

# Widely practiced Information Technology Service management Frameworks

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**Abstract-** The Practice of IT Service Management guided frameworks such as ITIL OGC UK has been on the rise with their release version of V3. While there has been some research into the benefits that these frameworks provide, there has been no theoretical basis explaining why Organizations achieve these benefits. Taking a Knowledge-Based View of the organizations provides an understanding of how organizations are able to improve the service delivery when implementing the frameworks. This research illustrates how IT Service Management frameworks can support organizations in improving service delivery while adopting these ITSM frameworks.

**Keywords – ITIL, IT Infrastructure Library, Processes, Knowledge-Based View, Service Catalogue, CMDB**

## I. INTRODUCTION

As IT Heads attempt to mature their IT service management (ITSM) capabilities, they often consult external sources, such as ITIL documentation or consultants, for appropriate tools, techniques and methods. The surplus of approaches and widely varied semantics has generated considerable confusion around key service management frameworks — specifically, their purpose and their relationships to one another. As a result, necessary artifacts are inappropriately combined, omitted or misapplied to the detriment of service effectiveness.

- With definition, a "service" is an action that delivers a benefit to a recipient. Services are, Therefore, intangible and must be expressed in terms of the value expectation.
- Technological components and processes are Service fulfillment elements they are not services.
- The purpose of ITSM is to optimize and service outcomes, not process outcomes or technology asset use.
- IT organizations that invest in ITSM Software's or management objects without first articulating their services inevitably commoditize themselves and solidify their role as a back-office utility, not as a service partner.
- IT companies/Departments cannot optimize their services if they don't know what their services are. A service portfolio stating those services and their value propositions is the cornerstone of all service management imperatives.

## II. ANALYSIS

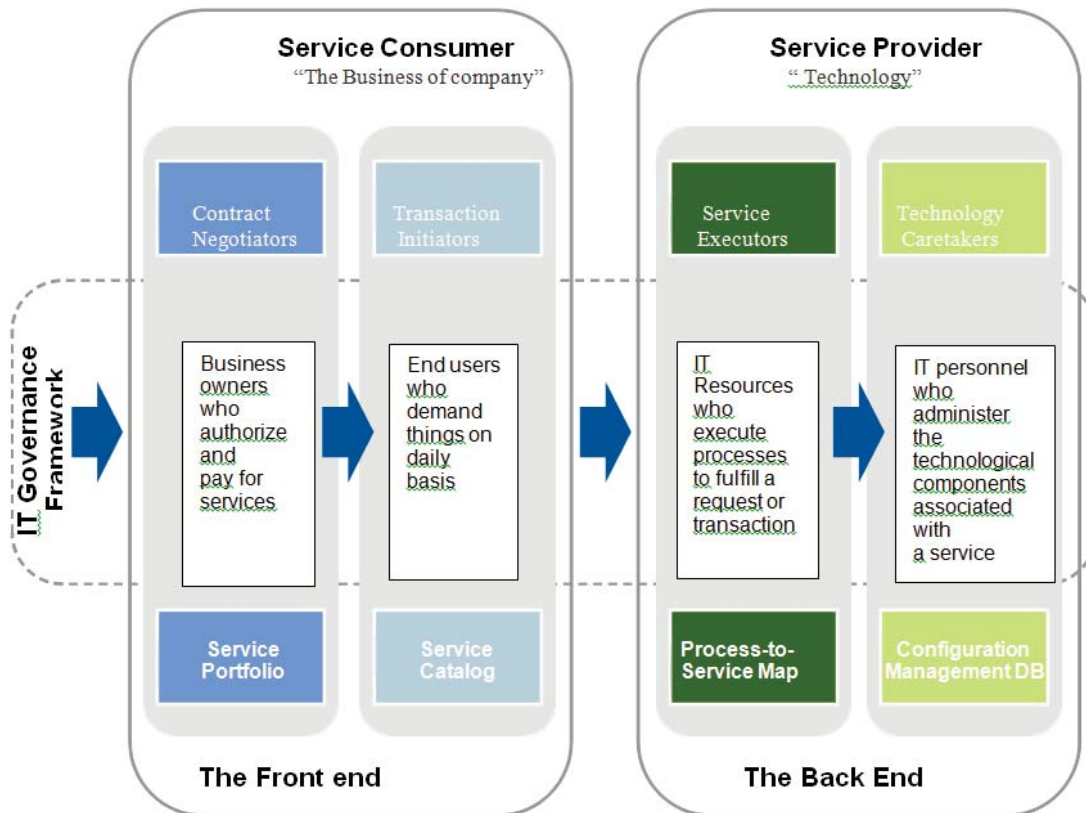
There are five most IT service management frameworks. Each targets in a different approach, and each has a distinctly different purpose. When understood and correctly implemented, these five frameworks clarify the anatomy of the service value chain, connecting the dots between a specific technical component or activity and the actual service results it drives. This ability is crucial to delivering predictable, repeatable service outcomes and continuously improving results.

