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ITSM and ESM in the Bigger World. Separation of concerns: A Modern Approach of ITIL for the Enterprise

Stephane H. Maes¹

June 26, 2022

Abstract

As businesses and business trends continue to evolve so do the tools of each line of business within the organization. In this paper, we explore the current evolutions of ITIL practices, ITSM, ITOM, and ESM algorithms and tools and DevOps, ERP, and other enterprise and industry applications, as well as how these changes are bringing organizations closer to digital transformation.

The paper provides architecture and lessons learned and recommendations on how to best combine these algorithms, tools and practices while keeping the “separation of concerns” at the forefront.

The paper discusses how digital transformation and ITIL will take organizations on a path of business maturity with omnichannel self-service and automation, as well as how they can help grow the business faster while maintaining employee retention.

1. Introduction

This paper presents our view on how ITSM, and now ESM tools are evolving in enterprises, in alignment but sometimes at the difference of standards like ITIL, IT4IT, eTOM, etc. It is based on the talk given at Pink 22 [1,5].

We do not pretend that the analysis is necessarily the consensus of the industry. It is more the reflection of the point of view of IFS. The company name may be new to you. So allow me a few words. IFS, (stands for Industrial and Financial systems) is a company founded in 1983 in Sweden. It has recently moved from custom systems and services to a software business focused on enterprise applications, with strong focus on certain industries. Over the last 5 years, it has been growing faster than most startups and unicorns and the FAANGs out there. We come to ITSM and ESM, with an enterprise application mindset, think of ERP, CRM, FSM, SM and EAM, and industry expertise like Aerospace & Defense, Telecoms, Energy, Utilities & Resources, Engineering, Construction & Infrastructure, Manufacturing & Service. We believe that ITSM and ESM complements nicely ERP and there is room for better customer relationship in this market where there are too many naughty vendors it seems, we are the only player to play in both arenas as well as benefit from industry vertical perspectives and expertise. Not only do we hope to grow in all these spaces but we also believe that we can fundamentally disrupt them. This is why we acquired last year Axios Systems and evolved its product into IFS assyst.

We hope you will find the point of view presented today interesting, disrupting at times but also that it will guide you with some core principles in your journey towards Digital Transformation (DX) and ITIL maturity or other objectives.

The author a former CTO at Cloud, middleware and devops, network equipment vendors and ITOM/ITSM vendors having owned some of the incumbent or disrupting products out there in the telecom space, the legacy IT, the Cloud and Cloud native world. He has conceived some of the first conversational systems, today's virtual assistant, and integration patterns like Oracle AIA. He has also been involved in many key trends like IoT, NFV, and AI/ops.

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However, he was not involved in ITIL. But he was at the inception of IT4IT and involved in TMF eTOM. So everything is the author's reading of the market, not the result of informed discussion within ITIL. Opinions may differ.

2. Outline

This is the generic outline of the paper.

We will summarize my way to look at what has happened over the last decade with ITIL: what and why.

We will then try to cover how to relate it to ITSM, ESM and then ITOM.

ESM is about expanding the principles of ITIL and the usage of ITSM tools to the whole enterprise: to lines of businesses using it instead of just IT. This is where things start to get interesting: do you really want to use ITSM tools, hardly something that excites everyone, for every domain of an enterprise. Do you really hope your developers will want to use it? We will discuss this, and introduce some key principles like separation of concerns, a generic principle that we will extend to ITOM, DevOps and ERP/Enterprise applications.

On the other hand we will also argue that ESM is indeed a key tool of digital transformation. As long that you understand what that means: B2C, omni-channel self-service and BizDevOps.

We will then try to wrap up with a summary of some of the key conclusions; Why it should matter to you, Why it's all about simplicity and How to get there?

3. ITILv3

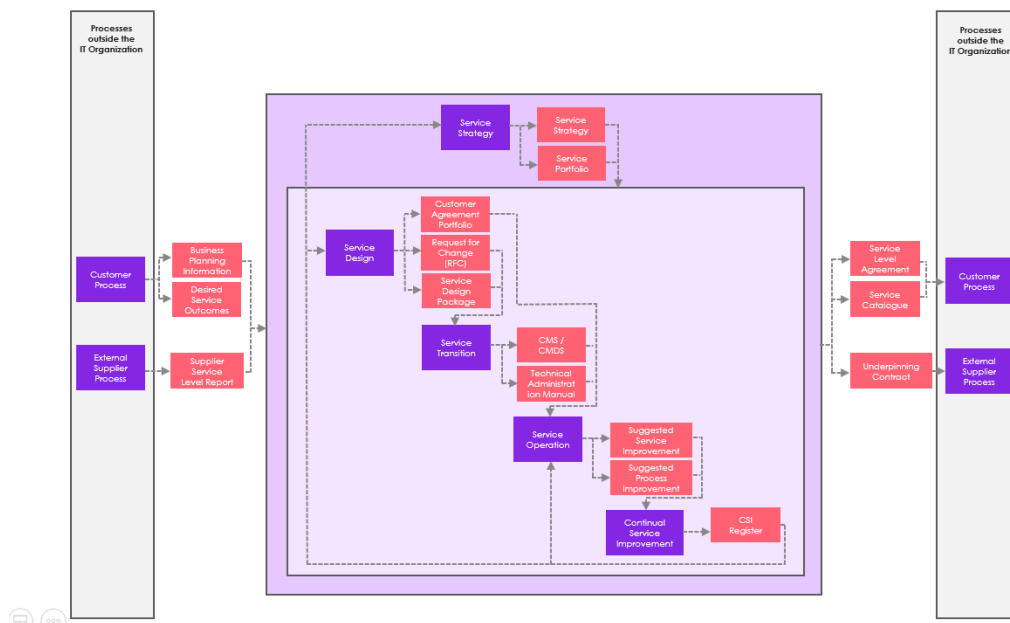


Figure 1: ITIL v3 - Processes as best practices (Based on [2], with permission)

ITIL, or IT Infrastructure Library is a set of best practices, not really as standardized as TMF eTOM and SID for example, for IT service management (ITSM). It started the 80s. With ITIL V3, it consisted mostly in 26 processes. It is illustrated in Figure 1. Details on ITIL can be found at [2,3].

