SPA2013 - Where Do I Start? - Session Materials

Recap of Objectives

Whatever level you work at in an organization it is challenging to become effective quickly when you first arrive.

In this session we are looking to gather are a mixture of technical and non-technical practices that will help people to overcome this problem. For example, from a technical perspective, if there is no system architecture diagram it might be useful to create one, from a non-technical perspective you might want to make an organisational map of individuals and responsibilities.

The goal of the session is to draw on your experience to reflect on what has worked for people in different contexts and to define a toolkit of techniques that people can try to apply in their own work environment.

Example Scenarios

New Permanent Position	Joining a new organisation from outside, without significant prior knowledge of it, as a full-time employee (or contractor filling an equivalent position).
Promotion	Being promoted within an organisation, within the same general organisational hierarchy that you are being promoted from (for example being promoted within "Client Facing Technology" in your firm).
Internal Job Move	Moving to a new job in a different part of your existing organisation, headed by a different senior manager. The new job is broadly at the same level as your existing job. For example moving from being the Presales Architect to being Head of Development for Internal Services within your organisation.
Contractor or Consultant Assignment	Joining a new organisation from outside, without significant prior knowledge of it, as a consultant or contractor being brought in to fill a short-term role requiring specialist skills.

Example Roles

Developer	Someone developing production software on a day-to-day basis.
Team Leader	Someone leading a development team of 3 – 8 people, splitting their time between management, leadership, mentoring and development.
Analyst	Someone who works to understand the problem to be solved and define it in such a way that the development team can be successful.
Coach / Mentor	Someone who works with others to help them improve their skills and effectiveness.
Architect	Someone who is responsible for providing technical leadership and who is accountable for the design of a system or group of systems.
Project Manager	Someone who coordinates the work of others in order to allow them to be successful in achieving a goal.

Example Organisations

Zaamab (Small Organisation)

Zaamab Ltd is a bespoke software house employing around 50 people of whom 35 are directly involved in software development. They have a single location on one floor of an office block but teams area split between two office spaces on either side of the stairwell.

Their primary business is the development of custom software systems for customers of varying sizes in a variety of markets but primarily retail and financial. The systems are built on top of their common framework, which helps to improve the speed of development but increases the learning curve before developers become productive. The framework is built on the Microsoft technology stack with C# and SQL being the main development tools.

The company is organized into small teams that serve specific customers. The style and maturity of the development process varies between teams based on:

- The relationship with the customers some are more open to agile approaches while others require a more formal signoff process in a more BDUF approach
- The experience of the developers making up some of the teams

Dramatis personae:

- Steve James founder and senior technical authority. Fairly business-savvy after a few years at the helm, which has seen him move away from the technical side a little but he is still very analytical and willing to call things out technically.
- Grant Davison new CEO coming from a sales background. Understands the nuances of software development but very delivery focused.
- Robert Langham the newest of the leadership team bringing a wide range of
 eclectic experience of modern development practices. Currently updating the
 processes and practices across the organization.
- Adam Robertson heads up the custom software delivery team, fronting off to customers for most day-to-day delivery issues and frequently getting involved in hands-on troubleshooting when required.
- Dave Williams lead solution architect in the organization. He is another longstanding member of the technical team who has been very much an internally taught techie. Very smart and likes to oscillate between in-depth code and customer requirements capture, and slightly bemused that others cannot transition as seamlessly. Like structured processes and delivering systems.

SilverTrail Travel Ltd (Medium Organisation)

SilverTrail Travel Ltd is a travel retailer that employs around 800 people of whom 120 are involved in software development. They have 3 different software development locations with most of the developers split across two floors in their UK headquarters. There are a small number of developers in London and another team in the USA. Both of these teams are the result of acquisitions.

Their primary business involves the aggregation of flights, rooms and excursions from a variety of suppliers which are sold through a variety of branded web sites targeting different areas of the world (Europe, Asia, US). Their systems are largely built using the Oracle technology stack (Java, JSP, Oracle RDBMS). They have a large amount of legacy code some of which has been recently refactored to try and bring order but there is also a move afoot to introduce an enterprise service bus. By the nature of the business, there are large numbers of inbound integrations with some outbound, real-time integrations to large suppliers.

The company is organized into small-medium sized teams that serve specific web sites. There are specialist teams providing a common service layer, architectural libraries and an ITIL infrastructure team. The development teams employ agile practices with a varying degree of expertise. There is some tension between the architecture team, the development teams and the ITIL infrastructure team.

