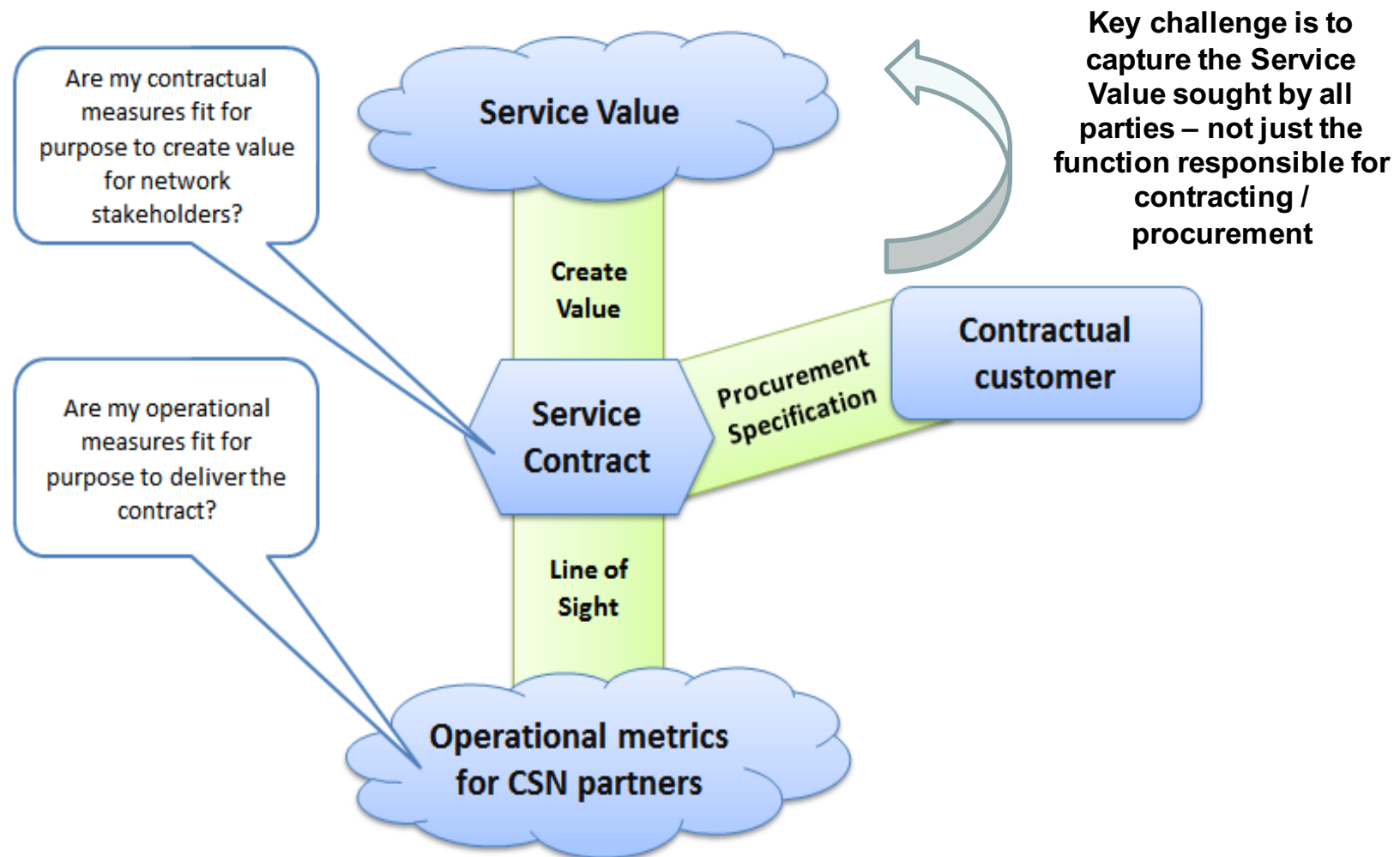


Enterprise KPIs - Aligning Metrics Across Complex Service Networks

Professor Andy Neely
Director, Cambridge Service Alliance

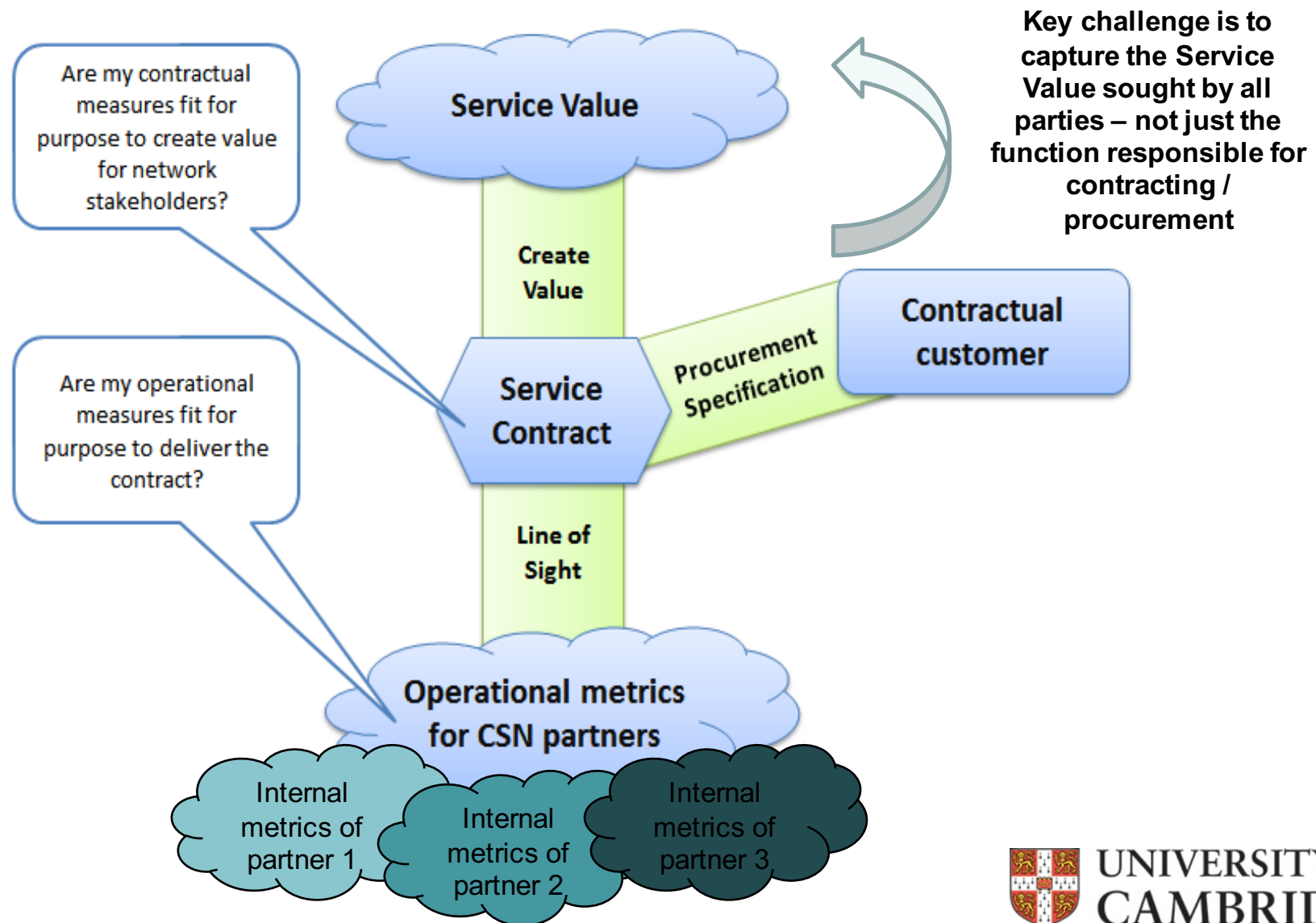
The Challenge: Part 1



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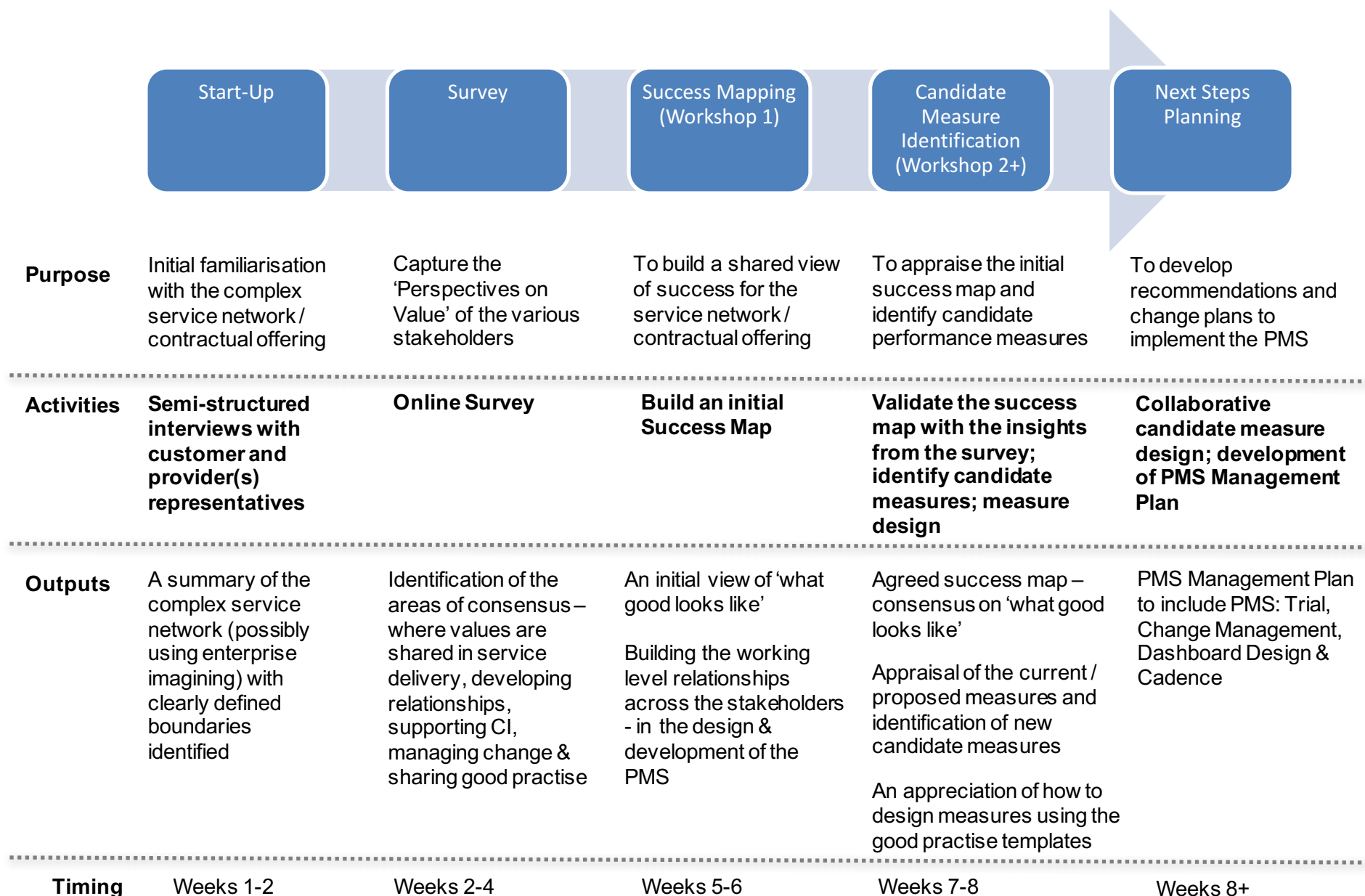
The Challenge: Part 2



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The PMS Design & Deployment Process



Process Overview - Application

The process is suitable for selecting and designing performance measures at both the:

- Contractual level: with Incentivisation, Risk & Reward mechanisms linked to cash payment.
- Operational level: to monitor the health and efficiency of the sources of contract performance.

There are two potential scenarios in which the process can be applied:

- Existing contracts: A useful approach to review the existing performance measurement system, identify improvements and negotiate improvements in the alignment of performance measures and client / provider values
- Prospective contracts: To identify / confirm proposals for candidate performance measures for a new contract aligned to client / provider values

Process Overview – Success Mapping

- At the heart of the process is the concept of success mapping...
 - Through the success mapping methodology we are seeking to develop a shared understanding of the key drivers of success in the CSN and to narrow discussions about potential areas for performance measurement.
 - If we just started the conversation about metrics by asking “*what should we measure?*”, thousands of possible metrics would be offered.
 - Instead, by concentrating on identifying the key drivers of success, we can narrow the subsequent discussion down to metrics that relate directly to the key drivers.
 - A success map is a cause-effect model, which illustrates the key drivers of performance in the complex service network and the relationships between them.
 - The idea is to illustrate the links between different dimensions of performance so that a logical set of connections can be seen. If, for example, we “*gather ideas from staff*” then we can “*improve stock control*”. If we “*improve stock control*” then we can “*improve delivery performance*”. If we “*improve delivery performance*” then we can “*improve customer satisfaction*”.

