

Article 6 – IT Physician Heal Thyself 'Building Bridges and Breaking Boundaries'

'The UPF 'Enabling Dimension''

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This is the sixth article in a series of seven that are due to appear in SERVICEtalk, Computing and its sister papers through Europe. They support the theme of the 2003 UK itSMF conference on 'building bridges and breaking boundaries'. The articles are also part of the bITa programme to improve the alignment of Business and IT.

Summary of the Previous Articles

Previous articles have introduced the idea of a Unifying Process Framework that aligns the domains and frameworks across IT and into the business.

The articles considered some key IT Management Domains including: IT Service Management; IT Project Management; IT Applications Management; IT Infrastructure Management and IT Strategy & Architecture.

Each of these domains have their own frameworks ITIL, MOP, PRINCE2, ASL, BSD/SSADM, RUP, DSDM, ISPL, IS-7799, COBIT and Catalyst POLDAT, that were developed separately and in parallel by different groups with different outlooks. They were not designed to align with one another and so they don't!

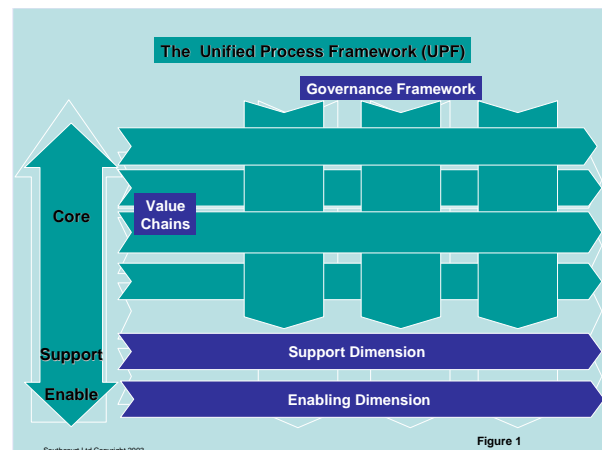
The articles introduced the Unified Process Framework (UPF) which has been developed to be a 'Framework of Frameworks', into which all the best practices within the individual frameworks can be assembled so that processes are truly 'end to end'.

The UPF is a process unifying framework that aligns not only the domains within IT, but also aligns IT with the business. UPF accommodates business frameworks like the Balanced Score Card, Six Sigma and EFQM.

The UPF is made up of four dimensions. Previous articles have explained the two dimensions of the core UPF processes that interact with one another: the 'Governance Framework and Domains' and the Value Chain Framework and Domains'.

They have also explained the Support domain where common processes performed across the Governance Framework are defined in a standard manner to be performed consistently and not reinvented everywhere they are used.

Figure 1 provides an overall picture of the UPF.



The Purpose of this Article

The purpose of this, the sixth article, is to explain the Enabling Dimension of the Unified Process Framework

The Enabling Dimension provides a common platform of work and knowledge management processes used across the Core and Support domains of UPF.

The Enabling Dimensions 'enables' all people involved in the business and IT, from the executive to the service desk to work and share information in a similar manner.

The Core and Support domains define:
'What is Undertaken'.

The Enabling domain defines:
'How Things are Undertaken'.

So let's start at the beginning of this topic.

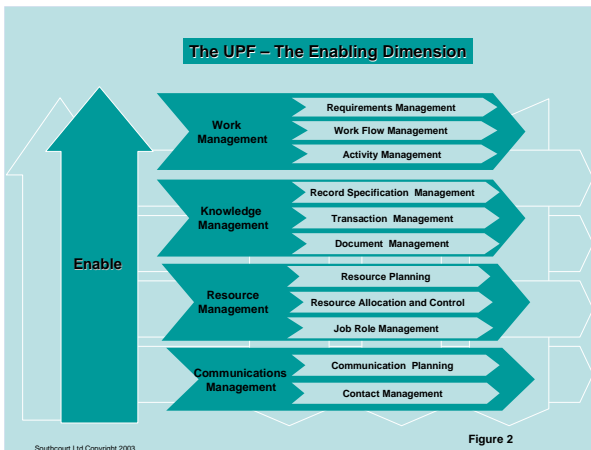
If we think about processes across the Governance, Value Chain and Support dimensions, they all need to be supported by work management and knowledge management methods.

