Top-down IT Transformation

KEY TAKEAWAYS

Drivers and benefits of IT Transformation

Understand different approaches to IT Transformation

Proposed roadmap for a top-down IT Transformation project

WHO SHOULD READ THIS DOCUMENT

CIOs
CTOs
CEOs

CELFOCUS

Tackling IT Transformation: Is there another Way?

IT Transformation projects have been considered the source of all evils in the corporate world. Often, they represent multi-year projects, with millions of euros in budget, high-risk of failure and, many times, dodgy benefits and business blockages. Everyone knows a story about a botched or over-budget project or one that jeopardises the same business benefits that it was supposed to deliver..

Nevertheless, these projects take place because organizations consider them critical to continue evolving and adapting to a very changing environment and dynamic ecosystem. If we continue to apply the same recipe, based on a bottom-up approach, then the results will be similar but **what if there was another way?**

Bottom-up approach: Nothing new

The traditional IT transformation approach is bottom-up. In this approach, there may be a "legacy" platform that needs replacement; or maybe a billing/charging replacement project that needs to be performed; or the need to introduce a new CRM platform. In any case, the bottom-up transformation approach is driven by the need to have a more customer centric model, and it usually involves the introduction of a new integration layer, order management, customer migration, which impacts all customer touch-points and other systems, including data warehouse, incentive compensation, web channels, store front-ends, etc.

This approach is inherently difficult to scale-down into smaller, more manageable projects: the replacement of an existing architecture "pillar" (charging) or the introduction of a new one (CRM, Order Management, EAI) causes so much disruption that the main options for "phasing strategies" are:

- **Major product family: prepaid vs post-paid vs. fixed**
- **Prolonging the customer migration ad-infinitum to reduce risk**

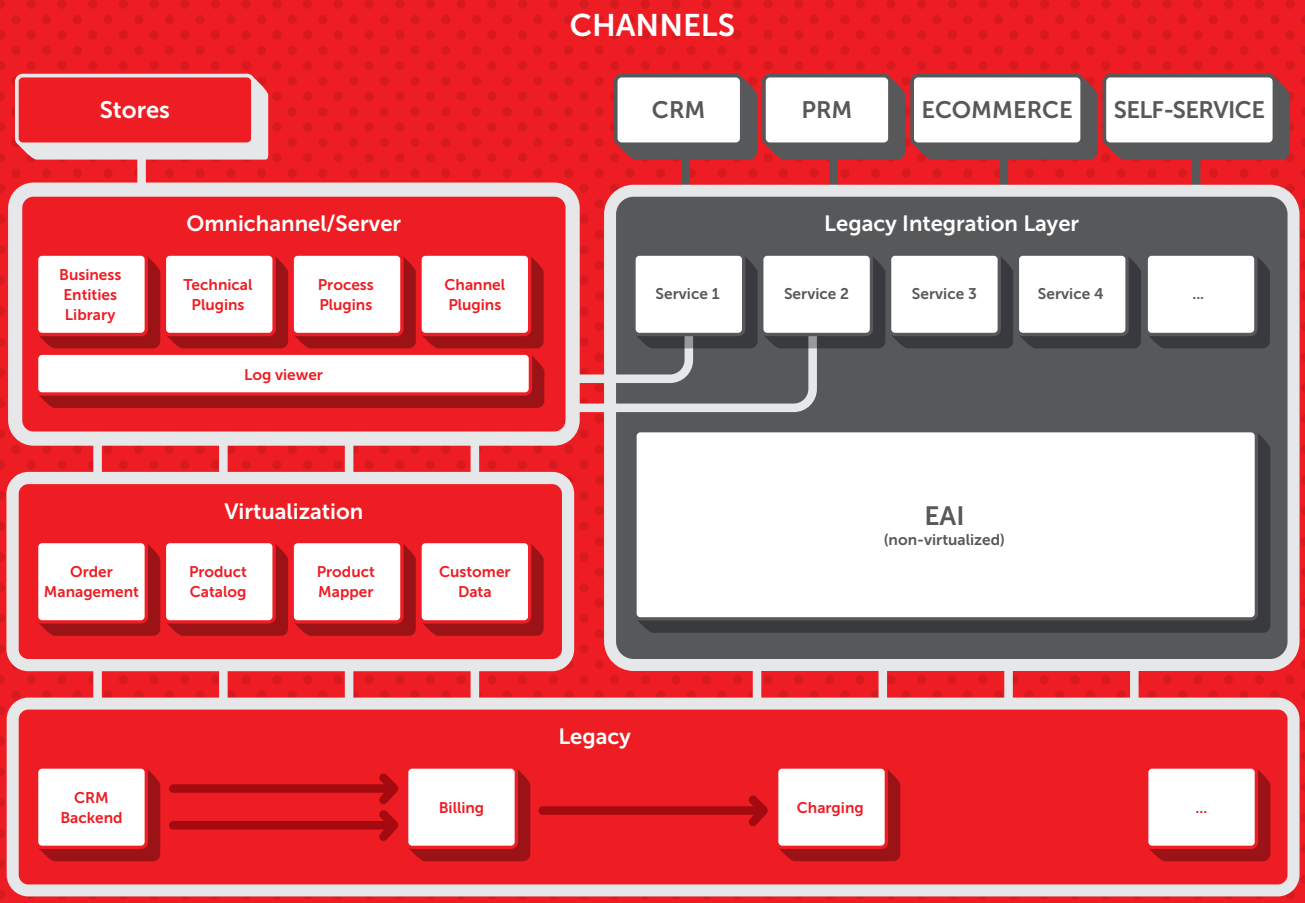
Each one of these strategies has its pros and cons, but ultimately share the same problem: the transformation project phases they generate are too big and thus have the same impacts on the organisation: high business impact, high-risk, costly projects.

