



IT operations as-a-service

***Improving IT Operations performance by setting-up
end-to-end, demand-to-invoice governance***



Executive summary

The turbulent economic environment, globalization and “cloudization” are driving a renewed business IT-relationship. In particular, business units are looking for using IT services in a simple, flexible yet cost-effective way – in particular in the domain of IT Operations (computing power, end-user environment, storage, ...). This quest is reinforced by the lasting pressure on cost control at each level of the organizations.

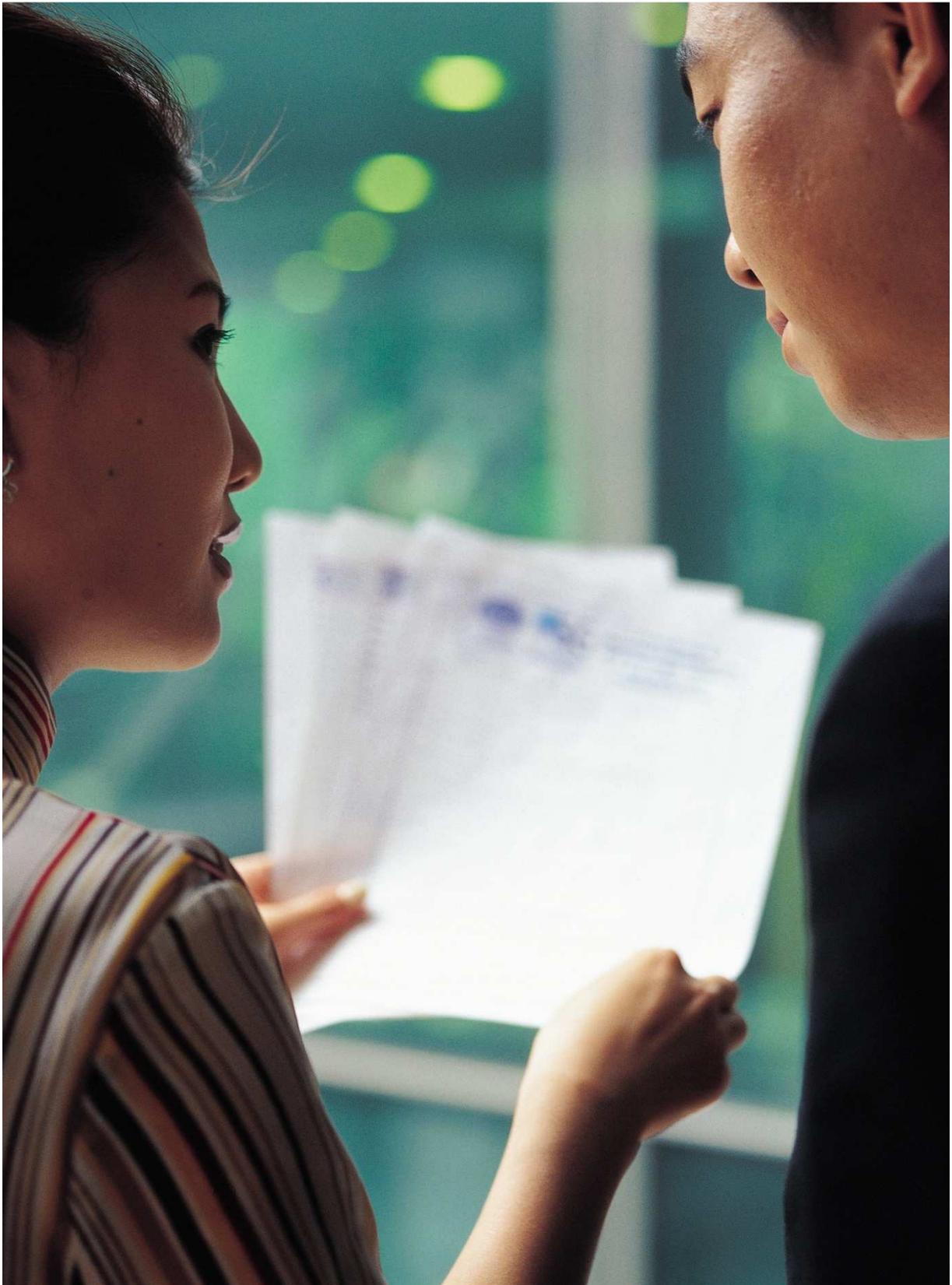
In the last years, we have seen a number of parallel initiatives conducted in a dispersed way in companies, aiming to bring more transparency to the IT - Business relationship. IT service catalogues design and implementation, service contracts and SLA set-up, IT costs charge-back, ITIL-compliant processes, are some of these initiatives. However, they have rarely met business expectations for a more simple, predictable and transparent way of dealing with IT.