4. ITILv4

In 2019, ITIL v4 was released. It now consists of 34 practices presented as managing the discrete capabilities that, in theory, underpin ITSM. Some are recovered from ITIL V3, some are new.

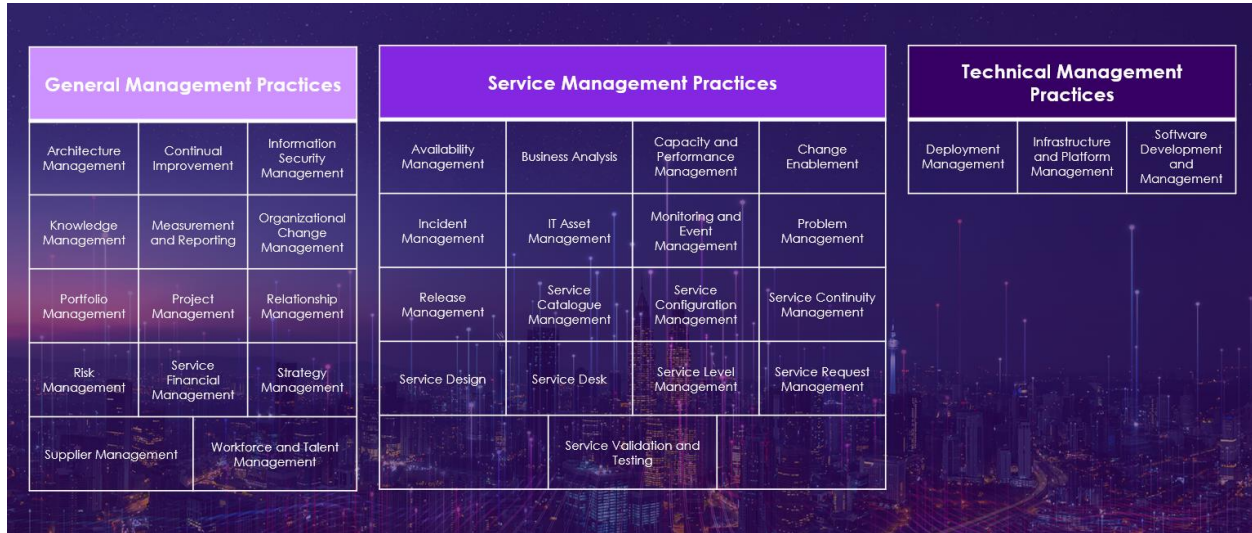


Figure 2 - ITIL v 4 Practices Manage the discrete capabilities that underpin ITSM. (Based on [2,4] , with permission)

It goes beyond what one could have considered originally as service management to support also general, business and technical management, with planning, design/architecture and development considerations.

It is the result, I believe of the pressure from industry fora activities like IT4IT at the Open Group and the TMF that broaden the need to extend the best practices to address service assurance, software development life cycle and many BSS, business support systems aspects. Industry trends around for example DevOps, Agile, SAFE etc. are also impacting the space. It was also probably heavily influenced by contributing members who had more than ITSM in their portfolio and agenda.

From my point of view, beauty is in the eyes of the beholder, I think ITILv4 is a bit organized as a Frankenstein. It's not as clean as eTOM or IT4IT. For example, one could argue for hours in which category which practice best falls. But it certainly has the merit to put the emphasis of best practices towards these new focus areas and associated use cases that I mentioned.

5. ITIL 4 – from ITIL V3 and before: from 26 processes to 34 practices

As we said we now have 34 practices. Its architecture relies on the idea of a Service Value System with a flow of value through a comprehensive system of service management capabilities. It introduces 4 Dimensions Of Service Management, 7 Guiding Principles, value chains and value streams.

Figure 3 schematically explains how ITILv4 works, including the following concepts

The 7 Guiding Principles are:

- *Focus on value*
- *Start where you are*
- *Progress iteratively with feedback*
- *Collaborate and promote visibility*
- *Think and work holistically*
- *Keep it simple and practical*
- *Optimize and automate*

4 dimensions:

- *Organizations and people*
- *Value streams and processes*
- *Information and technology*
- *Partner and suppliers*

Value chain:

- *Plan*
- *Engage*
- *Design & Transition*
- *Obtain / Build*
- *Delivery & Support*
- *Improve*

Service Value Chain: An operating model which outlines the key activities required to respond to demand and facilitate value realization through the creation and management of products and services.

Plan – All types of planning, at all levels.

- *Engage – Any and all interactions with people who are external to the group who operate the service value chain (employees, customers, management, partners/suppliers).*
- *Design & Transition – The operating model showing how components/activities work together.*
- *Obtain/Build – To manage the discrete capabilities that underpin ITSM (like Incident/Problem/Change).*
- *Deliver & Support – To make things better over time.*
- *Improve – To make things better over time.*

Value Stream: A series of steps an organization undertakes to create and deliver products and services to customers.

