

Better business case management for IP Transformation

Strategic White Paper

For most network operators today, the question is no longer if they will transform, but how to do it. Building a business case to support IP Transformation is the first step on the IP transformation journey. A deep understanding of the business, network and operations impacts of an IP transformation program, and of their interdependencies, forms the foundation of a solid business case. This paper details the best practices approach to developing a business case for IP transformation and highlights the value and importance of implementing a benefits management program.

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Introduction

Network operators, whether they are telecommunications companies, large enterprises or strategic industries that use data networks for crucial operational purposes, are either evaluating or undertaking large-scale IP transformations. To implement these major changes to their end-to-end networks, they need to develop and manage a sound business case for the activity. This includes tracking progress against financial objectives.

Based on Nokia's experience working with clients around the globe who are involved in these large network IP transformations, we have discovered that companies that have most successfully managed the IP transformation use three disciplines that others often overlook.

Those disciplines are:

- Ensuring operations readiness is undertaken in conjunction with network readiness
- Performing a business readiness assessment prior to IP transformation as an input to business case development
- Using a benefits management approach to define and track the value realized from their IP transformation program

Ideally, an executive heading a company that is undergoing a large IP transformation should be able to clearly articulate the following to the Board of Directors and other stakeholders:

- Why the IP transformation is being undertaken
- The expected financial return and additional business benefits, with associated measurements
- How the IP transformation will be accomplished, including how the services portfolio, network and organization will be transformed, and the preparation and investment needed to support these areas
- A clearly defined view of the various IP Transformation sequences, detailing how and where benefits will be realized throughout the program. This is a key characteristic of the most successful IP transformation management programs.
- An end state view of the network, business and customer journey

Optimizing business case management

How does a network operator achieve this optimum business case management for its stakeholders? There are four critical steps: portfolio management, network readiness assessment, operations readiness assessment and business readiness assessment. Together they provide the critical input required to create and manage the IP transformation business case.

Portfolio management

Portfolio management baselines the current portfolio to achieve an understanding of revenue, margin, and growth for all services. This may sound elementary, but in most large network operator organizations portfolio management is decentralized and siloed. As a result, different departments have different methods and measures for portfolio management. These differences must be consolidated into a single, consistent framework for the portfolio baseline.

In parallel with baselining the current portfolio, the next-generation portfolio must be defined. In this phase, services may be prioritized for rollout over time. The next-generation network portfolio development must include estimated costs, revenues and take rates. The network operator should also fully understand the relationship of existing services for retention, services for decommissioning, services to be replaced through emulation and new service launches.

Once current and future states are established, the program for the portfolio's transition is developed. This requires defining:

- Availability dates for new services
- Expected customer “take-rates” for these services
- Phase-out schedules for legacy services
- Transition plans for subscribers currently using services that are scheduled to be phased out.

In some cases legacy services such as TDM must be retained, for example in a utility network where critical legacy equipment continues to be supported. Such legacy services can still be supported but on a modern infrastructure to boost efficiency while meeting established service level agreements.

Once this transition plan is completed, a forecast of revenues and profits for different services over time can be established. Another important consideration is working with the regulators to ensure planned phase-outs are done within country rules and in accordance with regulations.

It is important to note that where programs are driven by the desire to reduce OPEX, the service portfolio roadmap is directly linked to the speed in which physical legacy networks can be decommissioned and dismantled.

Until the last service subscriber is removed from a network node, it may not be possible to decommission and realize the benefits of change. Therefore, programs based on achieving a reduction in OPEX support and maintenance, support and facility costs should be driven by the need to reduce services on the most costly networks to enable the fastest rate of decommissioning, rather than by technical or profit-related service priorities.

Where programs are driven by the need to reduce OPEX and launch new services to market, the most important consideration is not necessarily maximizing the decommissioning, but maximizing the business case by correctly sequencing the services and related expenditures.

Historically, the types of services that network operators offered to their subscribers were closely linked to the network architecture and even select vendors of network components. For this reason, portfolio development was usually delayed until the technology decisions and roadmap were clear. However, IP and IP Multimedia Subsystem (IMS) have changed all of that by offering an endless variety of services from a large set of vendors over a single network protocol. Software-defined networking (SDN) and network functions virtualization (NFV) promise to carry this flexibility, programmability and service evolution even further. This means that portfolio management should be undertaken in concert with network architecture design and vendor selection.

Network readiness assessment

Network baselining or network readiness assessment, the second critical discipline, is commonly the central focus for most operators as they begin an IP transformation program. This step is a prelude to making the network investments needed to build a new infrastructure that supports flexible new services and cost reductions. Once the architecture and solution design are established, operators can understand the scale and scope of CAPEX investment, and create a portfolio roadmap to assist them in managing and migrating services over time. A readiness assessment also takes into account parallel CTO investment programs that may introduce dependencies or delays into the migration program.

Operations readiness assessment

Many incumbent operators rely on ineffective processes to operate the network, especially when new technologies like IMS, SDN and NFV or all-IP are being introduced. Often customer interaction can be managed faster, or even via self-service on the new infrastructure. However, this fundamental shift in technologies also means that the customer-facing organizations, and associated service delivery and support models must accommodate the change. Ultimately, if the existing service organizations are not transformed in line with the network, the customer processes will be disjointed, inefficient and costly.

An operations readiness assessment is the first step to help avoid these costly oversights. In the operations readiness assessment, the existing service support and delivery models are assessed against a known standards baseline (either eTOM or ITIL, depending on the client), comparing the management disciplines and supporting organizational model to determine their current effectiveness, the capability to accommodate change, and the scale of expected IP transformation required. It is worth noting that an operations readiness assessment also includes a security assessment against the published standards, which is useful for the CSO.

