year period
Cost synergy achieved over three year period £5.7b

£m	Non FTE Reduction					
Area	Red	Blue	NewCo	Reduction	**Rationale**	**Basis of calculation/Comments**
COGS	(£4,480)	(£3,339)	(£4,264)	£3,555	• Economies of scale • Leverage for reduction in vendor costs	• Reduction in interconnect costs by 40% • Reduction in Channel commissions by 20%
Marketing	(£576)	(£1,030)	(£928)	£440	• Shut down acquired brand	• Reduction- 80% (ads), 30%(invent+logi) • All branding costs are eliminated
Other SG&A	(£180)	(£288)	(£321)	£147	• Remove duplication by shutting down offices and rent for property	• Closure of offices • 50% reduction in other SGA elements
Retail	(£1,757)	(£1,581)	(£2,820)	£518	• Remove duplication by closing retail stores	• Close 40% duplicated stores
Networks	(£175)	(£218)	(£324)	£70	• Single unified core network. • EoS gives substantial saving in backhaul costs	• 50% reduction in backhaul & transmission costs • Reduce vendor maintenance cost by third.
IT	(£239)	(£287)	(£445)	£82	• Duplication removed in IT consolidation • EoS for vendor contracts	• Reduce vendor maintenance cost by third • 20% reduction in h/w and licensing cost
Radio	(£2,228)	(£4,896)	(£6,479)	£645	• Closure of RAN assets due to duplications	• 30% reduction in RAN assets over 3 yrs
CS	(£997)	(£996)	(£1,814)	£179	• Optimise CS organization	• Improve CS operational efficiency
Revenue	£17,690	£19,782	£34,482	£2,309	• Limited opportunity to cross sell as segment and products are same	• Minor ARPU uplift to £23 is used
Total				**£7,945**		

IT and Network Systems Landscape for a typical mobile operator

Varying levels of synergies can be realised across Network and IT assets
IT consolidation provides more synergy quantum as compared to networks



For high resolution diagram, click here

Conclusion

Formation of NewCo delivers significant opportunities to drive synergies across entire business

- Duplication of functions will allow FTE reduction
- EoS will deliver aggressive cuts in vendor costs
- High level of synergies will be realised if
    - Blue brand is shut down
    - Associated spend on marketing, branding is removed
    - Better operating efficiency deployed across inventory, logistics and other components of SG&A
    - Headcount reduced over three year period
    - Retail stores rationalised
    - Network assets be merged
    - Technology differentiation is leveraged to maximise gain
    - IT platforms are consolidated via virtualization
    - Customer Service operations are optimised
- Product and operational differentiation will deliver ARPU uplift