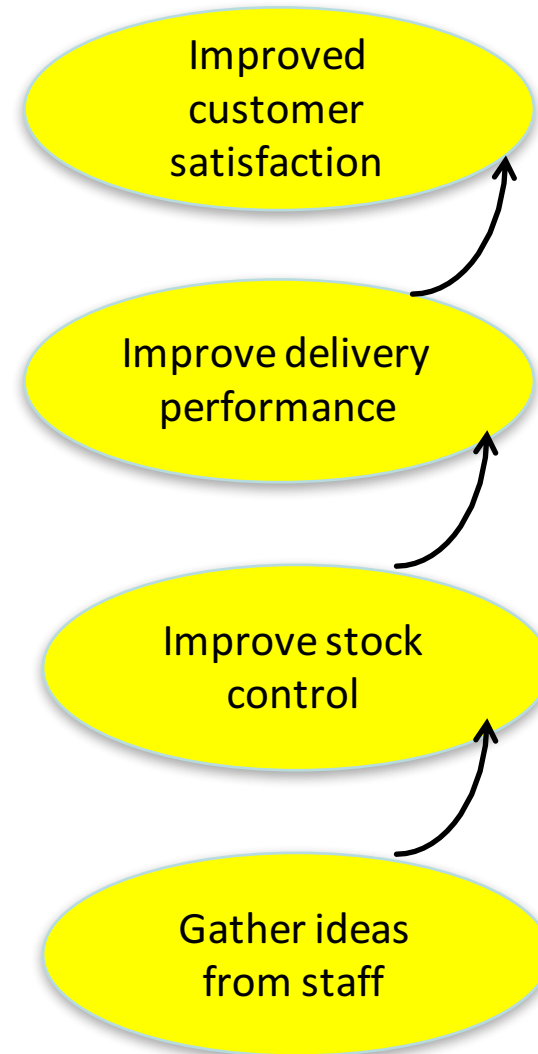
Process Overview – Success Mapping

What does success look like?

How can we achieve improved customer satisfaction?

How can we achieve improved delivery performance?

How can we achieve improved stock control?



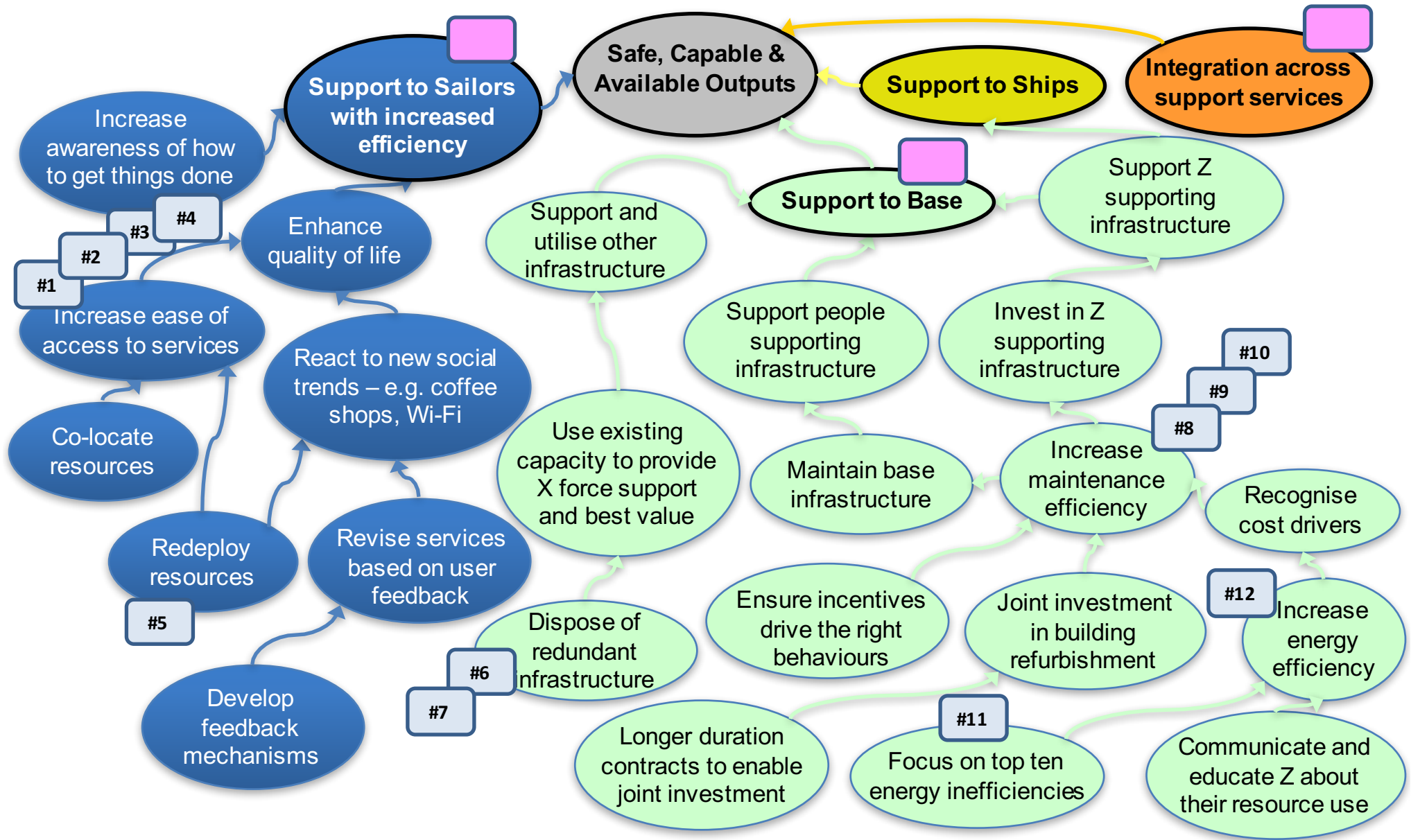
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Process Overview – Typical Outputs

