

# From Silos to Layers

*How Operators Need to Change Their Operating Model to Cope With Industry Dynamics*



The industry dynamics of telecoms services has led to an increasing disintermediation of the value chain and the emergence of new interfaces between operators and external partners. The “IP-ization” of networks requires telecoms operators to rethink their organizational design beyond the traditional Sales, Network and IT. Telecoms operators will need to embrace a new “layered” business model - not only necessary for future market success, but also required to generate significant benefits in the process landscape and hence reduce the cost base for an operator.

### The increasing value-chain disintermediation in telecoms

Telecom operators have historically followed an integrated approach wherein, access and services were offered to the market in a combined manner and “out of one hand.” However, as the amount of digital services increases, alternative providers, such as Over-the-Top (OTT) players, are challenging operators’ service revenues. On the other hand, the revenue from connectivity is ever more diminishing as a result of the fierce competition between operators and the emergence of additional access technologies, such as cable and mobile broadband.

This combined pressure has significant implications on the operating structure of telecom operators:

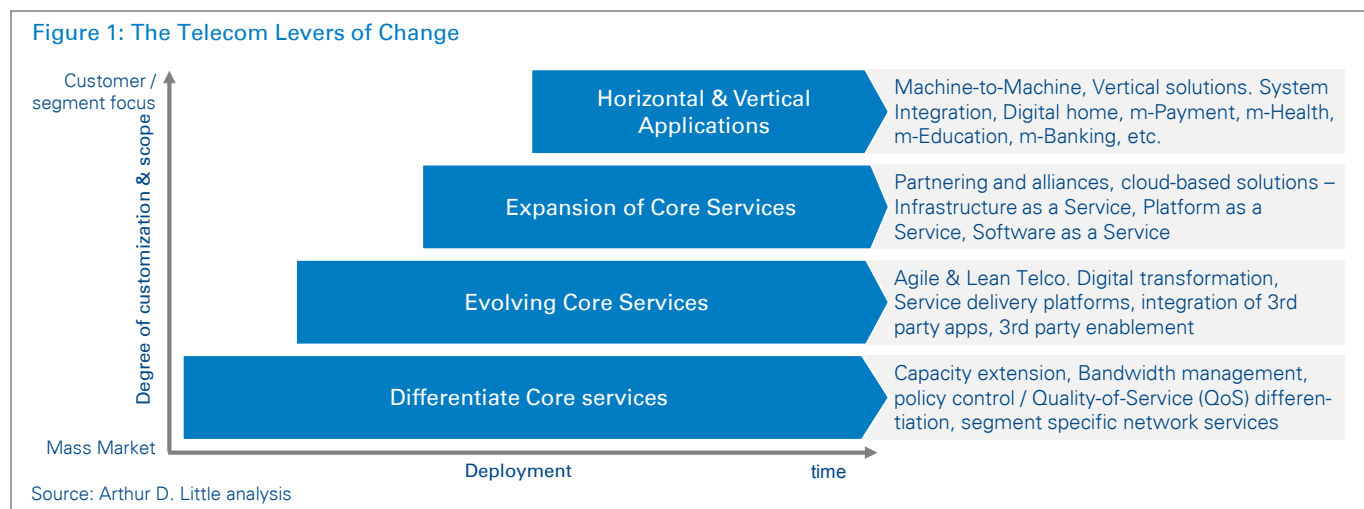
- The current service delivery model combining access and services needs to be split in order to provide new “enabling capabilities” (both network and IT) and end products. The enabling capabilities will also be provided to OTTs in order to enrich the application portfolio delivered through the operator’s network platform.
- The abundance of networks and their technological evolution puts additional pressure on operators to optimize network costs, which leads to a growing need for network cooperation and consolidation, while maintaining the service level differentiation capabilities required to capture new service revenues.

### Service offering will need to occur on four different levels

Implementing four levels of service differentiation, which encompass core services, partnering capabilities as well as horizontal- and vertical applications, are critical in order to drive the future value and competitive landscape in the telecoms industry, irrespective of the particular strategic intent of the operator (Figure 1, overleaf).

1. **Differentiate Core Services:** Offer better quality of service on existing offerings by improving capacity, QoS differentiation and segment specific service offers.
2. **Evolve Core Services:** Augment existing offerings by integrating external applications onto standard platforms.
3. **Enhance Core Services:** Extend the scope of core services offered to cover near core services, such as Cloud.
4. **Horizontal & Vertical Applications:** Focus on services and service development, which can be offered to different markets and shared among different platforms, as well as on the extension of service offerings beyond pure telecom services by developing and delivering segment specific services to customers.

These four levels of service differentiation are critical to the telecom operators’ offerings. They are an inherent part of the new IP-itized telecoms world and need to be taken into account by telecoms operators irrespective of their strategic intent, competitive position or technological asset base.