For Capgemini Consulting, meeting those business expectations requires to take an end-to-end view for IT Operations services – i.e moving towards “IT Operations as-a-service”. It means implementing a coherent set of processes: service catalogue design and maintenance, costing and pricing, demand management, service-oriented IT operations, invoicing and IT cost control.

Each stakeholder – Business, IT & Finance – have an strong interest in implementing such an “as-a-service” system. First, they will share a joint understanding of IT services, which will strongly facilitate and accelerate discussions. The Businesses pay exactly for what they use, which empowers them to adjust their usage in terms of volume and service level. On the IT side, implementing end-to-end processes is also a strong opportunity to industrialize services. It facilitates the journey towards more standardization and globalization – both by rewarding virtuous entities and by guaranteeing financial resources to deliver transformation. In the end, this end-to-end approach enables Finance to better control and forecast IT costs – in particular by separating the volume effects from the unit cost evolutions.

However, the implementation of “IT operations as-a-service”, while rewarding, is particularly complex. Based on our experience, we have identified a number of pitfalls to avoid – from limiting complexity to improving volume measures quality to mobilizing sponsors in the long run. In our opinion, setting-up “Operations as-a-service” should be managed as comprehensive transformation program that brings together the business, IT and finance communities.

More generally, “Operations as-a-Service” can also be seen a first step to deliver “clouditized” services – both IT and business shared services - to the business. As such, it is a formidable asset to increase transparency and efficiency in organizations.



1. IT EFFICIENCY MUST BE ADDRESSED IN A COMPREHENSIVE APPROACH

In the last few years CEOs have launched parallel initiatives to streamline and industrialize their IT activities:

- Operations support processes have been standardized and toolled
- ITIL and service management implementation projects lead to revamped Business and IT relationship, in particular through the formalization of service catalogues, service levels and “service managers”
- Projects concerning IT Cost analysis or charge back flourished

Each of these initiatives brought its own added-value. However those matters have seldom been addressed in a coherent, end-to-end approach.

Our conviction is that addressing comprehensively the “demand-to-invoice” process multiplies the added-value, both for the business and for IT.

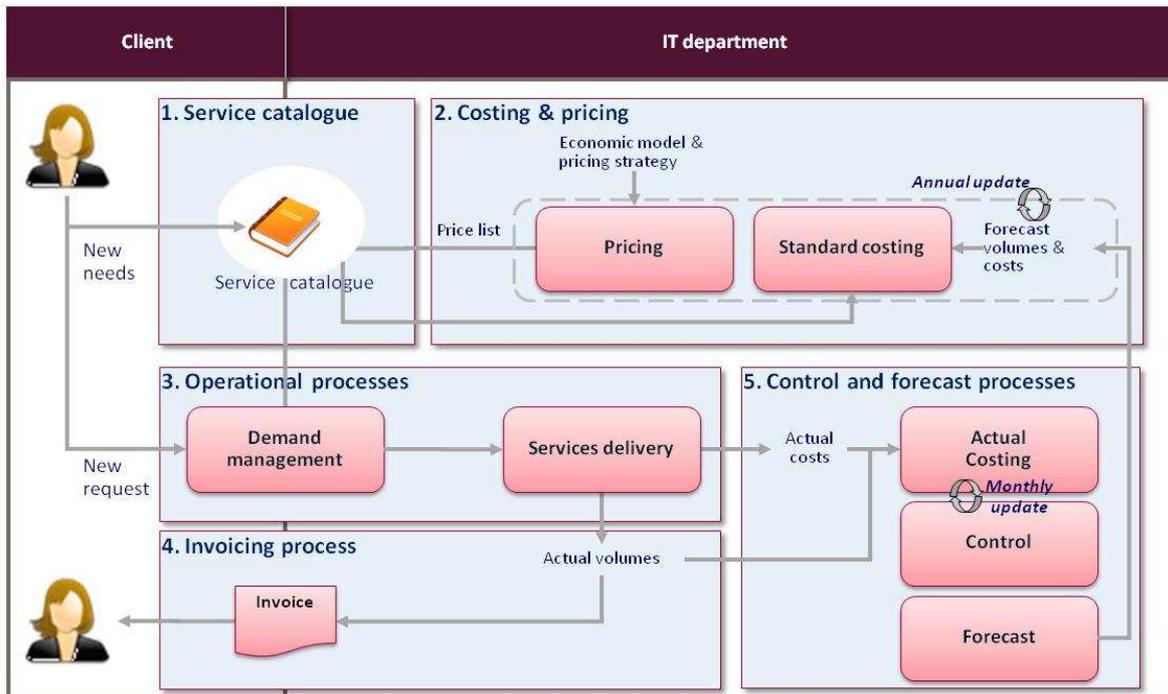
Additionally, several factors increase the need to better manage and control the “demand-to-invoice” process:

- **IT cost cutting remains at the top of CxO’s the agenda.** Therefore, as any other supporting functions, IT is urged to take this challenge, particularly on recurring activities accounting for 50% up to 70% of their budgets. IT and Business can either blame each other on generating costs, or build joint approach aimed at understanding where the benefits could rely. As an example, jointly adjusting service levels to the actual business needs, without “over quality”, can significantly reduce IT costs.
- The rise of cloud computing is shaping new business aspirations and shifting consumption behaviors. The Business-IT relationship has to get up-to-date with the “IT-as-a-service” trend and **the “cloudization” of IT activities:** simple and flexible operating models.
- **The rise of multi-client and multi-country IT shared services** advocates for simple and transparent IT operating and financial models. Charging costs to clients according to their consumption is becoming a standard practice.