Ultimately, the operations readiness assessment enables operators to scope, bound and manage the service IP transformation as an integral project within the IP transformation program. It enables the program team to ensure that not only are the technology benefits realised, but the service management benefits are too, while managing the level of change.

Business readiness assessment

This discipline is often overlooked by network operators. Transformation programs, as the name implies, have a major impact on how organizations are staffed and processes performed. While many operators today undertake programs with a heavy focus on the technology and infrastructure, the organizational support needed during the transition is often overlooked.

Business readiness assessment is the discipline that determines the organizational resources needed to deliver the program and how to reconfigure the business to deliver this transition. The discipline looks at functions such as program management, supplier management, contract management, and legal support. It baselines the business-as-usual (BAU) state against IP transformation program requirements. The assessment can then determine the resource gaps and contracting models that need to be filled, and propose the proper program structure to support the IP transformation.

The assessment also accounts for parallel business change programs, HR reductions, outsourcing, marketing campaigns and take-overs. Understanding the dependencies of these enables the program to account for such parallel activity and to leverage other investments where possible. Another important aspect of business readiness assessment is the identification of those initiatives that the customer must not undertake during the IP transformation. For example, if the human resources department has a target to reduce OPEX, they may initiate a separate early retirement incentive program. There is a high probability that this move would disable the IP transformation program's delivery mechanism.

A cross-company business readiness assessment will identify those initiatives running parallel with the IP transformation program that could impact its effective delivery.

The danger in overlooking this step is that companies often assume that their current organization can provide the support needed for the IP transformation. As the program ramps up, resources – often the best people – are diverted to the IP transformation. That tactic can be sustained for a while, but eventually the BAU functions will begin to experience quality issues. When the BAU issues reach a critical mass, BAU will “fight back,” and will always win. And, as resources are diverted from the IP transformation, schedule slippage inevitably occurs.

Finally, the assessment takes into account the complexity of engaging the external stakeholders; consumers, enterprises, wholesalers, government departments and the regulator as part of the program. Such engagement takes dedicated resources, extraordinary processes, and adds ongoing costs that must be accounted for.

In summary, a sound business readiness assessment populates the IP transformation business case with the costs associated with the organizational structure needed for the program. It also outlines the ramp-up needed to avoid resource gaps that can drive slippage in the schedule, and identifies the engagement costs associated with the program. An experienced partner with tested practices can help the network operator making these “once in a career” changes, avoiding many potential pitfalls.

The business case – putting it all together

Portfolio management, network readiness assessment, operations readiness assessment and business readiness assessment provide the critical inputs for the IP transformation business case. With this data, the network operator can project the investment required for IP transformation, as well as the impact the IP transformation is likely to have on revenues and costs.

In some cases, IP transformation may be driven by unique business considerations that are not purely financial. For example, some IP transformation programs are a response to diminishing markets and/or increased competition, and focus on diversifying the service portfolio. Unique factors such as this must be captured during the business case creation phase and built into the business model.

Today, most companies develop a business case view of the current state and the end state of the network. At the same time, they develop a business case to justify the network investment. From that point on, the burn rate of investment is tracked over time against key project milestones. What this approach lacks is the ability to better manage investments and capture benefits throughout the transition period in order to fine tune and optimize the program. To improve this common approach, we recommend that network operators adopt a benefits management program to help manage the IP transformation.

Benefits management: the intersection of business and network transformation

IP transformation programs, and the business change programs they include, are likely to be an order of magnitude larger and more complex than any program the company’s managers have worked on during their careers. These are truly “once in a generation” programs.

To successfully manage programs that involve this level of complexity and risk, a well-structured and highly disciplined approach to financial management helps ensure success. For most large programs, managers typically track the cash burn against specific milestones. However, in our experience we feel that this is not sufficient for IP transformation.

Because IP transformation programs should optimize spending, the return on benefits, not only financial burn, should be measured and tracked during the life of the program.

A structured benefits management program begins with documenting the quantitative and qualitative benefits sought through IP transformation. A benefits roadmap is put in place to show how and where benefits will be achieved throughout IP transformation, and key performance indicators (KPIs) are established for each benefit. These are the foundation for a benefits realization chain that allows IP transformation program progress to be tracked from a benefits perspective, rather than milestones alone.

For example, one benefit might be “Reduce operations expense on the network.” The benefits roadmap will link all OPEX reduction opportunities to this benefit. The KPI here is dollars saved. For example, actions that link to this benefit might include “close x number of offices, in order to save \$1B in rent, power, and other facilities costs.” Another example might be improving customer service. The related KPI may be to reduce the number of calls received by live agents and/or increase the number of successful customer self-service activities. This will track to IP transformation program activities to redesign and launch changes to the customer service interface.

A disciplined benefit management approach allows organizations to track the benefits realized throughout the program to present a more balanced financial and service picture. By building the business case through portfolio management, network readiness and business readiness, and coupling that with a benefits management approach, business leaders can communicate:

- Where investments are being made in the business, including investments in the network, support systems, and organizations
- How the program will be implemented
- What the specific benefits will be, when they will be realized, and how they will be measured

With these disciplines in place, the business leaders gain a powerful tool to help them realize the full value of their investments and better manage spend against benefits delivery throughout the life of the IP transformation program.

Acronyms

| | |
|-------|---|
| BAU | business as usual |
| CAPEX | capital expenses |
| CSO | chief security officer |
| CTO | chief technology officer |
| eTOM | Enhanced Telecom Operations Map |
| IMS | IP Multimedia Subsystem |
| ITIL | Information Technology Infrastructure Library |
| KPI | key performance indicator |
| NFV | network functions virtualization |
| OPEX | operating expenses |
| SDN | software-defined networking |



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