Top-down approach: Paving the road to success

The top-down approach is driven by business challenges which can include, for example, the full replacement of a specific channel's front-end (sales application, partners support, contact centre), supporting a new business need that is currently not covered (mobile-fixed convergence without common backend systems) or a set of meaningful business processes (like a fully automated customer registration process).

The fundamental concept is that once a specific business need is addressed through virtualization and integration services, it becomes "isolated" from the current legacy systems, data, products and business logic.

Once this is achieved there is a channel that exposes the current business, which is as much as possible "unlinked" from the underlying systems, as shown below:



Virtualization

Celfocus' Customer Centric IT Architecture approach includes a concept called virtualization. This concept allows for an almost complete abstraction of customer data, products and business logic. It is supported by a specific software component called Product Mapper and a supporting integration strategy directed towards virtualization. Through virtualization, we are able to separate front-end processes, products and data from back-end systems, thus allowing for a different IT transformation approach. One that is driven by front-end applications, instead of backend systems.

Why is this an IT transformation?

This new approach represents a different take on the traditional view, where "core" systems are replaced through large and intrusive transformation projects. However, it addresses the same challenges and has a deep and transversal impact throughout the organization because it:

- **Transforms** a business by changing processes, usability, decreasing usage costs (AHT), allowing for multi-channel processes, access to products and product rules and providing an omnichannel framework that is fundamental to support tomorrow's business.
- Enables **smaller bottom-up transformation** programs by isolating and standardising existing legacy systems. As Celfocus demonstrated before, it is much easier to replace a charging or billing system, if it just performs its core functions (charging and rating) than one that is involved in customer care business processes, product catalogue tasks, etc. This is valid for any legacy system, including a legacy CRM.
- **Drives the creation of a SOA architecture.**
- Consolidates and creates a **centralized product catalogue** strategy for all channels.
- Enforces the creation of **best practices for customer data management.**

Main Advantages

Main advantages of a Top Down IT Transformation:

- **Provides short-term benefits** to business instead of only long-term once.
- Imposes less restrictions or blockages to new products and services during the project's implementation resulting in **less business disruption.**
- Allows for strategy flexibility by adjusting or changing during the program without incurring the major losses a traditional transformation project would, when changed or cancelled midway.