Whether it be to do work on a project, to work on a change, to fix a problem, to run an operational service, to develop business processes or to produce a report, they all need:

- Resource to do the work – human and tools
- A work regime under which any work is done and they all need
- The ability to share information
- The ability to communicate with one another.

In UPF these areas of process are known as parts of the 'Enabling Dimension'. The Enabling Dimension domains specifically are:

- The Work Management Domain
- The Knowledge Management Domain
- The Communications Management Domain
- The Resource Management Domain



The diagram above, figure 2, illustrates the scope of these Enabling Domains. The first two, Work and Knowledge Management, are examined in overview in this article.

The Work Management Dilemma

A current management dilemma in most organisations is that they operate a number of piecemeal approaches to these topics rather than having a consideration for, let alone an actual, 'Unified Approach' or a Standard Regime.

Let's start by looking at Work Management.

If we take an example of a technology team in IT – let's take the Unix team, typically when it comes to work management they have work coming into them from different sources through different mechanisms.

- Work to resolve production issues is presented as job tickets from the service desk system and are allocated to one set of Unix staff – the support group.
- Work coming in from projects is managed by the project with frequently dedicated Unix resources allocated to the project to make sure the work gets done.
- Routine maintenance and housekeeping work is managed in another way
- Planned and emergency changes in another
- Technology upgrades in another
- Strategic Architecture in another
- Management work in yet another
- And of course administration in another.

As for the manager of the Unix team – because his team has no one way of working and because the different ways of working have no consistency, the team managers cannot see what their people are doing, what they have done, or what they are tasked to do.

There is no overall approach or work framework and the end result is that teams, like the Unix team, are broken into a number of teams directed at the different work strings:

- a project support team;
- a production support team;
- an architecture team
- a maintenance team

- etc.

The unity, productivity and effectiveness of teams is compromised.

If we reflect upon the Governance Framework, then each domain and each process in the governance framework is likely to have its own work management regime. Some will be partially automated with work flow like production incidents reported through the service desk. Others will have less automation support with just piecemeal knowledge capture and communication via email.

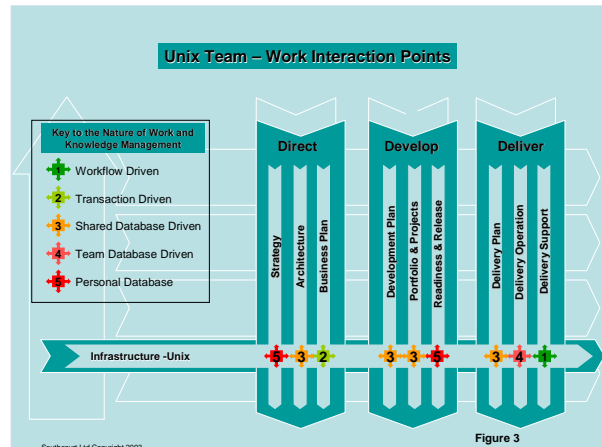


Figure 3 above reflects the variety of work interaction points for the Unix team across the governance framework. with different methods of work and management control and recording.

UPF encourages a common approach to Issue Management or Risk Management in the Support Dimension. In the same way UPF encourages a common or unified approach to Work and Knowledge Management.

The comparison is made between the business and IT processes covered by UPF with the processes for planning, managing and operating a factory. In most factories, the scenario in 2003, is of consistent work management methods of the production planners, factory engineers, materials handling staff, procurement people, dispatch people and production line workers.

Can IT people work this way and can business management and professionals work this way?

It is assumed by many, that IT professionals will react adversely to being organised in the way that production workers are. However the reality is that IT services are 'Directed, Developed and Delivered' by repeated processes and are really just an IT factory managing the life cycle of IT services.