This Capgemini Consulting Point of View aims at presenting the benefits of a consistent approach to deliver business effective, transparent, end-to-end IT Operations services. Based on our on-the field experience, it also emphasizes the key success factors that enable to successfully deliver the resulting business, IT and finance transformations.

“IT Operations as-a-service” **focuses on recurring IT operations.** Projects - either infrastructure or applications - are not illustrated hereby as their management uses other management techniques, such as portfolio management and arbitration processes.

IT operations as-a-service requires to implement a set of 5 processes

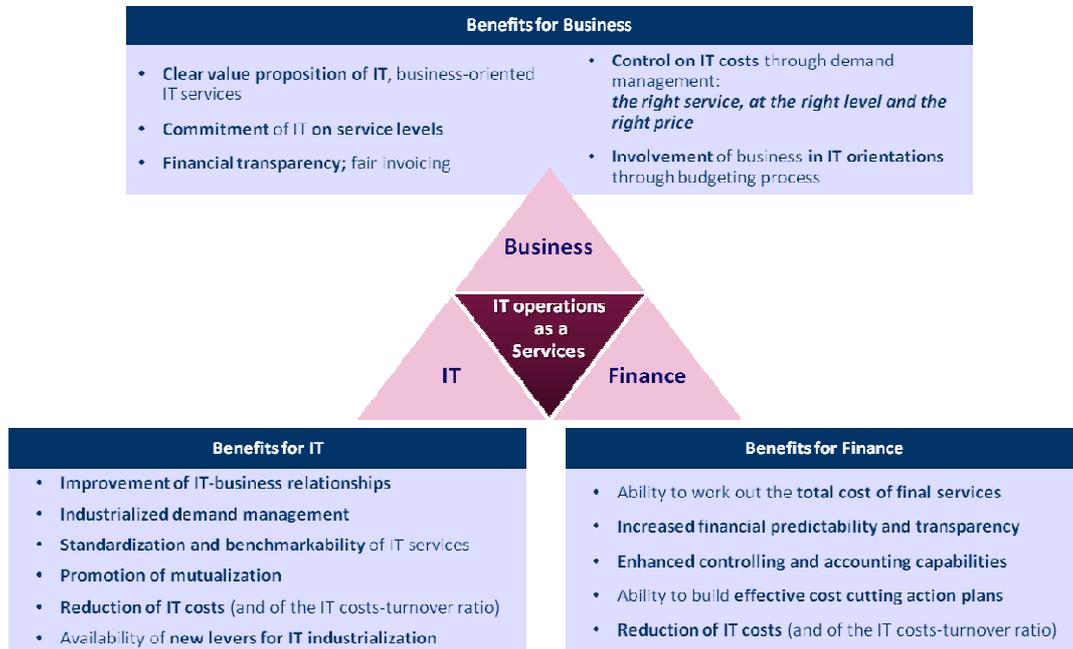


HOW DOES THIS END-TO-END PROCESS WORK?

1. The service catalogue is the cornerstone of the integrated end-to-end process. It presents in particular the detailed description of each service, the service level associated and the price of the service. Its split has to be consistent across all initiatives.
2. On a yearly basis, the catalogue is update to include new services and to adjust the related price list. This price list is fueled by the pricing strategy and the forecast volumes and costs.
3. On a daily basis, when the Business has a new request, he selects the appropriate service in the catalogue. An automated workflow roots this demand to the appropriate service delivery unit within the IT department. Once executed, the actual volumes and costs feed two different processes: the invoices and the control processes.
4. The invoices process consists in billing the client according to the actual volumes, valuated as per the agreed price list.
5. The control and forecast processes then aims at checking that actual costs and volumes are in line with forecasted ones. In case of significant changes, the invoice can be adjusted accordingly. The actual costs update the forecast, which will feed the following year costing exercise.

2. THE VALUE OF “IT Operations as-a-service”

IT Operations as-a-service brings benefits for 3 populations



When detailed, we can specifically identify the following benefits:



A transformed operating model between Business & IT

Moving forward to IT Operations as-a-service enables to:

- Use a **common language based on a services catalogue**, materializing a clear value proposition of IT. The dialog should be articulated around *services*: standard, measurable, elementary IT activities **understandable by end-users or IT clients**,
- Rebuild operational and financial **long-term confidence** between business, IT and finance, in particular by segregating a former monolithic budget into “volume” and “unit costs” for each service.
- **Transform the business and the financial perception of IT** while providing the unique capacity to **analyse, adjust and control IT services**.