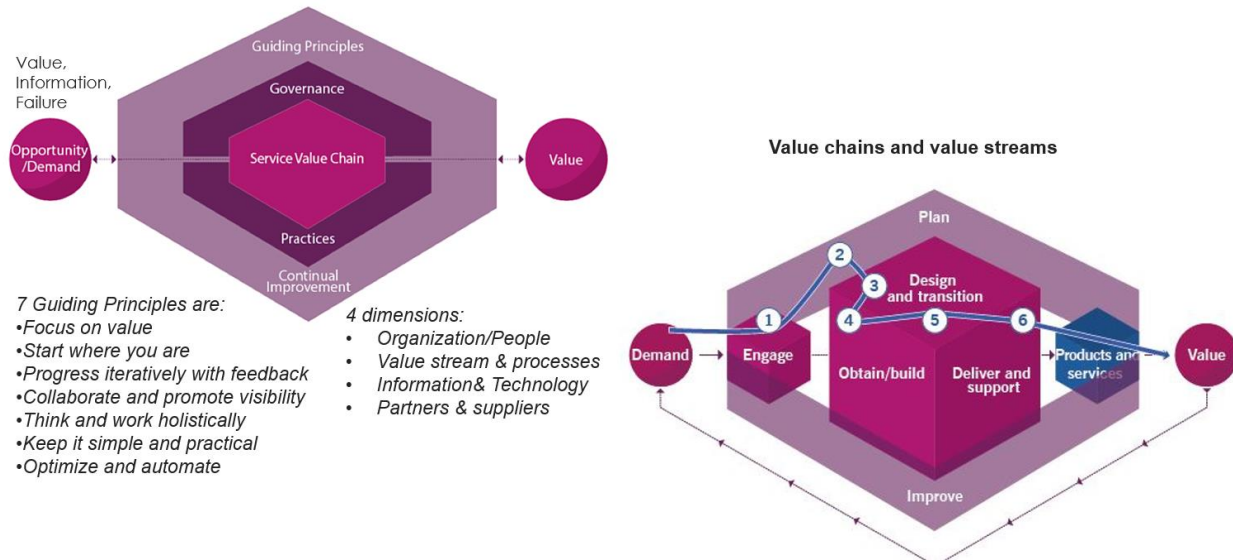


Figure 3: ITILv4 architecture and principles (from [2-4], with permission).

Anyway so we have 34 practices, with the most certified products so far by Pink verify being at 19. Ourselves, IFS, we are aiming at achieving, anytime now, certification of IFS assyst for 18. Many vendors are below (and were already low with respect to ITILv3). That means that there is a significant delta between ITILV4 and OTTB (ITSM) tools supporting the practices...

Does it mean new products and disruptions in the market? New entrants? Or does it rather mean that we need to understand the ITIL practices as describing a larger environment or ecosystems where different tools are responsible for different practices or value streams, i.e. subset of a value chain behind some practices.

I believe it is the latter and I believe that the market has not yet really understood exactly what it means. But, I would put it this way. With ITILv4, the practices have jumped from the IT and ITSM domain to aspects of ESM and beyond. By the way this was already happening during the era of ITILv3 both with the expansion to ESM by ITSM vendors and with ITOM and DevOps. But now this is codified and squarely also entering the space of BSS, ERP, CRM etc. And there are things that ITSM tools excel at doing, and there are things for which they are not the best... Note that the same can be said for ERP, if you ever had to spend hours of training just to figure out how to approve a PO or register a new supplier!

The question on the table is:

“Is ITILv4 (best) implemented by an ESM (ITSM) tool, or by a combination of ESM with domain specific tools, including ERPs, CRM, BSS, etc.”. Players in the ITSM field pushed for the first option. We contend it is rather about a smooth orchestration between these tools. In fact reimplementing logic knowledge and expertise of these tools in ESM would amount to rebuilding such a tool, now by a vendor without that domain expertise.

6. ESM/ITSM/ITOM tools and capabilities: Implementing ITIL

Let us go back to the basics. What is a modern ITSM application?

Here is our definition, consistent with figure 4.

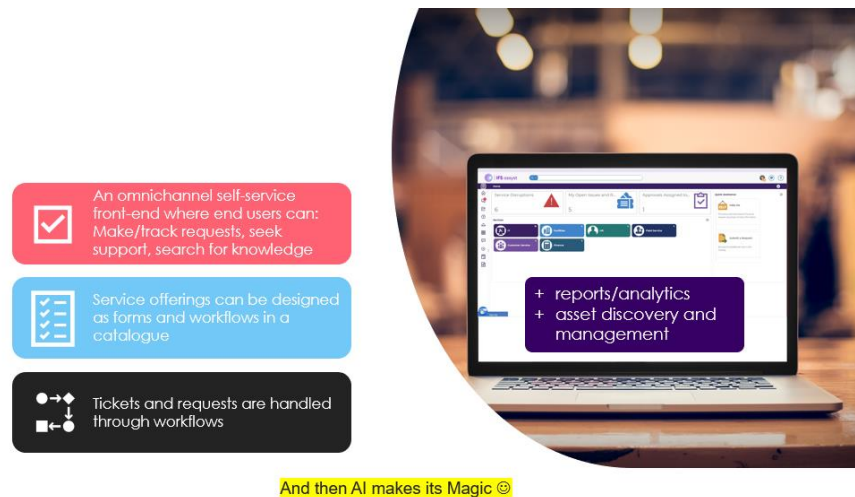


Figure 4: Functions of ITSM or ESM as tool to implement ITIL

It is a omnichannel self-service frontend that allows end user to make requests, ask for help or seek knowledge provided by the ITSM system.

Service offerings can be designed low code / no code with forms and workflows and offered in a catalog.

When requests and tickets are submitted they can be tracked and subjects to approvals. Requests are fulfilled by workflows while support ticket are handled typically by agents, albeit sometimes automatically, for resolution.

Of course the definition is generic. One can offer a product that only does a subset of the above tailored for particular use cases or segments.

And then, AI makes its magic. NLP? For conversations, written or spoken? Searches and KM? Analytics for insights or predictions, AIOps for ITOM or smarter ITSM with ticket classification, routing, incident prediction etc.? What about remediation, auto-remediation, autonomous systems etc. of ITSM, of the services, of the infrastructure, of the business processes throughout the whole enterprise, etc ...? The answer is yes to all.

7. ITSM Use Cases

So what is ITSM?

We would say it's Service Management (SM) for IT or ITIL for IT, not broader

So an ITSM vendors sells you an implementation that, for sure for ITIL v3, implements SM and ITIL SM use cases and processes for IT. When compliant with ITIL V4, it therefore focuses on the SM practices and whatever else of ITIL v4 in terms of practices relevant to an IT department.

Let's note however that while security is important, privacy and confidentiality may not be treated, nor need to be treated the same way as if the information handled was related to customers or employees personal data.

Yet there is already a notion of outbound stakeholders: when the end users raising tickets or seeking request or knowledge are customers of an IT SP for example.

8. ESM use cases

Not too cleverly, therefore, I will propose my definition of ESM or enterprise service management as a tool that supports the ESM use cases, duh!

But by this I mean that implements ITIL practices and ITSM but now, not just for offering services support and knowledge about IT, but also about anything that the enterprise or a line of business offers to its stakeholders.