'Direction, Development and Delivery' all involve work and all the work needs to be organised. The author believes that a unified method of working across the governance framework for management and professionals including IT is inevitable.

It is desirable from a manager's viewpoint – what do you think Mr Unix team manager?

It is also desirable from a staff viewpoint – what do you think Unix team?

UPF encourages the elements of work management processes to have a common framework.

The traffic light analysis below helps teams and departments determine the commonality and uniformity of work management approaches, methods and mechanisms for managing work against a number of work management concepts.

There is insufficient space in this article to explain all the processes and elements that make up the Work Management Domain in UPF, and so we will reflect upon just three from the chart, figure 4, below:

- Work Definition Management
- Work Requirements Management
- Work Execution Management.

UPF - Work Management Process Analysis			
Work Management Process Concepts	Common Approach	Common Method	Common Mechanisms
Work definition management	Red, Yellow, Green		
Work requirement management			
Work execution management			
Work resource management			
Work planning management			
Work structure management			
Work audit management			
Work knowledge management			
Work time management			
Work cost and recovery management			
Work communication management			

Figure 4

Work Definition Management

Work is defined in different ways by different groups of people in business and IT in the form of process flows, procedures and work instructions.

Where many people perform the same activities repeatedly, then the work structure tends to be defined at a low level with detailed procedures and work instructions. Where things are done as a 'One Off' then the opposite is true.

But how often are things done as a 'One Off'?

If we look at most work activities that are performed across the governance framework, they are repeated. If we think about most of the things that the executive, managers and professionals do, be they business or IT the work activities are repeated.

We tend to define 'Delivery' work activities in some detail, but we tend to leave open the definition of 'Directional' and 'Development' activities. Even in projects where work packages are identified, very few work packages have any work definition, just an objective and resources to find the way and achieve the end result.

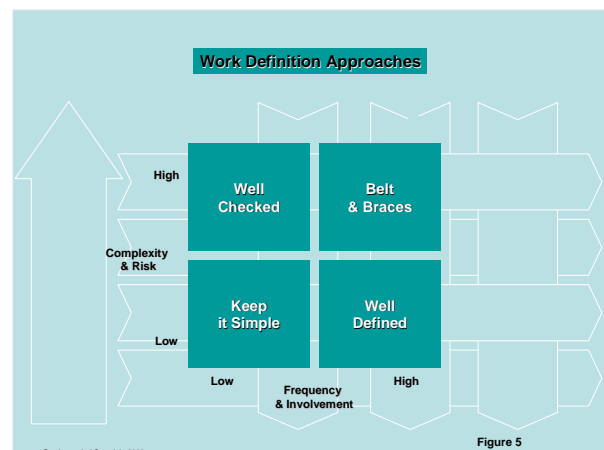
Most work packages performed in projects involve standard activities that go undocumented. This should

be surprising as the cost of undertaking 'Development Activities' on projects and the value of getting the right as opposed to the wrong result can be far greater than those of 'Delivery Activities'.

Work Definition Management in UPF then encourages work activities to be defined, before the work is done and then refined after it has been done for the benefit of when it is done next.

Work only has to be defined at the level appropriate to ensure that:

- There is consistency of the end result
- The checks and controls needed are undertaken
- The work process can be audited, reviewed and improved



The common sense approach to work definition management is illustrated in the diagram above, figure 5. The 'Belt and Braces', 'Well Defined' and 'Well Tested' approaches are balanced by the 'Keep It Simple' approach. However 'Keep It Simple' doesn't mean don't do it.

To ensure that the appropriate level of 'Work Definition Management' is established, another UPF Enabling Management Practice is used: 'Work Requirements Management'.

Work Requirements Management

How often is it that people do work that is not required?

A strange question, because if something isn't required why do it? However many managers and team leaders do not know what their people are doing. a lot of work that is done is not required.

There are requirements for people in each of the value chains to undertake work at different points in the Governance Framework. The way work is required of people, the way it is requested, the way it is planned, resourced and supervised varies enormously across the governance framework.