BACKUP SLIDES

Total business case over three year period

	RED			BLUE			Merged entity with Synergies			Realised Synergies			Cost of Implementation		
(millions £)	Y1	Y2	Y3	Y1	Y2	Y3	Y1	Y2	Y3	Y1	Y2	Y3	Y1	Y2	Y3
Revenue	£5,820	£5,901	£5,968	£6,194	£6,601	£6,987	£11,469	£11,417	£11,542						
Service Revenue	*£4,036*	*£4,117*	*£4,184*	*£6,137*	*£6,544*	*£6,929*	*£11,412*	*£11,360*	*£11,485*	*£1,238*	*£699*	*£372*			
COGS	£1,481	£1,494	£1,505	£1,107	£1,111	£1,120	£1,401	£1,422	£1,441	£1,187	£1,184	£1,185			
Interconnect Costs	*£818*	*£832*	*£843*	*£608*	*£612*	*£621*	*£639*	*£637*	*£644*	*£788*	*£807*	*£820*			
Channel Commission	*£662*	*£662*	*£662*	*£499*	*£499*	*£499*	*£763*	*£785*	*£797*	*£399*	*£377*	*£365*			
Gross Profit	£4,339	£4,407	£4,463	£5,087	£5,490	£5,866	£10,067	£9,995	£10,102						
Total Fixed Cost	£2,439	£2,507	£2,588	£3,616	£3,697	£3,800	£5,459	£5,074	£4,858						
SGA	£675	£710	£753	£995	£1,042	£1,097	£1,205	£1,160	£1,146	£387	£513	£625	£54	£72	£13
Marketing Cost	*£192*	*£192*	*£192*	*£343*	*£343*	*£343*	*£309*	*£309*	*£309*	*£147*	*£147*	*£147*	*£7*	*£0*	*£0*
Headcount & Salary	*£387*	*£422*	*£465*	*£508*	*£554*	*£610*	*£709*	*£679*	*£664*	*£186*	*£298*	*£410*	*£14*	*£64*	*£13*
Executive Salary	*£36*	*£36*	*£36*	*£48*	*£48*	*£48*	*£70*	*£70*	*£70*	*£14*	*£14*	*£14*	*£21*	*£0*	*£0*
Other SGA	*£60*	*£60*	*£60*	*£96*	*£96*	*£96*	*£117*	*£102*	*£102*	*£39*	*£54*	*£54*	*£12*	*£9*	*£0*
Retail	£586	£586	£586	£527	£527	£527	£1,016	£902	£902	£97	£211	£211			
Technology Cost	£851	£878	£913	£1,764	£1,798	£1,840	£2,579	£2,438	£2,230	£35	£237	£523			
Network	*£48*	*£58*	*£69*	*£60*	*£72*	*£86*	*£93*	*£107*	*£124*	*£15*	*£23*	*£32*	*£6*	*£6*	*£6*
BSS	*£60*	*£78*	*£101*	*£72*	*£94*	*£122*	*£112*	*£145*	*£189*	*£20*	*£27*	*£35*	*£12*	*£12*	*£12*
RAN	*£743*	*£743*	*£743*	*£1,632*	*£1,632*	*£1,632*	*£2,375*	*£2,187*	*£1,918*	*£0*	*£188*	*£457*	*£12*	*£12*	*£12*
Customer Services	£327	£333	£337	£329	£331	£336	£660	£574	£581	-£3	£90	£93			
EBITDA	£1,901	£1,900	£1,875	£1,471	£1,793	£2,066	£4,608	£4,921	£5,244						
EBITDA margin	32.66%	32.20%	31.41%	23.97%	27.40%	29.82%	40.38%	43.32%	45.66%						

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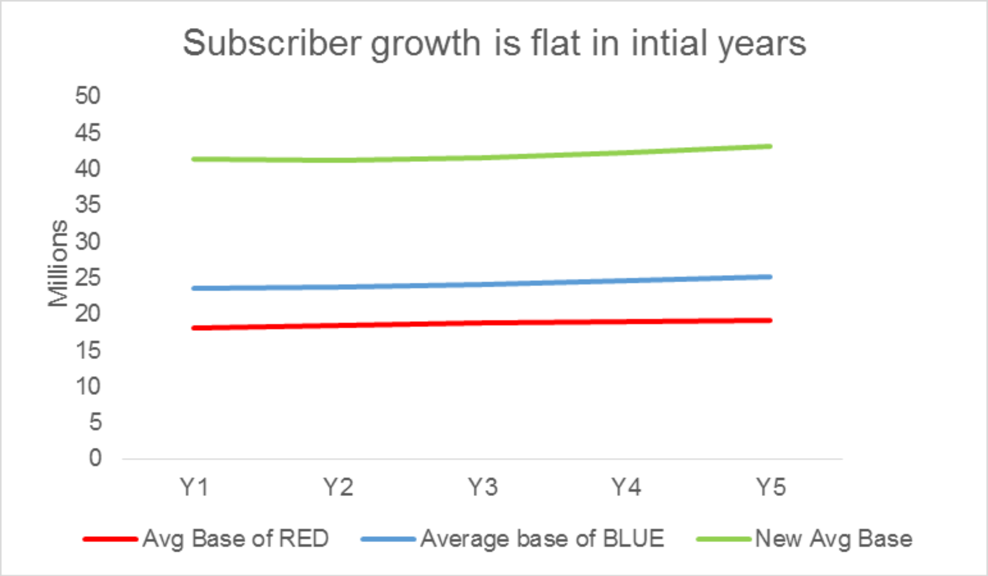
Subscriber growth in short run is negatively impacted in the merged entity

- Subscriber growth is negatively impacted during an acquisition phase.
- Two key reason for this
  - Consumer is unsure of the future of its mobile contracts and seeks safety with the competition.
  - Employees (especially Sales teams) have low morale as headcount restricting is eminent.
  - Product road map delivery is hampered and therefore products and pricing may lose out.
  - Competitors seek to gain market share during these times.
- This contraction has been modelled as a reduction in base gross ads as -10% drop in 0-6 months, -7% in month 7-13 and -3% in month 13-24