And its stakeholders can be inbound, i.e. employees, or outbound i.e., customers, suppliers and partners. It still fits the definitions, value chain architecture and many practices defined by ITIL v4. In fact one can expect that now all the generalization can become more relevant (I know I should say even more relevant... but somehow I can't force my self to that last step).

Yet it is important to understand that this does not mean that you can do what unfortunately many in the industry have done so far: take an existing ITSM tool, create a new tab (if even that was done) and stick a ESM label on it and here we go. With, in general, the added value for the vendor that this means more seat licenses, or whatever is their metrics, and additional fees for LOB specific content or features...

ESM brings in new requirements. The easiest way is to understand that privacy and confidentiality are much pressing if HR transactions take place. Also, more requests are done on behalf. New service management use cases appear like say technician dispatch, fleet management etc.

Interestingly, ESM has appeared on its own, starting with HR portals and supporting certain types of HR tickets and requests, think of the employee onboarding typical use case, then it expanded opportunistically to other domains. Many other types of HR requests and other HR management use cases however have solidly stayed with enterprise HR applications where employee personal data, goals, evaluation salary, bonus, retention, talent management, hiring, and many other process are handled. Benefits remaining also somewhere in between, i.e. out of HR apps and out of ESM, but possibly supported from ESM. Etc.

Let us start to push beyond the boundary of ITSM and ESM to see what happens.

9. ITOM use cases in ITSM

Let's start with ITOM: expanding ITSM in the context of ITOM, IT Operation management, that it be by considering IT operation management capabilities and tools, or by considering how other groups than say the IT support, service or help desk; for example the IT Ops or Cloud Ops team deal with ITSM.

IT Operation management has a broad meaning in the industry, related to all aspects of ITSM, Automation, Service Assurance (monitoring/observability), governance, compliance, and AI (AIOps).

But in ITSM it typically means a subset of functionality around ITAM, Service / Asset discovery and management (CMDB), License Management, Software Asset Management

And Event management (e.g., from change management, or as a result of automation, monitoring / observability, or remediation).

10. ITOM (for Ops)

For Ops, the story is different. ITSM is not the center of the world, even if it seems sometimes.

In general IT Ops teams, and now Cloud Ops teams rely on a slew of tools to manage infrastructure and applications. In the past it was physical servers and virtual machines and now it usually extends to the cloud and cloud native solutions.

Their center of the worlds are more dashboards

The tools include:

- Service assurance tools responsible for monitoring, observability of infrastructure and applications from a performance (log, metrics, traces and => event processing). And security point of view, though that is often involving different teams. They apply against infrastructure (Compute, network, storage) and OS/middleware, applications, often as VM or now containers
- Compliance that compares systems states versus policy based desired states and notify of any drifts that must then be corrected by say patching.
- Provisioning and automations that deploys and configure or updates systems and workloads. These may be part of bigger automation, integrations and workflows that performs such tasks.

To do so, these tools rely on knowing what to manage:

- For Requests: What needs to be provisioned/deployed or updated, where
- For Remediations of issues: what needs to be updated or patched or modified
- And then What to monitor.

These details come from ITSM and its CMDB + discovery that tracks the assets to manage, which is therefore a key component that can be seen as the or a brain orchestrating the others ITOM components and the single source of truth.

Reports, dashboards and analytics and built on top of the data collected by the different tools. Cost governance is a good example.

This allows us to also make sense of the craze for AI in ITOM and confusion introduced by some vendors and analysts that either boiled the ocean or aim at too little too small. You have all heard of AIOps, I am sure. But no two vendors, analysts or RFPs seem to mean the same thing when they mention AIOps

First of all, AI is just a tool like any other tool. Nothing special. The main difference is the ability to perform some pattern matching and inference tasks based on data and learn or improve those in supervised or unsupervised manner. In the past it was done with heuristics or statistical models that were slow to build and update. Now they can be continuously updated. That's it.

Algorithms and models can apply to each ITOM tool.

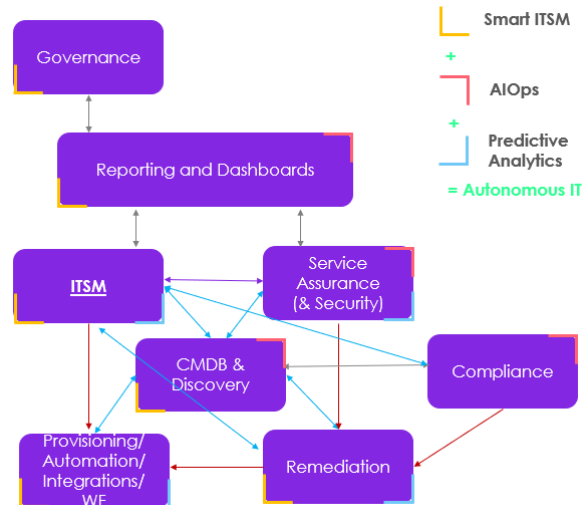


Figure 5 – AI in ITSM and ITOM: much more than AIOps, and certainly not to be encompassed as AIOps.

We like to distinguish, following figure 5:

- Smart ITSM features that encompass:
 - NLP and conversational interfaces with dialog capabilities for chats
 - NLP for smart searches and smart knowledge management to find best knowledge document, classify tickets or understand tickets, etc.
 - Intelligent processing and workflows like smart routing, agent selection based on skills etc.
- AIOps which is about smart service assurance that analyses observability data (metrics, logs, traces (and associated events) to process events, to detect anomalies, analyzes times series and helps root cause analysis.
- Predictive analytics that predicts trends, events, issues/incidents and problems. It leads to the ability to predict failures and provide predictive maintenance capabilities.
 - As the systems becomes more advanced, past tickets and changes also contribute as input to predictive analytics.
 - But goal is to predict problem before it occurs or user notices and so before end user open tickets
- Autonomous systems where remediation can be proposed, recommended or self-applied. This is the holy grail or No-ops, or probably rather low-ops IT (don't worry about your jobs yet)

In the bigger picture that I try to draw here, the main message was:

- ITSM relies on ITOM / ITAM functions to discover assets and build a single source of truth in is CMDB. It makes sense to combine these tools (discovery and CMDB - or ITAM) in an ITSM/ESM tool as it relates to the assets that ITSM oversees (CI). ITSM also receives events about the assets from ITOM Tools
- ITSM is itself just an applications among many in ITOM / IT Ops /Cloud Ops. Ops typically do not use ITSM, they use their own tools synched and integrated with ITSM. There is a clear separation of concerns between ITSM and IT Ops tools, except for the shared CMDB. And in fact ITSM is often a different department from IT Ops.