Adjusted service levels

Some IT services are critical for the business, and cannot stand any failure or unavailability. Some others just can. **Adapting service levels to the actual business needs is a major opportunity to reduce the IT costs while minimizing business impact.**

When IT Operations as-a-service works:

- **Businesses can express their needs on an informed and educated decision process**, having in mind the prices of their services that will cover their requirements,
- **IT services are delivered according to the expressed needs, and do not provide a higher nor lower level of service**,
- IT costs are a logical result of actual consumptions and agreed unit prices; they **no longer need additional laborious justification**.



Industrialized demand management to streamline operations

By encompassing demand management in an end-to-end “Demand to invoice” process and by articulating demand around the services catalogue, this IT Operations as-a-service paves the way for a fully industrialized

management of business needs, far from the traditional day-to-day ordering by businesses. By increasing visibility and standardization of demands, **this model enables the IT organization to optimize resource allocation, delivery processes and quality of service.**



Smarter decisions through pricing strategy

Defining a suitable pricing strategy makes it **possible for the IT organization to influence business demand**, either to promote most economical solutions at company's level through favoring standardization and mutualization, or to support the implementation of IT strategy and policies (prioritizing selected technical platforms or technologies, decommissioning others ...).



Responsible demands

The virtuous circle generated by setting-up IT Operations as-a-service consists in the **promotion of responsible use of IT resources.**

The behaviors of the Businesses in consuming IT services have a direct and visible impact on the IT costs charged to each Business unit. Excessive consumptions have a direct financial impact on the invoice delivered to each Business. This is far from the traditional "all you can use" approach, or from the end-less discussions around the evolution of next-year IT budget. On the other hand, "the Best-in-class" business units that limit their consumption will be rewarded with a lower IT invoice.



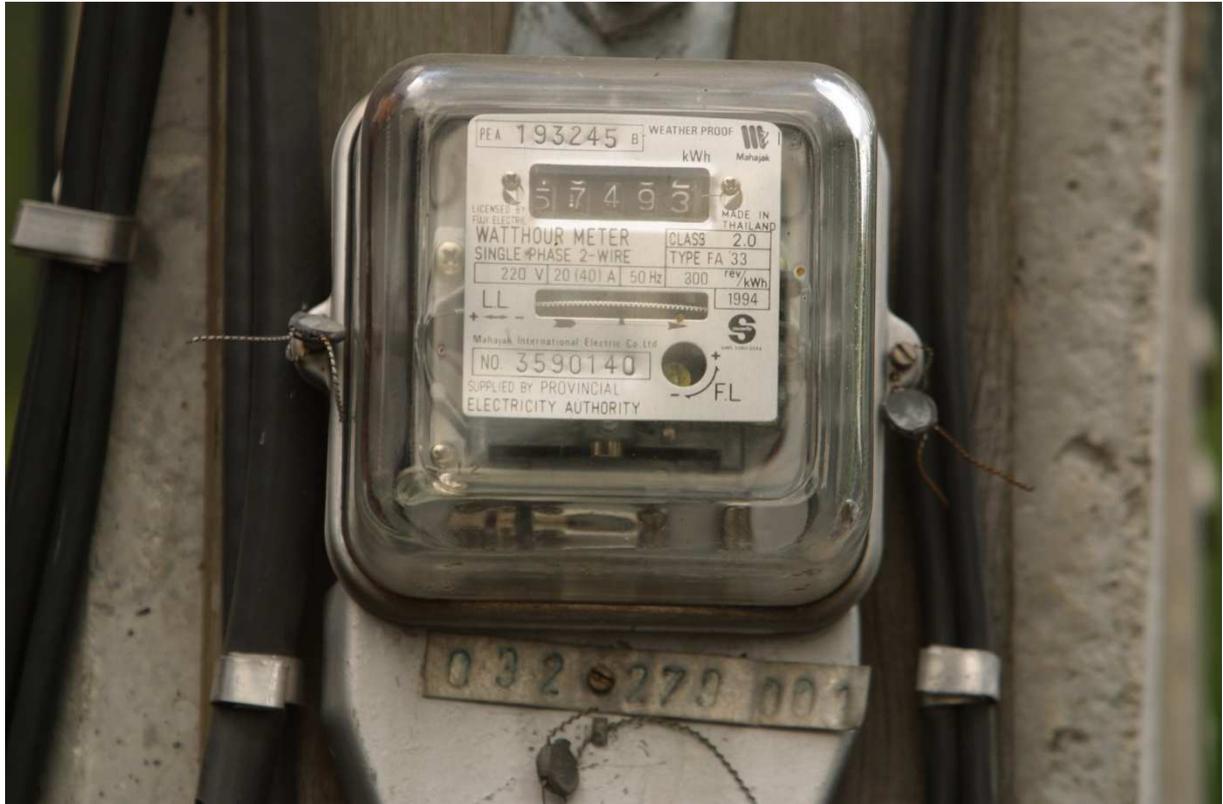
More effective financial control by IT management and benchmarkability