FOLLOWING ARE THE FIVE MAIN ITSM FRAMEWORKS:

1. Service Portfolio
2. Service catalog
3. Process to service map

4. IT service view configuration management database (CMDB)
5. IT Governance

As Figure below shows, the first two frameworks are "front-end" objects directed to business stakeholders. The other two are "back-End" objects directed to IT Heads and Companies Involved in the operational execution of a service.



Before any of these frameworks are developed, it is important to be clear that the whole point of ITSM is to optimize service outcomes from the point of view of the ultimate consumer, not another IT organization involved in the service delivery value chain (see "ITSM Fundamentals: Defining Provider Relationships and Accountabilities Across a Service Value Chain"). Therefore, every decision and every framework must support that goal. This means that it is pointless to create any of these frameworks until the consumer has been identified and the service portfolio itself has been articulated. The portfolio must come first. IT organizations cannot optimize their service outcomes if they don't know their services and what the expected outcomes actually are.

Furthermore, without the portfolio, there is no common organizing construct for the other frameworks, and there is no ability to correlate process and configuration changes or catalogs to service outcomes. The inevitable result is that valuable time is wasted in managing the artifact (a catalog or CMDB) or a fulfillment element (a process or a technological component) rather than in optimizing the service outcome.

#### THE SERVICE PORTFOLIO

Every internal IT organization functions within two domains. The first is the architectural domain, which is concerned with delivering new IT-enabled capabilities to the enterprise. Its business value is based on the degree to which the IT-asset-based capabilities have their intended impacts on business key performance indicators (KPIs). The second is the service domain, which is concerned with the value-added management capabilities that an internal IT organization brings to bear in shepherding and stewarding those IT-asset-enabled business capabilities. Its business value is based on the effectiveness of the IT organization as a service provider when compared with other alternatives mainly, external service providers.

A service portfolio is a strategic articulation of the IT organization's core capabilities and service value to the enterprise. Physical, tangible assets are not services, and they do not belong in a portfolio, the portfolio answers the questions, "Why should the enterprise buy the service?" and "Why should the enterprise buy it from an internal IT organization, rather than another alternative?" It is targeted to senior business leaders who want to know they are getting good service value for their money and that they can't do better somewhere else.

The service portfolio lists and describes the IT organization's services and their explicit business value propositions. A fully centralized IT organization with both application and infrastructure services might have 10 to 15 true services. IT services are usually articulated in a portfolio and how they perhaps should be articulated as they get closer and closer to making true business contributions. The clearer the description is from a business perspective, the easier it is to create value-based service-level agreements.

Imagine crafting a business value statement for PCs, mobile phones or printing. Then, imagine crafting one for desktop management or workplace services. Which is easier? Which is more compelling? The service is not the asset. The service is the act of provisioning, maintaining and disposing of the asset. The service value is derived from a combination of the asset's business-enabling capabilities and the IT organization's effectiveness in sustaining those asset-enabled business capabilities.

#### THE SERVICE CATALOG

The service catalog is the operational manifestation of the service portfolio. It is targeted to the day-to-day consumers of IT products and services. Unlike the portfolio, the catalog can contain physical assets as long as they are something the defined customer would actually request and buy. Like

any other catalog in any other realm of life, an IT catalog is intended to facilitate service ordering and fulfillment. It is fundamentally transactional in nature. It is organized so that the things a consumer wants to request are easy to find, and it is articulated so that options are well-understood. In addition, it clarifies how to order or request the service, when to expect the transaction to be completed under ordinary circumstances (this is not the same thing as an SLA), and what to do if those expectations are not met. It says nothing about how the IT organization goes about fulfilling those requests.

Fundamentally, the catalog's purpose is to make it easier for a consumer to do business with IT. As with the portfolio, this necessitates articulating it from the point of view of the consumer, not of the provider. Connecting the catalog to the portfolio further requires that every item in the catalog be associated with one and only one service from the portfolio. This enables cost accounting roll-ups that correlate service cost to service value. It also provides important context that elevates what would otherwise be a commodity transaction to a value-based service. Moreover, it enables the pursuit of aggregated, value-based SLAs at the portfolio level, rather than technology- and transaction-centric performance metrics at the catalog level. IT companies that implement a catalog without first building a portfolio inevitably build it to make their own lives easier, treating other co-provider IT companies that are involved in process handoffs as customers. They communicate the catalog contents from an IT-centric perspective, including back-office fulfillment elements that are of no interest to an end consumer. They also tend to set pricing and SLAs at the catalog level. This cements the business perception of IT as a commodity and forces the IT organization to continue justifying its existence on the basis of cost. It creates an untenable management burden due to the total number of SLAs that need to be managed, and inevitably, they are the wrong SLAs, because they are not based on any understanding of who the customer is, or of the service's desired business value and contribution.