11. ESM: Beyond IT and Lines of Business

This separation of concerns is a key principle and pattern.

Let us go back to ESM, which we already positioned as tools to provide ITIL to LOBs and so in this case non-IT and focused inbound or outbound.

Just as for IT Ops, enterprises and LOBs have their own tools. It's for example typical enterprise applications like ERP, CRM, FSM, Facilities, HR, Procurements, asset management, Financials and other BSS. Such tools are expert and optimized at specific functions, domain or sometimes industries.

How does ESM relate? Clearly, it may not be a good idea to just attempt to reimplement in ESM workflows the business logics captured in these enterprise applications. It requires expertise that ESM vendors and business owner probably do not have.

Let us see what value ESM can bring and what it should not be doing, on a case-by-case basis.

12. ITSM/ESM, DevOps and Software Development Lifecycle

Let us consider a trending topic: DevOps and DevSecOps or Software development life cycle management in general.

It is an area of focus for ITIL v4, Safe and IT4IT and more agile initiatives.

Some vendors initiatives and subsequent analysts rewarding ratings may have at time suggested that ITSM/ESM tools can be used for DevOps purpose and conversely. After all, development tasks management, bugs tracking and resolution does not seem that different from help desk activities, change management and request fulfillment.

Unfortunately, the analogy probably stops there. If you have ever been a developer or dealt with them, especially once they have adopted DevOps, agile and scrums, you probably will agree that ITIL, ITSM and its rigorous change management control processes seem also the antithesis of development agility, where next steps are planned just in time and changing or adapting all the time with minimum overhead and bureaucracy.

Furthermore, if there is a lesson that I have learned, is that you can not impose tools on developers. May be in the past or in IT... But with the open-source momentum this has changed. They will want to use their own preferred dev tool chain. In fact past experience with a leading enterprise development and QA tool vendor is that, even with the best tools and being the incumbent, you must be ready to accommodate different choices of surrounding tools, especially with a trend towards open-source tools.

Suggesting that developers should use ITSM to manage say their work or project is a dead end: in most cases developers will ignore it, bypass it, rebel or quit. Vendors that have had such ambitions have not fared too well in that endeavor so far.

- ITSM / ESM are not part of the DevOps toolchains
- DevOps is about agility and somehow antithesis of Change management processes
- ITSM does not subsume DevOps toolchains but works with them in such that:
 - ITSM user can perform release and DevOps (work) management without having to use DevOps toolchain
 - DevOps can pursue their daily business without bothering about Change Management and ITIL
- Yet both can work together

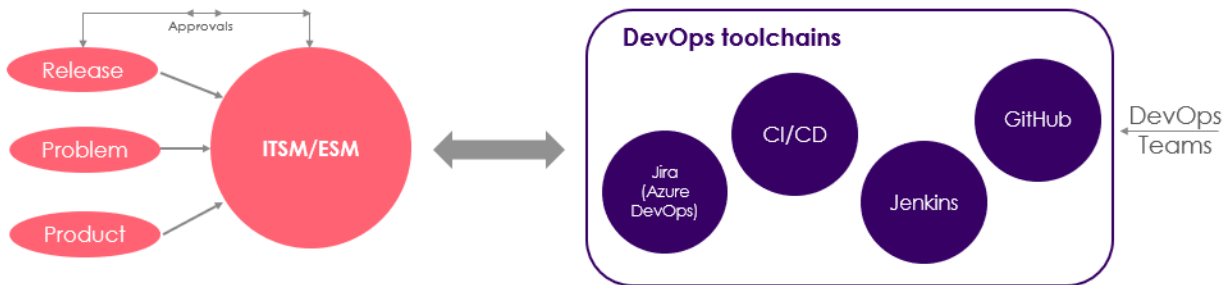
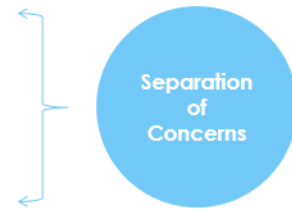


Figure 6 – Recommended separation of concerns between Dev Tools chains (DevOps) and ITSM.

That is why again it makes most sense to separate concerns as illustrated in figure 6:

- Business owners like program and problem managers or release management can use ITSM/ESM to manage incident, or enhancement requests and associate resolution to releases that can be approved and progressed. Deployments can be triggered via Jenkins from GitHub etc. As they progress, synchronization takes place with DevOps work management tools like Jira or Azure DevOps, that DevOps can use to define and manage their work and update progresses that are then reflected back to ESM. Here I mentioned explicitly some tools because they are some of the most widely often encountered, at least in our case
- Developers and DevOp can therefore continue to work in their preferred tool chain, and ignore the ITSM/ESM tools and say change management processes that they support. And yet fit the change management process from the point of view of the business.

In other words, every team use their preferred tools, especially dev can use their preferred dev tool chain. Neither teams are forced to understand, use, or even just go to the other practices tools. That is what is really meant by separation of concerns.

Of course some of you may object based on what has been done or said by some:

- But one could adapt an ITSM product to manage DevOps without other devops dedicated work management tools.
 - That is correct. And you would have another proprietary tool. Most have failed. Only, some have had some success in narrow existing customer bases, where developers are still “controlled”.
 - Dominant tools are open source and Jira among most agile communities. Good luck to displace that. Why would you pay more money, considering that for now the business model is high priced seat-based license for most ITSM vendors, not us - IFS, but almost all the others... for a product that is a by definition, at the beginning at least, a bad Jira contender that no developer knows and most probably does not want to use. It makes no sense. use Jira or other devops tools they are free or cheaper and fit for purpose and demanded / appreciated by and familiar to developers.
- Second push back: but can't we then do the opposite use a devops work management tool as ITSM or ESM?