In UPF, 'Work Requirements Management' is the approach that ensures that all work activities are undertaken against a recognisable, preferably documented and approved requirement. for the work.

'Work Requirements Management' involves having standard ways of sorting out a whole variety of people and organisational issues and responsibilities around work.

Work Requirements Management – Responsibilities Example – Unix Production Incident Workaround Work	
Responsibilities	Example Job Roles
Who budgets resources for it	Unix Team Manager
Who prioritises it	Service Desk
Who organises resources for it	Unix Support Manager
Who requests it	Service Desk
Who approves it	Service Manager
Who allocates resource to it	Unix Support Manager
Who does the work	Unix Administrator
Who progresses it	Service Desk
Who checks the results it	Peer Unix Administrator
Who authorises changes	Change Manager
Who receives it	Service Delivery Shift Manager
Who needs to know about it	Lots of Job Roles
Who owns the process	Service Desk

Figure 6

The list above, in figure 6, illustrates the areas of responsibility that are addressed in UPF as part of Work Requirements Management processes, that enable work to be unified and undertaken in a standard manner.

In the example above there are clearly a large number of players involved in handling all aspects of a requirement.

Most work requirements have similarly complex relationships and responsibilities. The objective with UPF is to take a standard approach to this aspect as well as other aspects of work management.

'Work Requirements Management' supports Work Definition Management because requirements should be raised against a definition of the work that is required. If the work is to undertake a maintenance activity, say put a software patch on a number of servers, then there should be a Work Definition used to undertake that activity.

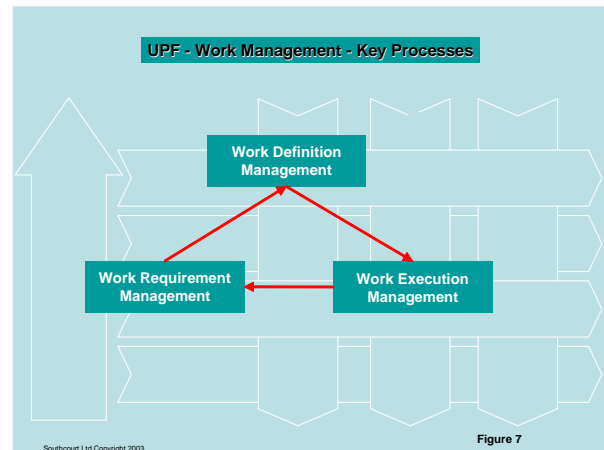
If the work requirement is to undertake a quarterly review of the technology architecture, to bring it in line with projects development progress, then there should be a Work Definition used to undertake that activity.

The work definition provides the basis for determining if a requirement should be accepted. The work definition should help establish the relative priority of the requirement, along with the SLAs or OLAs for doing the work

So work definition and work requirement management support each other.

Work Execution Management

Let's now briefly look at Work Execution Management. This is simply the framework for executing a number of requirements according to their work definitions, in parallel with competing pressures and common resources.



In UPF Work Execution is the set of common processes by which the work actually gets done to deliver the 'Work Requirement' using the 'Work Definition'. The interaction of these three process areas is illustrated in figure 7 above.

Done manually good work execution of work coming in from multiple streams is intensive and impractical. Work Execution benefits from automation either in the form of work flow or transaction processing. The benefit of the Work Flow approach is that the activities undertaken are as in the 'Definition' of the work and they are executed as a 'Work Requirement'.

Work execution involves managing the delivery of the requirements as defined in the work definition

The Knowledge Management Dilemma

The lack of a common approach to work management is one thing, perhaps it doesn't matter that the Unix team have to work in work compartments as above without a unified way of managing their work. However the fact that those 'work compartments' are also 'knowledge silos', is a big issue.

If we look at the UPF model we see that at every intersection of the Governance Framework with the Value Chains we have potential, if not actual, silos of information.