Dramatis personae:

- Richard Stewart recently appointed CIO for the organization. Has been recruited because of his "large company experience" and is struggling to broker between the agile and ITIL teams.
- Simon Cooper relatively young software development manager who has helped to build the agile development capability. Keen to adopt new techniques like Kanban but struggling to play the politics needed to keep his team working the way they want. Reports to Richard.
- Kirsty Scharner leading agile development evangelist in the organization. A high profile figure in the local agile community who brings new ideas and practices into the organization. Reports to Simon.
- Anna Richards heads up the main web team who develop the European web
 application. She has come up through the ranks from developer to team leader
 and is quite keen on new technology and techniques but is wary of introducing
 too much new stuff due to previous inadvertent production outages caused by
 unready changes leaking into production.
- Stefan Spekowski devops team leader who has helped to build a fairly slick pipeline but, as a former delivery lead, is now getting a little bored and frustrated.
- Emily Shore operations team leader and very wedded to ITIL. The
 development teams see her as the figure whom is always looking to restrict their
 ability to deliver.

Crusty Bank PLC (Large Organisation)

Crusty Bank PLC is a leading bank based out of London. They employ over 6000 IT-related staff around the world with IT centres in India and Singapore as well as half a dozen locations across the UK. They have acquired a variety of other organizations over time including mortgage vendors and trading houses, and their physical and organizational structure reflects this.

Their primary business by number of people is retail and commercial banking although the bulk of the profits recently have come from the trading arm. They still retain hundreds of branches across the country, each of which has the usual hardware including tills, ATMs and PCs. They also have front office call centres and back-office processing centres around the world. A large part of their IT is focused around several IBM mainframes with almost every other type of hardware and software at work somewhere in the organization. Over the years they have built and continue to build a variety of bespoke software systems from seriously transactional payment systems through to HR-focused onboarding systems.

The company is organized into hierarchical divisions to which part of the IT is aligned. The rest of IT is siloed into technology-based teams aka Shared Services. In theory, the organization is fairly well up the CMMI scale¹ but the reality on the ground is somewhat different. The size of the organization, the churn in suppliers and people, and the siloed nature of the IT function leads to large inefficiencies and what boils down to a heroic delivery culture.

Dramatis personae:

- Advaya Malhotra very driven CTO of the retail side of the business (consumer and commercial). He is keen on new technologies such as mobile and big data. Spends most of his time travelling the world and cheerleading for the technology function.
- Mike Cole leads up one of two main technology groups in the retail bank. The undercurrent of rivalry sometimes gets in the way of delivering value for the bank. Always looks out for his own team and has a core of long-time, loyal adherents. Reports to Advaya Malhotra.
- Seamus Brody as spent the past 3 years trying to deliver agile and iterative development into the part of the retail bank you have been recruited into. Struggling to make an impact amongst the organizational politics. Reports to Mike Cole.
- Brian Newman one of the senior engineers in the retail space. Has spent years
 in heroic delivery with the war stories to prove it. His military past predisposes
 him to detailed planning and partitioning. Fiercely loyal and committed and
 demands the same in return from those who work with and under him. Reports
 to Mike Cole.
- Vijay M Singh head of technology at the Singapore Technology Centre. Selfstyled "Technology Guru" he is continually meeting with vendors and pushing the boundaries of the bank's architecture, albeit with limited impact on the ground.

 $^{^1}$ CMMI (the SEI Capability Maturity Model Integration) attempts to measure how mature and effective the software development processes of an organisation are by comparing them against an ideal model based on the SEI's experience.

Practices

Name	Organisation Map (example)					
Brief Description	Draw an organisation chart which shows the key roles, people and reporting lines (solid and dotted)					
Top 2 Benefits	1. Know who the decísion makers are; 2. know who can answer questions					
Top 2 Challenges	Finding a reliable source of information if there is no official organisation chart Determining the dotted organisational lines					
Applicability						
		New	Promotion	Job Move	Contractor/ Consultant	
	Developer				X	
	Team Leader	х		х	Х	
	Analyst	х	х		х	
	Coach / Mentor	х	_	Х	х	
	Architect	х	х	х	Х	
	Project Manager	х	Х	х	Х	

Name					
Brief Description					
Top 2 Benefits	1. 2.				
Top 2 Challenges	1. 2.				
Applicability					
		New	Promotion	Job Move	Contractor/ Consultant
	Developer				
	Team Leader				
	Analyst				
	Coach / Mentor				
	Architect				
	Project Manager				

Name						
Brief Description						
Top 2 Benefits	1. 2.					
Top 2 Challenges	1. 2.					
Applicability						
		New	Promotion	Job Move	Contractor/ Consultant	
	Developer					
	Team Leader Analyst					
	Coach / Mentor					
	Architect Project Manager					
		•				
	1					
Name						
Brief Description						
Top 2 Benefits	1. 2.					
Top 2 Challenges	1. 2.					
Applicability						
		New	Promotion	Job Move	Contractor/ Consultant	
	Developer					

Team Leader
Analyst
Coach / Mentor
Architect
Project Manager