- Good luck. That's possibly picking the crappiest possible tool for business users and end user that are not attuned to "tools and UX for engineers or developers" and those guys are not necessarily ready to take one for the cause of open source. No way LOBs will accept it long term, unless it's a very small shop on the cheap.
- So much more is then to be added to it to make it support all the features of 30+ years of ITIL, ITSM and ESM use cases... so beyond helpdesk basics, you will be disappointed or you, or your vendor, will have to invest... and somebody is going to have to pay for that catchup. Don't believe me? Well look at the price and module add-ons for devops vendors trying to make it into ITSM... It sound good and compelling but it's either flaky (for the cheapest option) or expensive for what it is...

So in summary. For DevOps. Do not try to bring them to ITSM/ESM and conversely. Use your ITSM/ESM for the business / LOBs and let your developers continue to use their preferred dev tool chain. Just integrate and synchronize between the two systems so that actions on one side are reflected on the other.

13. Facilities Maintenance (example of FSM + ERP/CRM)

So is this separation of concerns the way to go also with ERP, enterprise applications in general or industry vertical applications?

Let us consider the case of a facility maintenance with associated "field service management", illustrated in figure 7.

It is an ITSM and ESM service. Besides the more traditional use cases of room reservation using ESM, let us consider that use cases where rooms may have problems with thermostat, air conditioning, TV or projector.

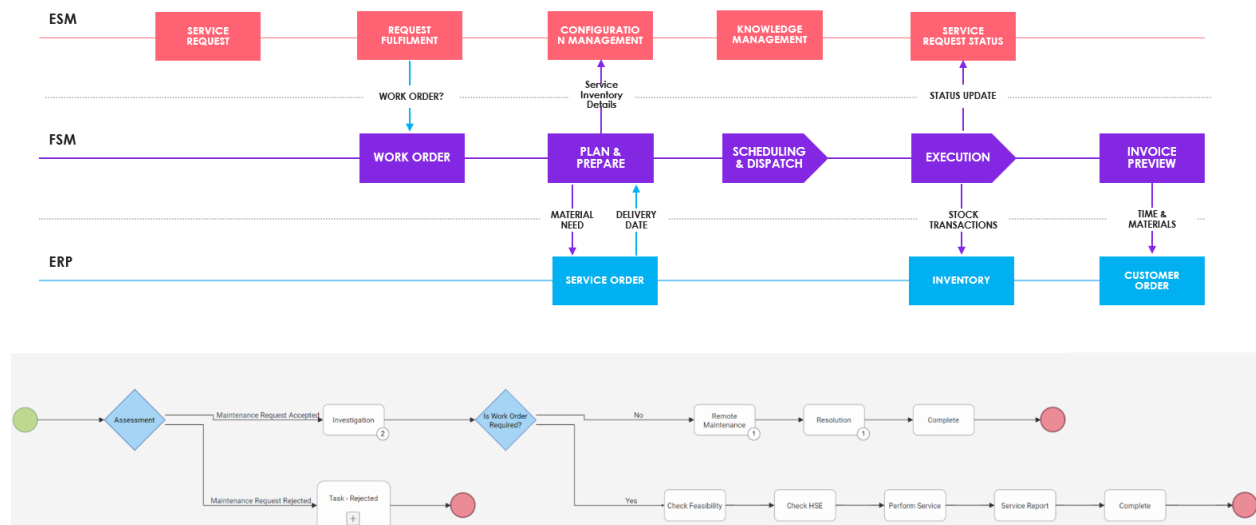


Figure 7 – ESM/ITSM and Field Service Management use case and example of separation of concerns.

Room reservation is a simple request to fulfill use case of ESM. No need to explain much more other than understand that while the room reservation management could be implemented by ESM logic, it is already typically a request delegated to another system. Think room reservation with MS exchange for those who use these capabilities.

Issues with the room, are really an incident management with report of an issue to be fixed and creation of a ticket. Although apparently trivial, we can see that the resolution requires possibly ordering parts and dispatching a worker to fix the issue. That includes creating work order, making request to a procurement systems etc.

Sure again all that can be implemented in ESM or in a proprietary backend. But risks are big that it will be complex and suboptimal. There are enterprise applications out there that can really do this best. Think of “field Service management” and ERP/CRM. Many companies have such applications for their core business. FSM provides the ability to create work order, schedule and dispatch technicians and even manage fleets. That matters when having to dispatch to different facilities across wide or multiple geographies etc.

So the principle is that ticket, request or steps to resolve trigger workflows that trigger business processes in FSM to create work order, dispatch technician, manage repair and close the issue. In between the ordering of the part (that could be done from ESM or from FSM, depending on how you have built your business processes, let us assume that it is done from FSM) or charging the requester, determining rate or SLA etc. (if from a client in a managed service provider deal for example).

Our choice of FSM ordering the part is an example of reuse of what exists: FSM in general will involve these steps and integration with procurement, CRM or ERP. It is typically out of the box between these applications.

We can see a repeat of the separation of concerns encountered with the broader ITOM, and with DevOps. Self-service support request and case management is in ITSM/ESM, order management, work management and scheduling, dispatch and repair is done by the application best designed for that: FSM and procurement of parts, charging/SLA determination can come from CRM or ERP in general.

One may be tempted to say that if we are a small company, then no need to do that. Just do it in ESM/ITSM. And yes it's probably correct, except that it's quickly something that will become overly complicated. And reimplementing you own ERP or betting that your ITSM vendor can do a good FSM system is well a bad bet.

Can they make it of course. But at what price and when they will be done... well they will have proven my argument: they will have a true FSM application hooked to ESM/ITSM lol. But that does not give them a CRM/ERP though... Do you want them to implement that too?

Unfortunately, we see some trying this in the industry today....