- A Success Map
 - A visual representation of the shared understanding of the key drivers of success for the CSN
- Candidate Measure Designs
 - A coordinated set of good practise measure designs, aligned to the key drivers of success from the success map
- Implementation Planning
 - An agreed approach to working collaboratively across the key stakeholder groups to design, critique and finally implement the candidate measures within the PMS

Sample outputs – Scenario X Success Map



Sample outputs – candidate measure design for Support to Sailors

Measure	Support to Sailors – Harbour Hassle
Purpose	To ensure that all support necessary is in place to enable the workforce to perform their duties with minimal harbour hassle
Relates to	People are content with their work and living environment Enterprise contribution to ensuring workforce is trained, motivated and effective; Integral to successful achievement of all business outcomes
Target	X % improvement
Formula	% of ships reporting the quality and provision of services is improving
Frequency	Monthly
Who measures?	Delivery Team (soft services, security, MT etc.).
Source of data	Company - Ship satisfaction survey
Who acts?	Company & BXO.
What do they do ?	Understand trend analysis and take appropriate corrective action.
Incentives/Penalties	Introduced during first year once data has been gathered in sufficient detail to undertake trend analysis.
Notes	Provides central measure in pursuit of other KPIs. “Harbour hassle” – external things that prevent smooth running within the Naval Base; e.g. delays at security, bus timetable, parking, gate closures, late meals, lack of communications etc.

Sample outputs – candidate measure design for Integration

Measure	Integration across Portsmouth Partners
Purpose	To provide confidence in the effectiveness of the output of the Waterfront Programme Office (WPO) in identifying and resolving issues that will impact on the ability to provide successful operations worldwide
Relates to	Successful operations worldwide
Target	No unidentified events that have an impact on the Force Generation (FG) Plan
Formula	Number of unidentified events that impact the FG Plan
Frequency	Measured as it happens Report Monthly
Who measures?	XXX element of WPO
Source of data	WPO
Who acts?	Head of WPO
What do they do ?	Analyse and take appropriate corrective actions
Incentives/Penalties	No – failure would be accounted for elsewhere in the business and could therefore be a double whammy.
Notes	Could be linked to partnering KPI as relationships have to be developed and maintained with all stakeholders to ensure relevant information is fed up to WPO.