### The need for a “layered operating model” for telecoms operators

The unbundling of competitive play into different levels has strong implications on the operating model. Apart from equipping the telecoms operators to face oncoming challenges, organizing telecoms services in layers, in which one level provides services to the next, allows operators to:

- Tap into different value creation opportunities in the new ICT world and beyond
- Secure a better structure and leverage between the layers, and
- Focus on the specific value added by the different layers with all value delivery and value facilitating units managed by the support and steering layers

In Arthur D. Little’s model, the operator’s operations are organized around the four layers that will be critical in the future telecoms services world (Figure 2):

- **The Market Layer** defines the required products for the respective customer segments. As requirements are distinct for the various segments, the organization is designed according to Customer Facing Units (CFUs) that are targeted to the respective customer groups. Each CFU consists of Marketing, Sales and Customer Care organizations.
- **The Product Layer** structures all product development and provisioning activities and ensures an optimal sourcing. This layer brings about the synergies in product development between multiple customer facing units. The Product Layer is responsible also for the product lifecycle management, ensuring that the overall complexity of the portfolio remains low.
- **The Enabling Layer** manages both IT and Network capabilities and hence ensures network abstracted service creation capabilities and flexible ICT enablement for own and

third party support. This layer combines the intelligence of the (network and IT) infrastructure and is the essential link translating the assets into commercial value.

- **The Network Layer** focuses on connectivity at a cost and ensures optimal pricing and risk-sharing models. This layer is the hardware of the organization and is the first step in the value creation process.

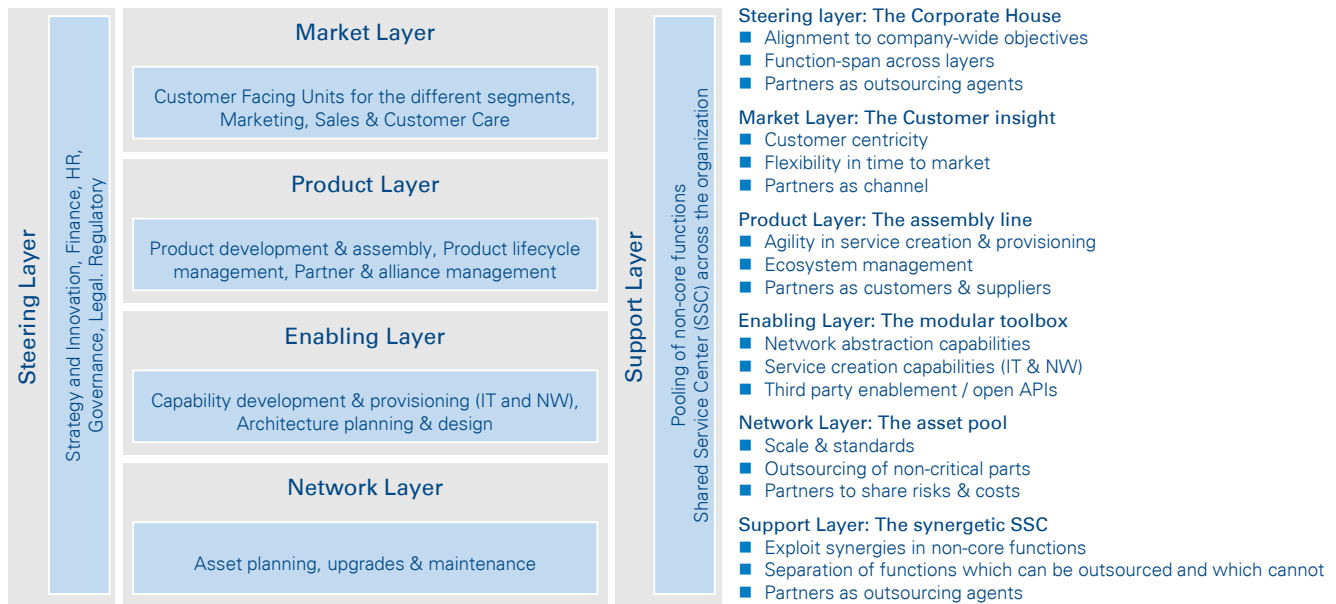
These operative layers will be framed by strong governance and support functions:

- **The Steering function** is responsible for orchestrating and guiding the operational layers with respect to Key Performance Indicators and Service Level Agreements. The Steering layer also infuses new strategic ideas, such as long-term innovation, into the organization.
- **The Support function** combines the assets within the organization that are either communally used and/or have low impact on the core business

While most operators already have introduced Customer Facing Units (CFUs), the adoption of the layer logic within the telecom space is currently seen mostly in the network area, as network sharing deals, such as Telenor and Tele2 in Norway and Orange and T-Mobile in Poland, are forcing a clear distinction between the “Assets” (Network layer) and the “Management” that resides in the Enabling layer. The consolidation of IT and Network resources within one “delivery factory” is also seen as a major synergy driver within larger groups, such as DTAG, to allow synergies between various local operations.