SG&A provides strong opportunities for synergies

- In the model SGA is comprised of the following drivers
  - Marketing cost including, advertising, branding, logistics and inventory
  - Headcount & Salary including executive salaries
  - Property , vehicles and other overheads

- Two key synergy drivers in SGA are
  - Brand consolidation removes cost of maintaining two brands and streamlines marketing spend.
  - Duplication of work and functions results in headcount reduction
- This contraction has been modelled as a reduction in base gross ads as -10% drop in 0-6 months, -7% in month 7-13 and -3% in month 13-24

“Brick & Mortar” retail shops provide significant synergistic opportunities

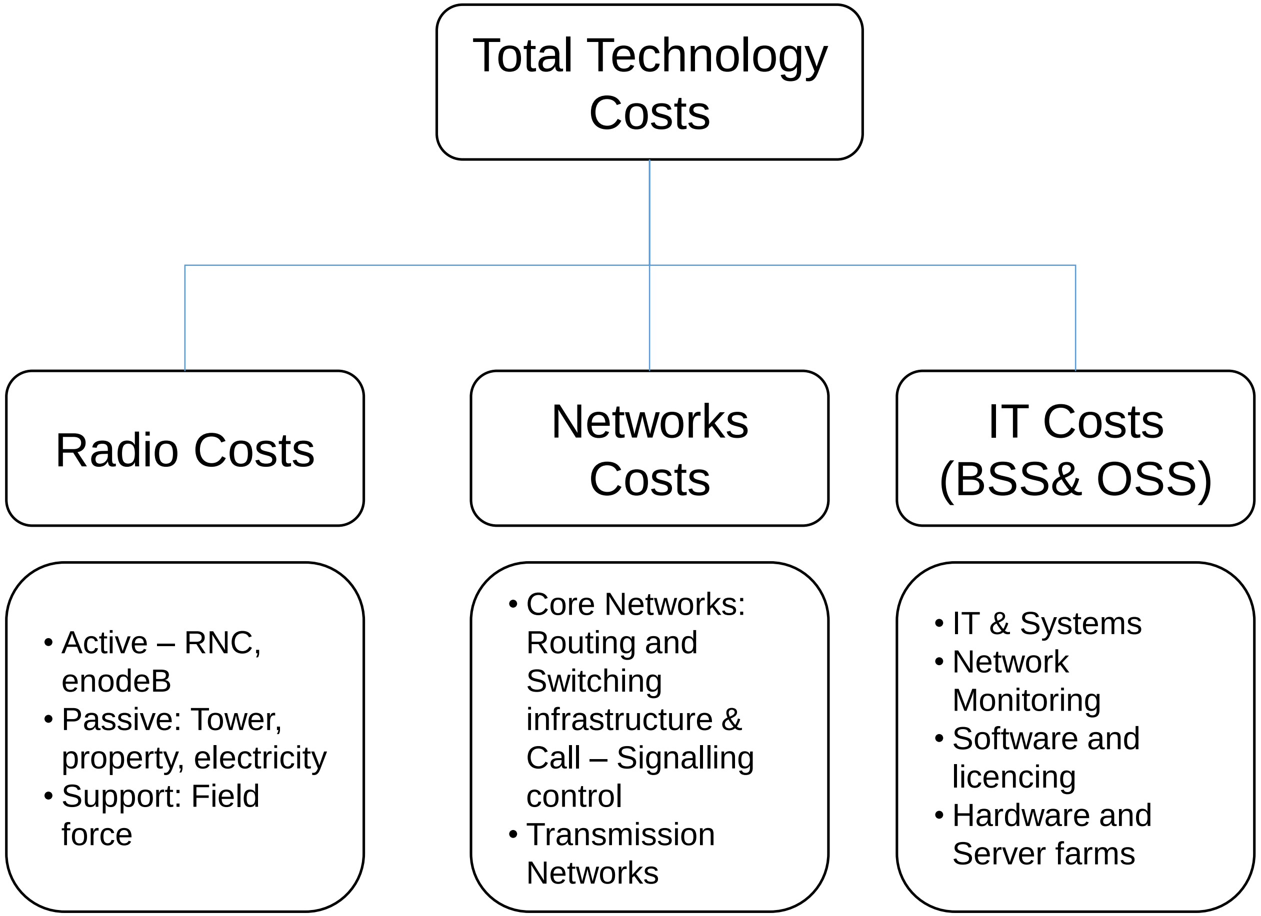
- Retail cost for an operator typically consists of
  - Rent for property
  - Salary of retail store employees
- Significant synergies could be achieved in this cost component.
- Provides opportunity for reduction in headcount
- Stores in geographical proximity could be shut down.
- A total of 138 (70 Blue + 38 Red) retail stores were studied in the London area.
  - 21 stores were found to be collocated in the same area.
  - Further 20 stores were assumed to be in low footfall areas
- A total of 41 stores were planned to be closed, representing a reduction factor of 40%
- A more conservative approach of 20% was used for conservative synergies