Another point is that if your company uses different, not pre-integrated enterprises applications for say FSM and ERP/CRM, ESM may have to do all the different calls which renders design of the ESM workflows more complex and less intuitive for LOBs business owners who may want to do that. More on that later. If the enterprise applications are pre-integrate, it's all a breeze. Create the work order in FSM and all will happen automatically. Sure again, it could happen if you know what your are doing... Which typically ESM vendors or ESM PS may not know when it comes to understanding enterprise applications. That's where it helps to own both ERP and ESM... If you remember why I told you earlier that we entered the ESM space.

14. ESM and Field Service Management (FSM)

This slides illustrates in more details a recommended separation of concerns architecture between ESM/ITSM, FSM and ERP/CRM for facility maintenance or FSM combined with ESM/ITSM in general.

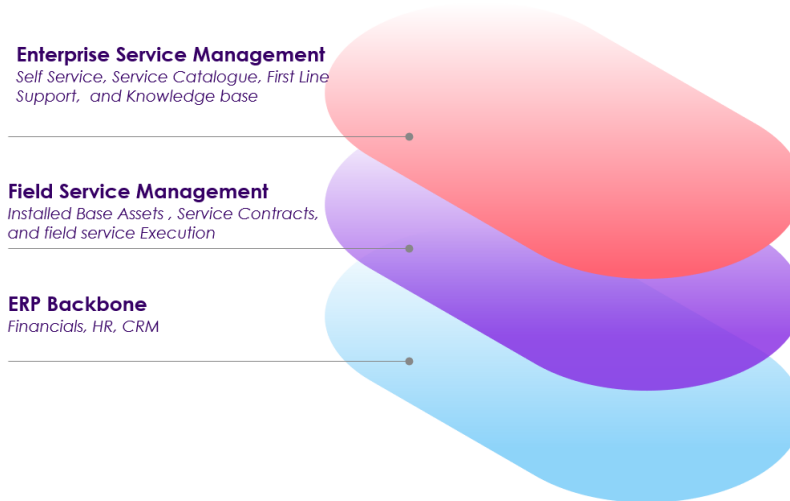


Figure 8 – Recommended ESM and Field Service Management (FSM) separation of concerns

This is what one should strive to achieve when bringing ESM for serious, non toy use cases within enterprises. The same applies to industry vertical use cases that are all over FSM.

15. HR

And the same applies for HR use cases where besides the traditional ESM HR use cases like on-boarding of new employee, or HR support, we now can have actions in the HR application that result into notification, approval request or new available offerings in ESM. Actions in ESM can similarly trigger next steps in the HR application.

I discuss it that way rather than showing an actual use cases, because I want to illustrate a different point. Yes the separation of concerns is the same as earlier. But while in the FSM cases, different personas use different applications... Here things may change: employees may start in ESM and have HR or managers continue in HR application. But sometimes he can start in HR applications and have others continuing in ESM and back and forth.

So this is an example, where the separation of concerns is less about persona and more about tasks to be done: complex HR tasks can be done or checked in HR applications, but they can be triggered from ESM: ESM is about easy self-service while HR is again where the tough specialized logic runs and confidential data may remain segregated: ESM may not remove the need to interact directly with the enterprise applications. But it could if interactions could be multiple back and forth with notification of the user of update to be pursued in ESM.

16. ERP & Enterprise Applications

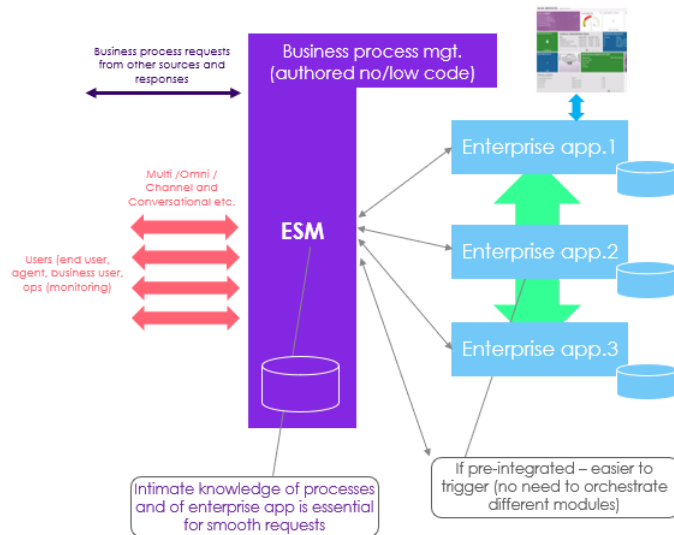


Figure 9 – It illustrates the recommended role of ESM as omnichannel self-service frontend to Enterprise applications like ERP.

Figure 9 summarizes what we have seen so far.

ESM provide an (omnichannel) self-service frontend to enterprise applications to execute end to end business processes that may involve enterprise app by triggering some of them or orchestrating them. Other persona may react also using ESM or directly using the enterprise apps. The first option may require notifications of status update in ESM.

When enterprise apps are pre-integrated, request fulfillment by triggering the backend is trivial. Otherwise, it amounts to orchestrating the enterprise applications.

If user of ESM says interacted through MS Teams and ESM orchestrates the enterprise applications, we have MS teams as channel to interact with ESM that performs an AIA (orchestrated EAI) integration of enterprise applications. Salesforce has shown a similar vision, where they use Slack as that orchestrator, when they speak of slack as the platform. I believe that it validates our view. But I can't leave it at that without pointing out that it is a weaker proposal as Slack, like MS Teams would not provide all what ESM / ITSM and ITIL brings to the table. For us it's just a channel. But they don't own an ESM, which explains the limitation.

On the flip side, it proves a point I said already a few times. If you hope that any ITSM/ESM vendor will be able to do that efficiently out of the box... good luck... building AIA / EAI requires deep expertise in ERP...

I hope you also start to see the potential but also the disruption that ESM can bring to enterprise applications and conversely.

More importantly the outcome of this trend is that using enterprise application in self service without advanced training becomes possible with ESM. No more days or worse of training to manage POs, use CRM or request a day off!

17. Outbound Facing

As we already mentioned, there is another key trend with ITSM/ESM: targeting outbound stake holders as customers, partners and suppliers.

When the stakeholders are known, it is not such a change. Everything remains the same except probably for the need to allow SSO, or IDP federation to recognize the external parties. Some capabilities to support or request on behalf of parties in other organizations (e.g. partners on behalf of customers) need to be added and that's it.