The introduction of a dedicated product layer is currently driven by several large international telecom companies, such as ePlus, in order to reduce the current portfolio complexity and to generate synergies within product development.

Figure 2: Arthur D. Little's Layered Operating Model for Telecoms



Source: Arthur D. Little analysis

### The layered operating model in practice – application and challenges

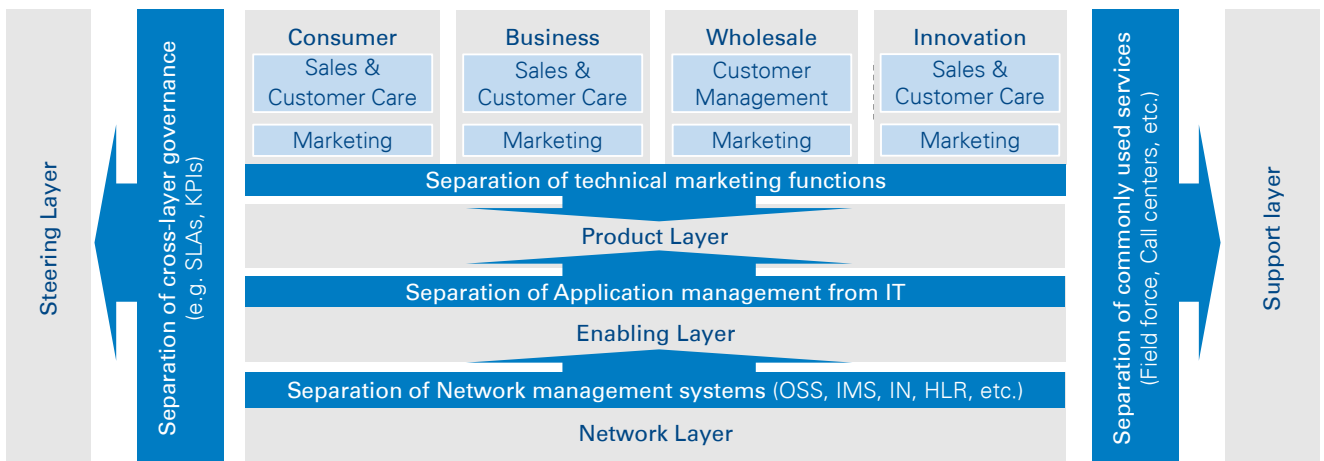
The successful implementation of the layered model is best exemplified by a recent case example of a leading mobile operator, which is now also entering into the B2B / ICT landscape, adding both Fixed Line services and Corporate Solutions to its portfolio. The model implied many changes as illustrated in Figure 3:

The key characteristics of the model adopted by the operator were:

- Merger of the technical marketing and product configuration capabilities from IT and Network functions into a unique Product House whose responsibilities are now to:

- Deliver the configurations of products and services,
  - Develop standardized platforms (APIs) for internal CFUs use as well as 3<sup>rd</sup> parties and partners and
  - Drive the growth of the operator's business in the ICT arena through identifying and integrating capabilities in cross industry ecosystems.
- Product marketing and product configuration capabilities combined within the product house, which makes the product house a buffer layer between the demanding unit (CFU) and the delivery unit (IT/Enabling), enabling a more focused orientation within each of these units.
  - Creation of a clear separation between the enabling layer and the network layer with all the enabling capabilities

Figure 3: Layered Operating Model – Case Example



Source: Arthur D. Little analysis

required for service delivery housed in the enabling layer to standardize the enabling ICT capabilities.

- Refocus of the network layer on delivery of lowest cost physical infrastructure development and management, via possible outsourcing, etc.
- Creation of a dedicated shared service center responsible for providing the other layers with all value creating and value delivering services.

These changes, implemented in order to increase agility in the firm with reduced time to market, have resulted in the transformation of the operating model.

Implementation of the new operating model, however, is not without its challenges. To reap the benefits of the layered model, the operator must completely rethink its organizational setup, implement clear guidelines between the various layers and change current responsibilities within senior management.

### Conclusion – The benefits of a layered model

Implementation of a layered operating model is urged by the IP-ization of telecom networks and is intended to enable operators to reap many benefits, both on the top-line by providing a boost to the revenues, as well as on the bottom-line by optimizing costs and reducing redundancies within the organization. It utilizes “mass customization” capabilities that support effective production without jeopardizing customer intimacy.

Embracing the changing world of telecoms will require fundamental transformation of the operating model to reap the benefits in terms of:

- Top-line growth through new revenues in terms of customer extension and of leveraging capabilities to and from third parties
- Bottom-line optimization through stronger cost focus and better exploitation of third party suppliers
- Improved agility and efficiency
- Synergies within Operator groups through the ability to use common capabilities within one layer across several local operations

Arthur D. Little has gained significant experience in the transformation of telecom operators from top to bottom, understanding and identifying the specific business benefits, as well as the challenges that come within this fundamental change in strategy and operations.

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### Arthur D. Little

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