Top-down transformation Roadmap

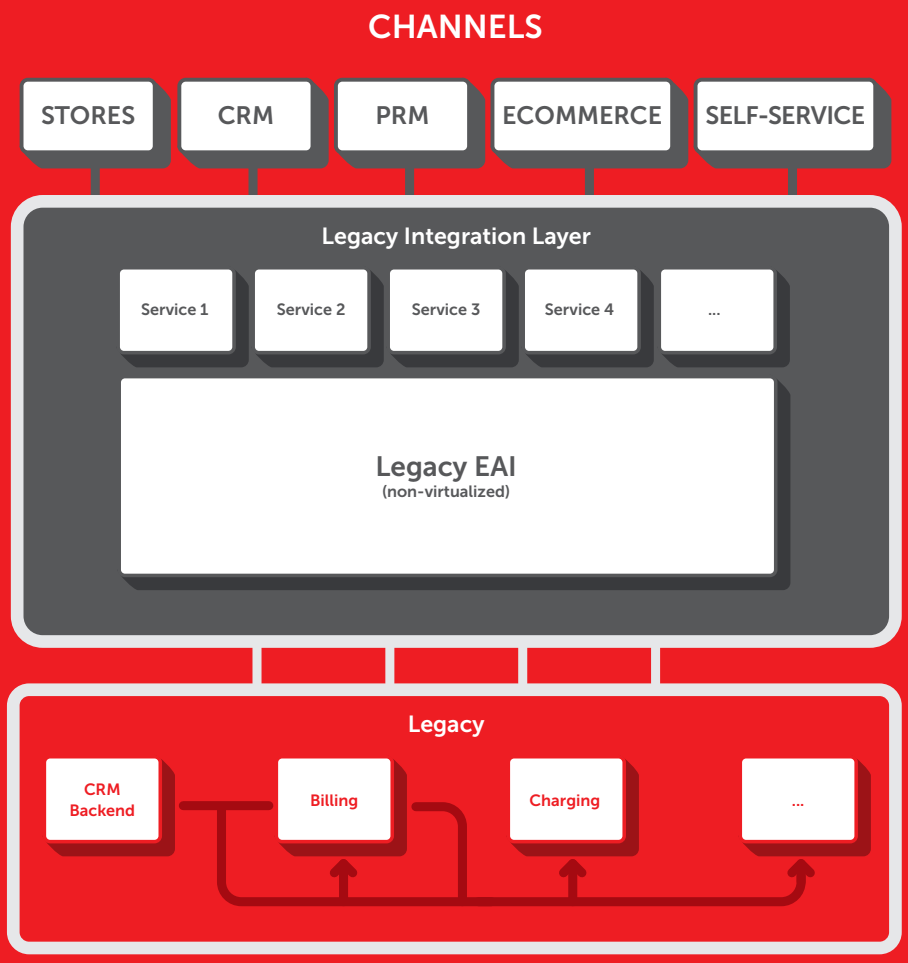
By focusing on specific business processes, this approach is surgical and provides quicker results with less risk and impact on the overall IT architecture. However, it is important to note that the top-down transformation strategy will not be able to change the charging system from batch to real-time, as only a charging transformation program is capable of that.

However, it enables the organization to choose the best moment to transform or upgrade, with less risk, less cost and a faster time-to-market, while keeping the new platform closer to the standard product and giving it more flexibility and ability to integrate with all channels.

The images below describes an illustrative 4-phase top-down transformation roadmap:

Initial Architecture

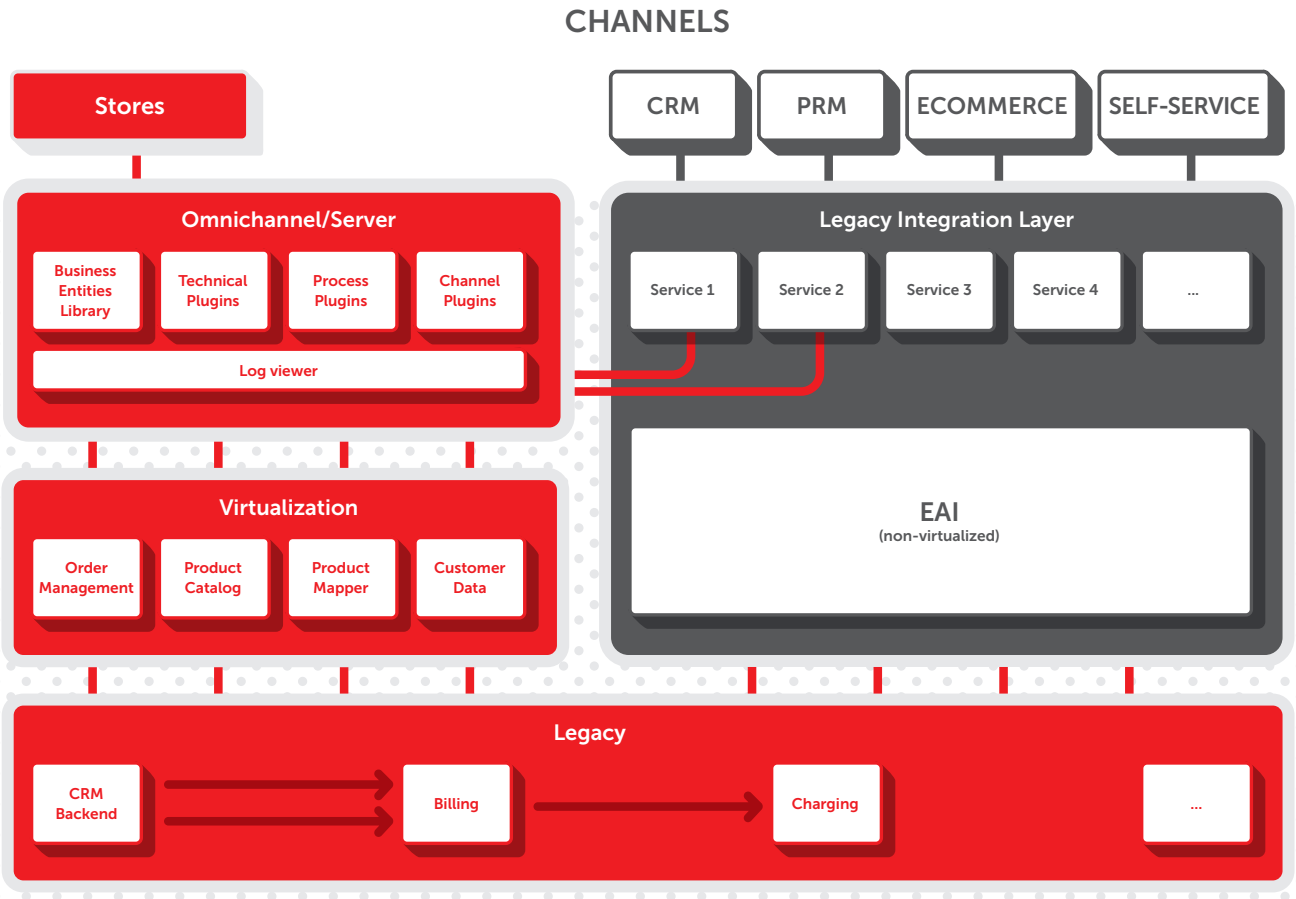
Initial architecture is for a "typical" CSP IT architecture. There are a CRM, Billing, Charging and other standard legacy platforms (network provisioning, field service, logistics, etc.) in place. In this example there is a CRM solution in place, however, the lack of a CRM solution would be even more representative.



Phase 1
Omnichannel for stores

Selects specific stores as the target for the first release, thus all in-store business processes are considered in scope. The most important business criterium is that this deployment should cover "full functions" for specific employees to avoid "alt+tabbing" between applications. The first phase also deploys all the main components for the architecture, including omnichannel server, virtualized integration layer, product mapper and catalogue. There are a few caveats:

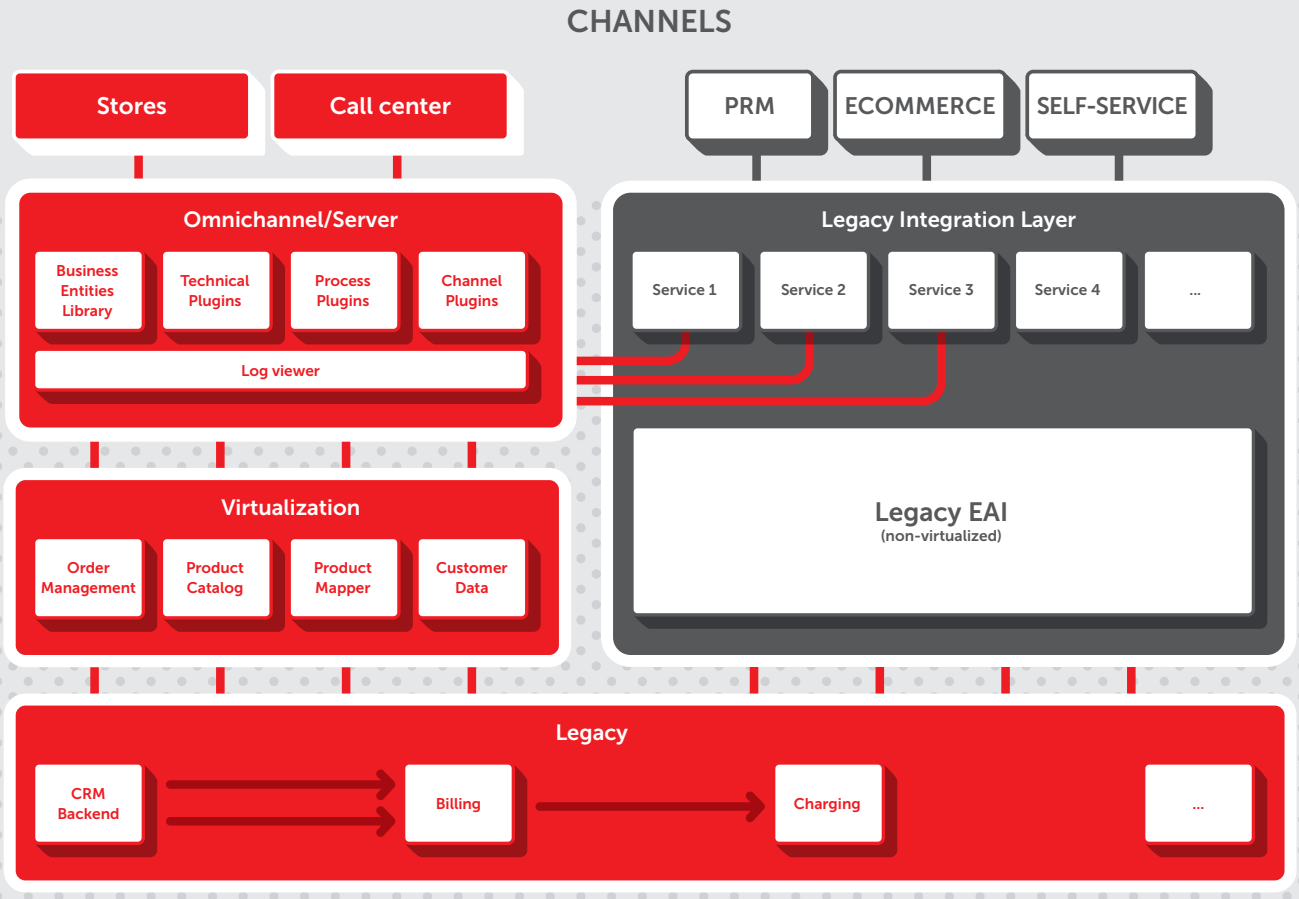
- The product catalogue will not be fully virtualized, since there are users and customers still accessing the "normal" catalogue.
- Some legacy services will be "routed" to the new architecture to leverage its capabilities (i.e. catalogue, customer data inquiries, etc.).
- Some existing legacy services will be disconnected, simplifying the legacy architecture.
- There is a significant transfer of business logic into the omnichannel processes and catalogue since these are required for the eShop processes.