In UPF we use the term 'Knowledge Management' to mean the sharing of information across the Governance Framework and across the Value Chains. Simply meaning that information shared, is 'knowledge'

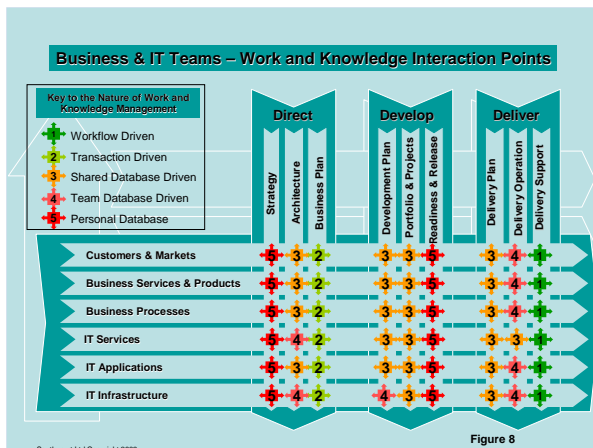
Let's go back to the Unix team and the work interaction points in the diagram above.

Not only is the team fragmented in performing their work in the different domains of the governance framework but the information and knowledge tends to be locked up in those domains and not transferred between them.

Knowledge Management fails the Governance framework for all business and IT teams.

- In the author's experience, information gained in defining the business or technology Architecture is seldom shared, used or most importantly related to information defined in production deployment.

Seldom are the business or technical functions, features or faults, that are discovered in development, simply known to people supporting business and IT delivery.



Knowledge Management also fails the Value Chain for all the business and IT teams.

- During development projects, members of the business and IT teams may learn to understand how things work with the other value chains.
- In the IT arena, this would involve how Applications work together with the IT infrastructure and handle data. In the business – IT arena, how applications support business processes .
- In the business arena, this would involve how business processes are used in the supply of business services and business products to customers, along with how customers are serviced in different business markets.

The information and understanding gained in projects tends to be locked away in project development files and does not get dissipated to the value chains. So it is not normally accessible to the service delivery, support and maintenance people in the value chains. "Information is not shared and so Knowledge is not acquired".

In IT Service Management terms, Knowledge Management is about implementing an Enterprise wide Configuration Management DataBase (E-CMDB) in one form or another. The E-CMDB should hold and relate information on and between all Value Chains developed and used across the business life cycle managed by the Governance framework

The Resource and Communication Management Dilemmas

Work and Knowledge Management are the two main Enabling Domains but there are two other related domains – Resource Management and Communication Management. There is no more room in this article to explain these beyond what is in figure 2 They, as the other enabling processes, enable the operation of the Core and Support activities to take place, without reinvention.

IT as the Enabler for the Enabling Domain

Automation clearly enables people to share information and to organise work activities in a more collaborative manner. However whilst work automation is an enabler the lack of common work management approaches and methods is not necessary but is the norm.

It is always possible to implement essentially manual work, knowledge, resource and communication processes, be they supported by a quill pen and paper or by a spreadsheet and email, but integrated systems will not happen without the magic of IT.

Some IT Service Management tools and some Professional Service Automation tools provide workflow, transaction processing and a central knowledge repository with resource management – so enabling the automation of the 'Enabling Processes' in that specific area of business process.

The key to effective automation of the 'Core' and 'Support' processes of UPF is the automation of the 'Enabling' processes with a flexible and adaptable work and knowledge management tools set that can be implemented on everybody's desktop as their work and knowledge management hub.

The Way Forward

The seventh and final article in this series will show how IT can move forward from being individual domain/framework driven and how IT can improve, in a pragmatic manner, the interfaces between its existing frameworks like ITIL and PRINCE2, to integrate them practically into one Business – IT aligned 'Unified Process Framework'.

For more information on the itSMF and its UK November 2003 conference, contact service@itsmf.com

For more information on bITa and their alignment programme and planned seminars on this subject, in Q4 2003 across the UK contact support@bita-center.com or look up their web site www.bita-center.com

For more information on UPF, UPF Master Classes and the UPF Handbook, contact the author of this article J.Gibert@btopenworld.com

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