Being able to measure IT operations through services consumption means increased control on cost & performance by IT organizations. **This empowers IT leaders with the capacity to manage IT financial performance** in parallel with IT delivery and operations. On top of that, **it enables the organization to benchmark their services to the market.**



Increased financial reliability and enhanced controlling and accounting capabilities

IT costs account for a growing part of end-products total cost. Understandable IT services and additional cost transparency and predictability allow **more accurate and more reliable financials.** Furthermore, educated knowledge of IT costs is a necessary capability to assess and manage **the total cost** of products or services.



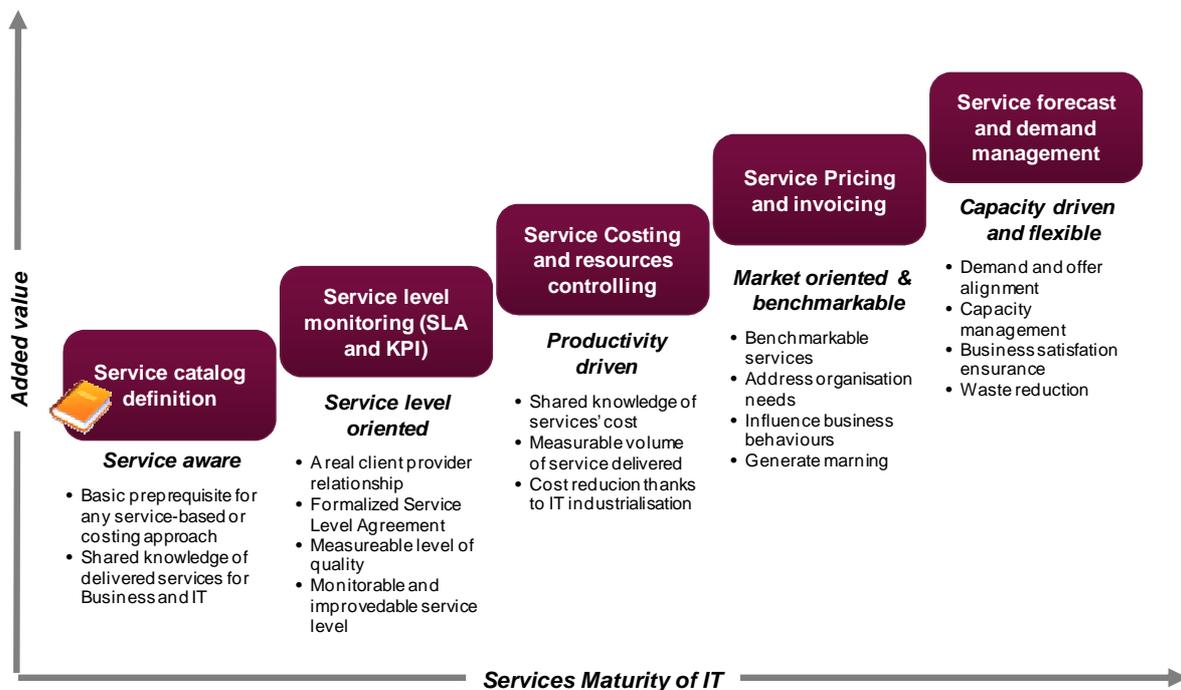
3. KEY SUCCESS FACTORS TO IMPLEMENT COMPREHENSIVE END-TO-END PROCESSES

Based on our experience, coordinating the initiatives to implement IT Operations as-a-service is more complex than it may seem. In fact, this initiative need to deal with business, IT and finance, both at operational and strategic levels. Therefore, it requires to **adopt rigorous project management practices**, especially regarding the need to coordinate those 3 actors. Additionally, we have built a number of **convictions to help secure and accelerate the design and implementation phases of such programs**.

3.1 PROGRAM MANAGEMENT BEST PRACTICES

A. Define the vision, set the ambition, start by the service catalogue:

IT Service catalogue and financial model are structuring elements for implementing IT Operations as-a-service. Before getting to actions, **all stakeholders have to define the ambition** on the path of transformation:



B. Align Business, Finance and IT

Implementing IT Operations as-a-service is not an IT initiative. It is not a business initiative, nor a finance-only initiative. The stakes of this transformation (to have a more transparent & controllable view of IT) usually encompass the objectives of Business, Finance and IT.

However, if the objectives of the transformation are shared, each of the stakeholder have their own agenda.