In short, a catalog that is unsupported by a portfolio further entrenches business leaders' belief that IT doesn't understand the business and is not worth engaging. By contrast, a catalog that is supported by a portfolio elevates the conversation, captures all the business value-adds that a competent IT organization delivers, and creates the basis for both a performance-based IT culture and an effective activity-based costing system.

#### THE PROCESS-TO-SERVICE MAP

The process-to-service map correlates to a service all the activities associated with fulfilling it and meeting its SLAs. The map's primary purpose is to make explicit the relationships between services and processes, so that performance and process optimization can occur. It captures the intangible fulfillment elements of every service. As such, it is a crucial back-office decision framework for IT leaders, but it should not be positioned with business leaders or IT product/service consumers.

The process-to-service map is necessary because there is not a one-to-one relationship between services and processes. If the average fully centralized IT organization has 20 services, it might

have 100 processes. It will never be possible to optimize all those processes, so the IT organization needs a mechanism for knowing which ones matter

The IT organization that is optimizing processes for services that already meet their SLAs is wasting money by investing in service outcomes that are not valued by the business at the probable expense of services that are underperforming. The only way to respond to a business managers insistence that a particular service's performance be improved is to have a measurable statement of expected performance (an SLA) and to know specifically what processes drive that performance(the process-to-service map) so that the explicit processes impeding performance commitments are recognized and can be improved.

#### THE IT SERVICE VIEW CMDB

Every IT service has activity-based fulfillment elements, because a service is the value-based result of an action or actions — that is, a series of processes, activities or tasks. These processes, activities or tasks directly result in service fulfillment or are acted out on technological assets,

which, in combination with processes, deliver a service outcome. While the IT service view CMDB is similar to the process-to-service map in many ways, it focuses on the physical rather than intangible fulfillment elements of a service and is more aligned to service change and execution, rather than service prioritization and planning.

A CMDB's primary benefit is to deliver a top-down, service-oriented view of the infrastructure components that compose an IT service and the interdependencies between those components. CMDBs are designed to depict parent-child, peer-to-peer and hierarchical relationships across base configuration elements.

Creating a CMDB requires the following :

- Solid configuration management and discovery processes. This is because the CMDB leverages other information sources and includes only the information that is necessary to support a service.
- A strong sense of objective. The information collected and maintained must serve a purpose.
- An owner who is responsible for the ultimate integrity of the information that the CMDB contains.
- Integrity metrics to which the owner can be held accountable.

#### THE IT GOVERNANCE FRAMEWORK

The Widely practiced governance model is COBIT 4.1 even with the release of latest version 5. The importance of the governance is to support toolset that allows managers to bridge the gap between control requirements, technical issues and business risks . It enables clear policy development from Board/Management and improved practice for IT control throughout Companies. The Framework is accepted globally as a set of tools that ensures IT is working effectively and functions as an overarching framework which Provides common language to communicate goals, objectives and expected results to all stakeholders Based on, and integrates, industry standards and good practices in Strategic alignment of IT with business goals Value delivery of services and new projects Risk management Resource and management Performance measurement.

### III.CONCLUSION

Each of the aforementioned frameworks targets a specific stakeholder and serves a specific purpose, but all are fundamentally aligned to the achievement of a predefined, value-based outcome. For this reason, the frameworks must be developed from the top down. The available range of ITSM automation tools/Software's has an important role to play in service management and its delivery, but typically. Most software's have a stronger back-office rather than front- office orientation. Few support the service portfolio or the process-to-service map.

IT Heads must be careful to avoid "running to what is most familiar" — that is, technology — when starting their service management journey. Beginning ITSM with a bottom-up, asset-centric orientation virtually guarantees making three classic ITSM mistakes:

- Positioning assets or processes as services
- Targeting catalogs to co-providing IT organizations, rather than to service consumers
- Mistaking tactical transactions for strategic, high-value services

The good lesson is that all of these mistakes can be avoided. When properly selected and implemented, this set of ITSM frameworks provides the means to re-orient key stakeholder relationships and conversations away from technology toward business results, and away from cost towards investment.

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