Phase 2
Omnichannel for contact centre

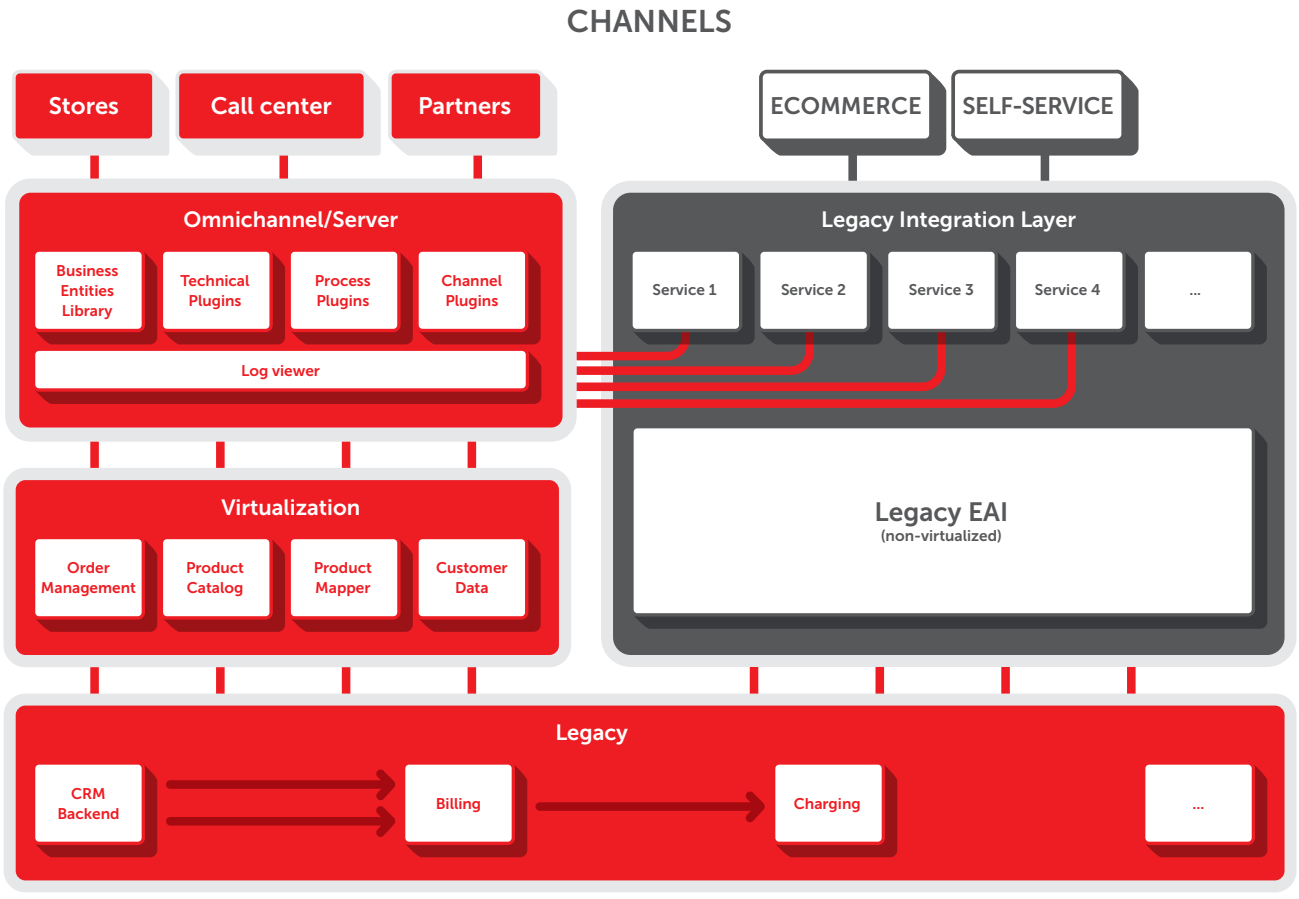
Selects contact centre as the target for the second release. It further increases the number of services provided by the new virtualized architecture and drastically increases the business logic transfer into reusable contact centre business processes. Most of this logic is no longer required within the legacy systems (since they will not be supporting any direct user activity) thus reducing the customization level for these systems. At this stage, it is possible to have processes starting at the shop and finishing at the contact centre and vice-versa.

This is the fundamental step that "switches" the architecture from legacy to virtualize. This step can have further phasing to avoid business disruption.