Sample outputs – candidate measure design for Support to Base

Measure	Estate Availability - providing a safe and harmonious environment
Purpose	To ensure that the Estate is available to support the Force Generation (FG) Plan.
Relates to	Ability to maintain and repair ships, train and support people so that they can succeed on operations.
Target	No infrastructure disruptions causing a change in the FGP
Formula	Number of infrastructure disruptions that have caused a change in the FGP
Frequency	Tripwire – measured as it happens. Report Quarterly (may be aligned to the frequency of the payment plan)
Who measures?	Waterfront Programme Office (WPO) on behalf of the Force Generation Authority
Source of data	Jointly owned by WPO
Who acts?	DH Infra & Transformation - Head of Estates & Service Delivery and DIO Projects
What do they do ?	Analyse and take appropriate corrective action to fix failure. Requires agreed and resourced through life management plan.
Incentives/Penalties	Yes
Notes	Not ready for this to be in place by April 2013. Requires further joint development to get to the through life management plan; however, this will be an early deliverable

WiP - need to consider splitting into two measures: Estate Availability & Safe Operation of the Estate

Process Overview – Foundations for a Successful Outcome

- A discussion about CSN measurement cannot be led by a single partner, it is essential that the key parties (contracting customer, end user, prime contractor, key suppliers) to the complex service are willing to engage in the process – typically supported by the following key roles

Role	Responsibility
Sponsor	A senior person within one of the partner organisations who has a genuine interest in the PMS and will act as the figurehead for the PMS design initiative; being prepared to actively promote and communicate the benefits of the approach and secure the 'buy – in' of their peers both within their own and partner organisations to support the initiative
Facilitator	A person (or persons) having a robust understanding of the PMS design process and skilled in working with large, diverse and often complex stakeholder groups to guide them through the process in a collaborative and constructive manner
Partner Point of Contact	This role must be identified within each partner organisation supporting the initiative; typically the lead PoC will be appointed in the same organisation as the Sponsor and will assume responsibility for identifying their peers in the other partner organisations and collaboratively managing their respective stakeholder groups in the scheduling, participation and support to the initiative
PMS End Users	This role extends to all subject matter experts and persons having a role to play in both the design, operation and use of the PMS – they are the key 'community of interest' for the PMS who must be consulted to establish a robust and credible appreciation of the needs and aspirations for the PMS; they are typically identified and engaged in the process by each Partner PoC

Process Overview - Benefits

Benefit	Client	Service Provider
Greater speed to contract	✓	✓
Greater realisation of contract potential	✓	✓
More responsive to value proposition changes		✓
A better understanding of what is required for the service to be successful	✓	✓
Follow on contract / order book growth		✓
Continued and deepened collaborative relationships between supplier and client	✓	✓
Drives more appropriate behaviour across the network partners	✓	✓



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For more information...

The screenshot shows a web browser displaying the Cambridge Service Alliance website. The browser's address bar shows 'cambridgeservicealliance.eng.cam.ac.uk'. The website has a dark blue header with the University of Cambridge logo and navigation links: 'Study at Cambridge', 'About the University', 'Research at Cambridge', 'Quick links', and a search bar. Below the header, a banner reads 'Cambridge Service Alliance' and 'developing new understanding and approaches to complex service systems'. A navigation bar includes links for Home, About Us, Business, Research, Study, Resources, News, Events, Cambridge Service Week, and Contact Us. The main content area features a slide titled 'Growing your Services Business in an age of digital disruption'. The slide includes the University of Cambridge logo, a detailed program schedule, and a large text overlay: 'Book Now for our Industry Day event! Growing your Services Business in an age of digital disruption'. The slide also mentions the date '11 October 2016' and a page indicator '1 of 6'. To the right of the slide, a sidebar contains the text 'Cambridge Service Alliance', a welcome message, a list of key points, and a 'Linked in' logo.

Cambridge Service Alliance

Welcome to the Cambridge Service Alliance...

- a unique global alliance between leading businesses and universities;
- bringing together the world's leading firms and academics;
- all of whom are devoted to delivering today the tools, education and insights needed for the complex service solutions of tomorrow.

Members of the Cambridge Service Alliance include BAE Systems, Caterpillar, IBM and the University of Cambridge.

Linked in

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Andy Neely – adn1000@cam.ac.uk

FORTHCOMING WEBINARS

Date 14:30hr GMT	Topic	Invited speaker
April 11 th	Mapping Ecosystems: Identifying Service Innovations. ***TOOL***	Prof. Andy Neely
May 9 th	Supplying innovation: unlocking innovative behaviours in the supply chain	Dr. Jingchen Hou
June 13 th	Facilitating Co-Creation in Living Labs: The Josephs Study	Katherine Greve
July 18 th	Service in the Platform Context: a review of the state of art	Xia Han
September 12 th	Enterprise KPI's – Aligning metrics across complex service networks	Prof Andy Neely
October 3rd	Critical Incidents in complex services contracts: human causes and means of prevention	Chara Makri
November 14 th	Feedback from the Frontline: Engaging Front-Line Employees in Service Contracts	Florian Urmetzer



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