List of retail stores for two operators in London

		Co-located stores
ArielWay	ArmadaWay	
BrixtonRd	Balham	
BromptonRd	Barking	
Cheapside	Beckton-GallionsReach	
CoronationRd	Brixton	1
EdgwareRd	BrixtonRd	1
FleetSt	BroadLn	
FulhamRd	Bromley	
HammersmithBroadway	Camden	
HampsteadHighSt	CannonStreet	
HarbenParade	Cheapside	1
HighRd	Chiswick	
HighStreet	Clapham	
Holborn	ColliersWood	
IlfordStore	EastSt	
KensingtonHighSt	Eltham	
KilburnHighRd	FleetStreet	
King'sRd	FulhamBroadway	1
LiverpoolRd	Hackney	
LongAcre	Hampstead	
MarchmontSt	HighRd	1
Moorgate	Holborn	1
MuswellHillBroadway	HollowayRoad	
OxfordSt	Hounslow	
OxfordSt	Islington	
Piccadilly	KensingtonHighSt	1
PraedSt	kent	
PraedSt	Kilburn	1
RusheyGreen	KilburnHighRd	1
ShephersBush	KingsMall	
TootingHighSt	KingsRoad	1
TottenhamCourtRoad	Lewisham	
VictoriaSt	LondonWall	
VictoriaSt	LondonWall	
WandsworthHighSt	MareSt	
WestfieldShoppingCentre,Stratford	MillenniumWay	
WhiteCityCl	MolesworthSt	
WoolwichPowisStreet	NorthFinchley	
	NottingHillGate	
	O2 Arena	
	OldBroadStreet	
	OxfordSt	1
	OxfordStreet	1
	PowisSt	
	ProcterSt	
	Putney	
	Queensway	
	RichmondUponThames	
	StJohn'sRd	
	StratfordCentre	
	StratfordWestfieldFirstFlr	1
	StratfordWestfieldLwrGrdFlr	1
	SurreyQuays	
	TheBroadway	
	TheQuadrant	
	TheStrand	
	Tooting	1
	TottenhamCourtRd	1
	TottenhamHale	
	Unit2060AFirstFloorWestfieldShoppi	1
	Unit4,SelborneWalkShoppingCentre	
	UnitC12PrinceCharlesDrive,BrentCrossShoppingCentre	
	UpperSt	
	VictoriaStreet	1
	WalworthRoad	
	WandsworthHighSt	1
	WestfieldStratfordCity	1
	Wimbledon	
	WoodGreen	
	Woolwich	1

Technology Cost

- Technology cost are structured as
  - Radio Costs
  - Networks Cost
  - IT (BSS & OSS) Costs



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Network & IT

- Network & IT operations do not provide significant opportunities for synergies.
- Network infrastructure operates under efficient and optimised parameters
- Migrating core network elements are high risk undertaking
- Technology differentiation provides best opportunity for synergies in networks
- Consolidation in server and hardware cost can be achieved in BSS component
- Strong discounts can be achieved in Vendor maintenance costs due to the step up in scale

Reduction factor for Networks	
Core Infrastructure	-15%
Licensing Costs	£0.51
Vendor maintenance costs	-30%
Backhaul & Transmission	-50%

Reduction factor in IT	
Equipment & Servers	-20%
Licensing Costs	-20%
Vendor maintenance costs	-65%

Radio

- Consolidation of radio networks offers strong possibilities of synergies in the merged entity
- Although urban and densely populated RAN nodes might not be rationalised
- Highway coverage, rural locations and remote areas provide the best opportunity for synergies
- Detailed Radio Design Project to be initiated
- Assumed 3 years to realise full synergies
- Opportunities to outsource maintenance of passive elements to tower co
- Spectrum cost reallocation has been de-scoped

	Y1	Y2	Y3
Assumed closure of RAN's	**0%**	**-10%**	**-20%**

THANK YOU


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