Therefore, such transformation requires to have three different worlds work together, raising several operational misunderstandings that result from huge differences in culture, language, methods and stakes.

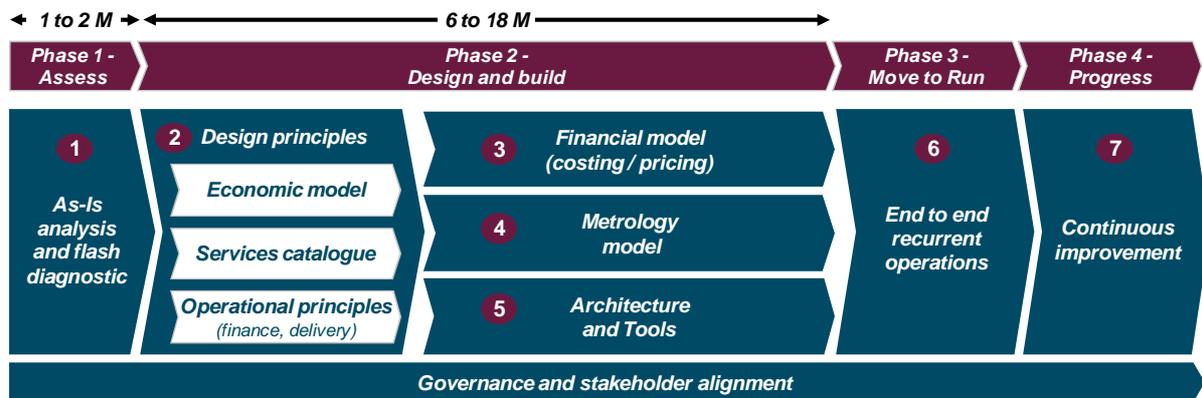
Consequently, IT Operations, Finance and Business have to be involved throughout the approach, from the early scoping of the project to the final implementation, including the building of the services catalogue and the design of the cost model.

Our experience in such projects shows that when the initiative is driven by the CFO only, there is a high probability that the costs do not lean to a service catalogue. In a specific case, all the analysis performed by the Finance were not understandable by the Business nor by the IT. As a consequence, the alerts were not transformed into actions.

Only the involvement of each stakeholder ensures a permanent alignment to the objectives and drive sustainable results. **However, being able to discuss in detail and to convince Finance, Business and IT requires specific skills in each area as well as the skills to coordinate them. Managers who can successfully lead such initiatives are scarce resources.**

C. Manage as a shared transformation program

Being **natively a multi-functional project**, the implementation of IT Operations as-a-service has to be managed as a transformation project, and needs to address all key transformation dimensions: people, organization, governance, processes and tools.



Note : duration of transformation programme depends on company maturity and complexity

D. Do not underestimate complexity of the Build phase, especially regarding metrology and tools implementation

Implementing IT Operations as-a-service requires to interface and architect the various IT systems and to align the data and processes underneath. This step is especially complex for company in their way towards process standardization. Our experience shows that reliable volume data are usually difficult to obtain immediately. Few IT departments are mature enough to report reliably on as simple metrics as the actual number of PCs for each business department. Users always spot incorrect volumes while data integrity is crucial to make them accept the invoices.

Having cleaned data and having effective tools can last up to 18 months. Our feedback is that this step is often underestimated, without the proper budget provision.

In order to accelerate this project, our experience has made us identify several project accelerators during the design phase.

4.2 OUR CONVICTION TO SECURE AND ACCELERATE THE DESIGN PHASE

The design phase aims at defining the target end-to-end process as described p.4. For each process we have identified key success factors.

A. Service catalogue : the cornerstone of the demand to invoice processes

- a. **To support a “demand to invoice” process, IT departments have to structure their offer around services catalogues.** This initial stage can be seen as trivial at first glance. However, this requires addressing the positioning of the IT department:

- Responsibilities on the IT value chain between Business and IT between Corporate and counties
 - Operating model regarding outsourced services
 - Service areas to foster
 - IT value proposition to the business.
- **Make the service catalogue the contractual vehicle between Business and IT.** The services catalogue is defined prior to service delivery, and supports the negotiations between IT and the business on the reciprocal commitments. Therefore the catalogue should illustrate for each service the commitment of IT on prices related to defined service levels, and the commitment of the Business on their consumption level.
- b. **Consequently, involve the business in the catalogue definition**, otherwise the catalogue will lack of business centricity: No levers to adjust usage behaviours, focus on IT issues only, use of technical jargon, etc.
 - c. **Defining the appropriate granularity level is key;** Our experience advocates to design between 30 and 80 services. Having defined few services do not enable to adjust usage analysis and behaviors, too many make the system too complex. Options and service levels usually add-up enough flexibility, even with a limited number of services.
 - d. **Secure service catalogue benchmarkability.** IT recurring activities are being commoditized; Benchmarkers can provide typical catalogue structures that are readily benchmarkable.