On the other hand, handling unknown users, as in B2C requires additional consideration to get to know the new user, e.g. registering and may bring in a push towards more new channels as in omni channels:

- Social like WhatsApp and Twitter
- SMS and telephony with CTI and CSR/contact center capabilities

B2C ESM is new and emerging. There are not many players with a true solution there. Yet there is demand for it. Ideally positioned are vendors with ESM/ITSM and CRM/contact center offerings.... Look no further...

18. ESM as an enabler of digital transformation

Building on this, we would like to emphasize also the role of ESM in digital transformation beyond looking at it from the SM point of view. Digital transformation (DX) is a over rehearsed term, yet ESM is an enabler of key aspects of DX: the evolution towards digital self-service of every business.

Let us consider an example: bank and financial institutions. For them DX means:

- Going away from just the branch Ability to serve customers with self-service through multiple channels (and consistently, hence omni-channel) like mobile, messaging, web, voice etc with nice / modern self-service UI/UX
- Security (i.e. access limited to request of approved services from a catalog etc.)
- Ability to seek fast and modern support or knowledge through all the supported channel
- Speed and automation:
 - E.g. automation of handling and fulfillment and fast update on outcome (with ability to track status in real time) and SLAs
- AI (e.g. conversational chat bots)

It turns out that this fits the definition and capabilities of ESM (External => customers): Omni channel self service, nice UI/UX to request service, ask for support or for knowledge, a catalog or services, automation (for fast answer/fulfillment of request), tracking evolution and smartness...

Enterprises can get somebody to implement DX... and they will implement a custom ESM... Or they can deploy an OOTB ESM product and it's cheaper, faster and supported and they have the ingredients for their transformation.

The Analysis applies to many industries (with variants), e.g. Telcos, Public sector ...

Add to this B2C and social media support and you really see that deploying ESM is what you need for a key part of DX (outbound and inbound facing).

The next topic will address the other aspect: agility.

19. BizDevOps

ESM as positioned so far is also a key element of a new trend: BizDevOps. A concept analogous to DevOps but for non-developer/not too technical LOBs business users.

With tools as ESM, business owners are able to develop offerings, forms and workflows in low code / no code manner. It also should extend to the integration to external systems to trigger automation or ERP orchestration.

Offers with associated triggered workflows can trigger other workflows developed by others in other LOBs, therefore allowing end to end business process development with low code/no code across the whole enterprise. That is promise of bizdevops, bringing agility and breaking department siloes.

In fact if workflows are subject to approval and can only trigger approved workflows it also bring in the shift left and ensure security consideration at that level: BizdevSecOps.

With this and the previous slide, we see why ESM is really key to DX.

And as a aside, I don't want to boil the ocean here but as ESM becomes autonomous, it leads to a vision of autonomous enterprise where all these processes can become self managed and self healing. BTW quite a larger vision that the autonomous enterprise idea marketed around a while back by another ITSM player.

20. Why does all this matters?

It is probably getting time to wrap it up .

Let us discuss a few key points and lesson learned or recommendations for those starting the ITSM (then you are late if you just starting!) and ESM journey.

Why does ESM / ITSM matter?

We all know the ITSM market is big and growing. If you believe that software eats the world and every enterprise is now becoming a software development or software service provider, there is no doubt that there is still growing needs for ITSM. [\$5B Growing at 17% YoY]

The ESM opportunity makes it so much bigger when expanded to all LOBs everywhere and when hooked to ERP. Yet, to be fair we haven't seen the take off of ESM yet. Maybe it is because, until really hooked to ERP, the use cases are still just toy gimmicks? But maybe it is also because the ITSM vendors have tried to milk the cow without understanding the market: the licensing model of ITSM, typically per agent seat is too expensive when opening the approach to any LOBs, i.e. to the whole enterprise. Add to this nickel and diming customers with new package for any new domains specific content and capability, practiced by naughty vendors and we understand what happens. So enterprises hesitate to start ESM projects and definitely limit them to a specific well motivated LOB instead of allowing any LOB to take advantage of ESM. And yes it does not help progress DX.

We think that there is a need for new licensing models for ESM. This is what we are doing with IFS assyst, and as we understand, it is certainly perturbing, if not disrupting other players. We believe providing licensing models that encourage spreading ITIL and ITSM/ESM to all LOBs, inbound and outbound with reasonable TCO is key.

Besides that we all have heard endlessly how DX is critical and I showed you how ESM is at the core of DX. We also showed you how ESM will likely impact the ERP/enterprise and vertical application market.

21. Simplicity is key

We also believe that ESM, with all its promise of simplicity has not yet delivered on them.

- It should be simpler to purchase and license ESM/ITSM
- Simpler to deploy and extend and upgrade without backward compatibility issues
- UI/UX should be simple and attractive/engaging. Legacy approach do not cut it any more
- Omni-channel self service should be a breeze to provide.
- Everything must be simple, intuitive and never require any training
- Capabilities should be simplified:
 - Low code no code
 - Easy to design offerings and workflows and integrations
- Using ESM with other tools should not force replacing these tools or adoption from reluctant parties but instead promote separation of concerns and keeping preferred tools

23. Conclusions

In conclusion, what should enterprise ask from your vendor?

- Support for all key use cases from ITSM, ESM and ITOM
- Expertise in the domain of interest for ESM use cases beyond the obvious Blah... (certification, offerings, content)
- Appropriate separation of concerns:
 - ITOM
 - DevOps
 - ERP
 - CRM
 - HR
 - FSM
 - etc.
- Viable and reasonable commercials for use cases beyond ITSM. Don't get nickel and dimed
- Quick Time to value

And if you have an ITSM system that you are afraid will take a while to replace, why don't you consider first finding a simple reasonable intuitive ESM to deploy on the side. You can then decide to migrate your ITSM in the future... It may be cheaper... overall and if simple the duplication of system is not such an issue.

We hope this was a useful analysis of the state and trends of the ITSM and ESM market and that my few recommendations will help you make the right choice in your ITSM/ESM/ITIL and / or DX journeys.

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