Phase 3
Omnichannel for all assisted channels

Complete the transformation for assisted channels by including partners. Due to process reusability, this is mostly about making sure that partners have access restrictions for processes and products, performance for low bandwidth connections, training, etc. At this stage, the possibility of having processes started in dealers and then handled by any other channels becomes available.



Phase 4
Full omnichannel

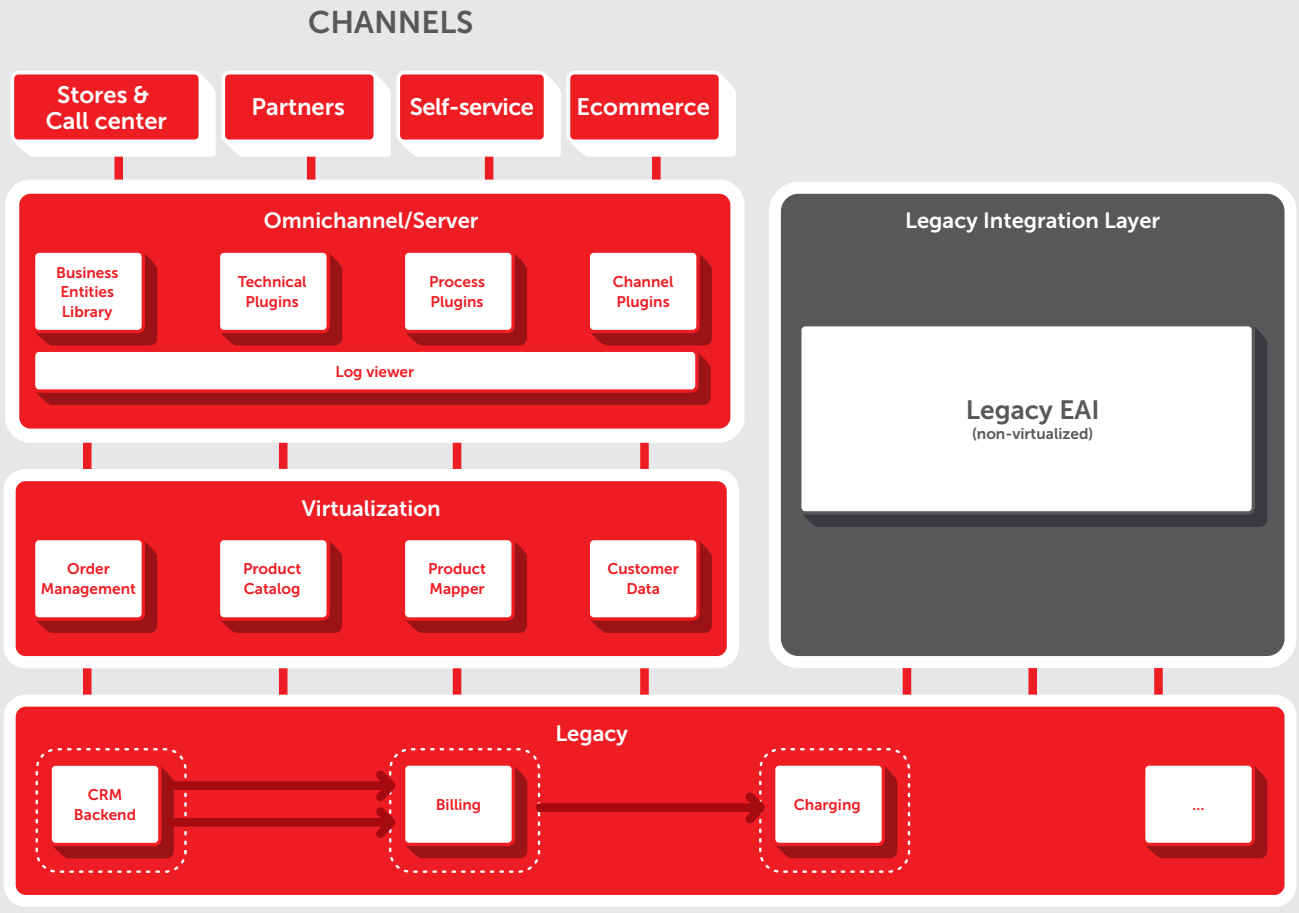
Extension of omnichannel to all self-service channels. This phase extends processes, catalogue and business logic to all channels. For self-service, it allows processes to be started by the customer and handed-over to dealers or sales for assisted selling, as well as the final conversion of non-online channels (IVR, SMS,) into the virtualised architecture. Additionally, since this is the last step in the roadmap, the following benefits also materialise:

- **Full Product virtualisation:** since all product interactions are now performed through the new architecture, it is possible to perform a full simplification of all products for all channels. Only commercial attributes need to be visible for products.