B. Economic model, costing and pricing

a. Chose the appropriate charge back model: a number of charge back models have been implemented so far and creativity has no limit, from high level allocation keys to detailed work unit mechanism. If mastering IT costs is not a priority, high level allocation keys are to be implemented. However, Businesses want to pay for what they use. In this case, go for work unit mechanisms.

Payable amount for a service = Unit price x Volumes + Fixed charges

Transparency relies on a single simple guiding principle: charging back IT services to users on the basis of their consumption. This method is the simplest and the oldest one and rules most of the existing commercial relationships.

b. Set the rules: the economic model

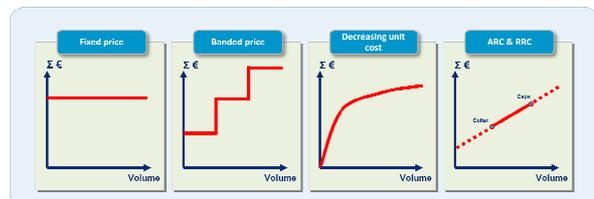
The whole work-unit-based operating model will rely on the following founding orientations:

- Perimeter covered (recurrent and non recurrent activities, infrastructures, applications ...)
- Financial status (cost center - neither profit nor loss - or profit center),
- Macrostructure of client invoices (possible display of overhead costs ...),
- Pricing principles (possible pricing differentiation between clients),
- Level of reciprocal commitments.

c. Define a reasonable and manageable number of items for the cost structure. The usual pitfall is to define a model with too many parameters: it makes it

difficult to see the impact of each parameter adjustment. Also, numbers of costing methods exists (ABC, etc.). There is no use in spending days in balancing pros and cons of these methods. Go for one and make sure it enables to master the activities.

d. Elaborate pricing models promoting client flexibility: banded prices or ARC / RRC pricing are now the standard



The prices should be updated and discussed every year.

e. Cover fixed costs, either by invoicing them directly or by bundling them

f. Accelerate change: when defining prices, CIO can foster changes by adjusting the margin (+ / -) to influence behaviors

h. Take recurring operations into account: number of initiatives have suffered difficulties because the recurring costs & prices update processes had not been considered. The project team did not manage the transition of costing rules and templates. It is critical to define the detailed feeding and administration of the model.

C. Demand management and service delivery

a. Empower the Business to choose the right service level. Communicating on the TCO of each service makes the Business realize the cost of its requirements. Doing so, it prevents the business from claiming the best quality at any cost. Our experience is that on some areas such as datacenters or network redundancy, savings can reach 20% with no decrease in the perceived quality

b. Set on-demand flexibility: users tend to frequently adjust their IT usage, which requires to optimize demand workflows. Demand is captured on the front-end systems, routing automatically the demand to the appropriate delivery departments. These automated processes avoid multiple back and forth inefficient validation workflows, establish dispassionate relationships between IT and users and ends up in IT savings. It is especially profitable in an IT environment that spans across several locations, business-lines and IT delivery centres.

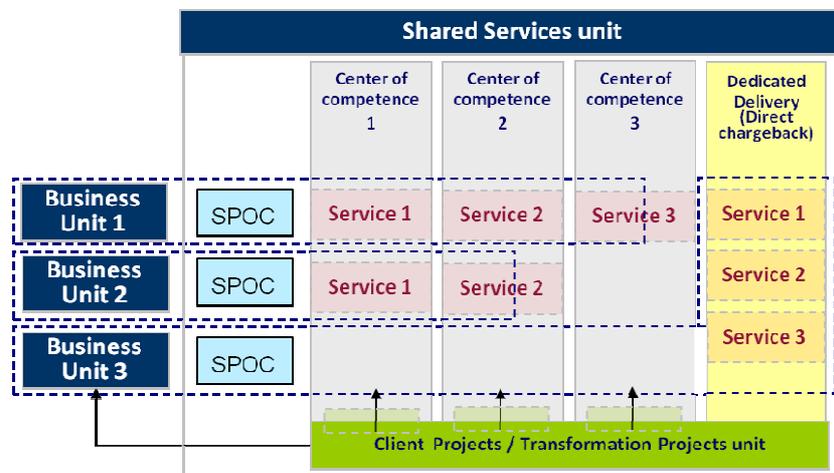
c. Design a service - centric organization...

Historically, IT organisations have been structured around activities performed or assets managed: the same datacenter team was in charge of providing mailbox spaces and hosting application. In service-centric organizations, Teams are responsible for end-to-end operations on a specific service, improving service delivery through competencies specialization while cutting costs. This trend is fostered by the emergence of global IT departments with local team specialised on specific services.

d. ... and maintain client centrality through single points of contact

However, this could increase the number of contacts between IT and users. It is key to **define the appropriate client relationship management** and to set a Single Point Of Contact ("SPOC") to capture business specific requirements & claims, to professionalize client relationship and to manage and monitor IT commitments.

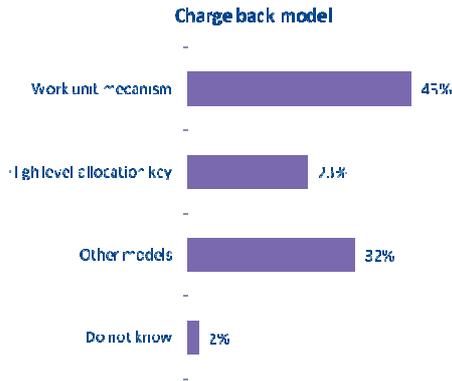
Illustration: Organization chart of a service-oriented IT department.



D. Invoicing processes

a. Pay as you go : there are multiple ways to charge services back to the users. However, according to a Forrester study in 2009, 43% of the interviewed companies **decided to implement a work unit mechanism, promoting the fairness: “I pay for what I use”**.

Source: 2009, Forrester



b. Implement strong governance to review volumes and invoices. It department needs to set governance rules to make the business validate the volumes and to let him the opportunity to challenge the proposed volume. Exceptions processes should be implemented.

c. Consider quarterly invoices and adjust them based on actual costs: on a yearly basis, costs can be adjusted according to actual costs and volumes. Adjusted invoiced have then to be send to the Business

E. It cost controlling and forecast processes

a. track wastage:

End-to-end service-based processes fosters end-to-end tools and thus the ability for IT operations to **monitor the resources used to deliver a service.** For instance, IT can warn the Business in case of **overconsumption or misuse.** A leader in the hi-tech industry publishes every month a “hall of shame” highlighting the users with the largest mobile invoice!

b. monitoring commitment towards IT SLAs, which encourages the IT department on its way to quality improvement.

c. refine the usage and costs forecast

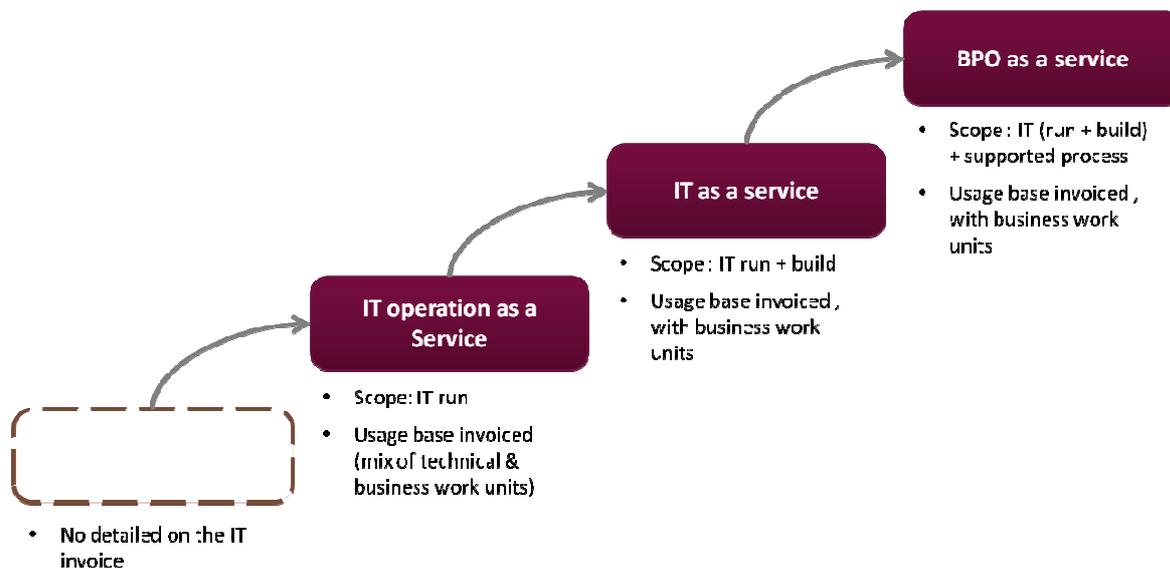
d. Rethink our make or buy policy according to actual service costs and its benchmark against market prices.

4. Conclusion

Implementing IT Operations as-a-service is a powerful transformation that has a long-term impact on service quality, controllability and IT financials. It is **much wider than a pure financial initiative** and needs a cross-discipline approach to encompass the whole picture, otherwise it will remain no more than an accounting gimmick.

By setting-up of a virtuous circle between IT, finance and Business, IT Operations as-a-service **is the first step for companies on their way to the “cloudization” of their activities.**

The next steps will consist in addressing the whole **IT as-a-service** and to invoice it through business inductors only:



Capgemini Consulting believes that the future of IT is to embed IT activities within the supported business processes. **BPO as-a-service is thus the final stage of the transformation.**

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