- **Business logic consolidation:** it is desirable (but not mandatory) that the final step is used to clean-up business logic "leftovers" on the legacy platforms. This will allow for easier replacement/upgrade of those legacy platforms in the future and cut on development and maintenance costs. This can be part of a gradual roadmap (this can be considered from Phase 2 onwards).

- **Integration simplification:** many integrations between legacy systems and channels may be simplified due to the introduction of the virtualised SOA architecture.

- **Simplified Bottom-up transformation enablement:** it is now easier to replace/upgrade individual legacy systems because they have non-core functions, cross--system processes, and business logic removed or simplified.



By introducing new shorter phases into this cycle of business driven top-down transformation it ends-up "wrapping" existing legacy systems with a virtualized business layer that: componentizes individual legacy platforms, isolates them from specific business logic (less customization), provides flexible ways to define new products, uses standard legacy APIs to "normalize" legacy interfacing and combines them in novel ways to build new business functions and products.

Benefits

The main benefits of a top-down IT transformation approach by Celfocus include:

- Integration components for the functions required for the first phase that are generic and can be re-used across future phases and other channels => **leading to building a service-oriented architecture that abstracts legacy systems.**
- A centralized, abstract product catalogue solution that can be reused for all channels that links products with their inherent business rules (e.g. if the chosen business processes cover products)
- An order management engine that is able to process full orders and coordinate their execution or process orders to the level they need to be delivered to an existing/legacy order management system.

IT Transformation Top down Virtualization Re-usable Business Processes

Celfocus Customer Centric IT Architecture and Celfocus Product Portfolio

Celfocus has worked with CSPs across the globe, from Tier 1 to smaller operators, with different levels of maturity, and developed a deep understanding of the IT transformation roadmap and critical success factors.

By combining a deep business knowledge with the understanding of different technologies, while never losing sight of the customer experience, Celfocus built a reputation leveraged on an unexcelled record of accomplishment.

Celfocus' Customer Centric IT Architecture is built around the customer and it starts with the omnichannel layer, up to the OSS components, covering all the main BSS building blocks.

Celfocus Product Portfolio addresses niche business challenges faced by CSPs across the globe. Leveraging internal experience and knowledge, they represent a long-term commitment with our customers. Today it includes:

CELFOCUS omnichannel
REINVENTING RELATIONSHIPS

- **CELFOCUS Omnichannel** was developed to ensure a consistent customer journey, regardless of the touchpoint. It covers sales and customer care scenarios for Assisted channels (shops, call centres, partners, and field engineers) and Non-Assisted channels (eCommerce and self-care), supported by a common and smart platform, for a seamless cross-channel experience.

CELFOCUS order management
DELIVERING DIVERSITY

- **CELFOCUS Order Management** provides a seamless division between business and technical layers and is also able to differentiate system requests, not only by product, but also by any parameter in that request. With the use of CELFOCUS Order Management, the launch of new commercial products will not affect the business flow, because the process distribution adjusts dynamically to pre-existing flows, which results in a better time-to-market response.

CELFOCUS

About Celfocus

Celfocus is a fast growing, global high-tech company with a reputation for developing and implementing successful projects and solutions that drive business value for the telecommunications industry.

By combining a deep business knowledge with the understanding of different technologies, while never losing sight of the customer experience, Celfocus built a reputation leveraged on an unexcelled track record.

Serving Clients in 25+ countries, Celfocus helps organizations transform their business in order to improve competitive positioning and ultimately their performance.

For more information about CELFOCUS, please visit our website
www.celfocus.com/offer/ITtransformation

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