



## Simplify Telecom Network Migration with Repeatable Frameworks

A perfect 10 in network migrations in the Telecom world is almost a mirage, but there's a lot that you could get a grip over to get closer to a 10.

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## Associated risks with Network Migration and the desired shift in focus

Telcos migrate their network for reasons such as tackling security issues, increased storage needs, increasing customer need for bandwidth, corporate restructuring, leveraging new innovation, containing cost, using open standard base interfaces, moving from traditional legacy environment and more. These drivers don't normally follow a sequence; hence attempting them as they come feels similar to managing a host of unplanned activities. Collectively, they have the potential of throwing in a high degree of uncertainty as the team takes on the execution. Network migrations are never perfect, however that does not imply that perfection mustn't be attempted. The known devils in the world of risks associated with network migration include facility issues, carrier order verifications, equipment support, and configuration checks. Upgrading a network or changing over to a new network provider can be time consuming, painful, and expensive for any business if it's not carried out under the watchful eyes of an experienced project management team. It's about how the team manages these risks to deliver your project on time and within the estimated budget – a tight rope walk!

A base requirement for a successful migration plan is that of shared responsibilities between the network

team, core engineering team and the service delivery function to arrive at a collective decision on inventory, customer expectations and network requirements. Doing so arrests snags caused due to inventory mismatch, readiness to make alterations to the network, meeting customer expectations and inventory management. They typically lead to post migration hiccups like service outage issues, unmet requests for upgrade and downgrade, missing deadlines set by the customer and lack of service assurance support to the customer. If these issues persist, the account teams are disabled from staying updated on the status of their consumers on the network, for example the number of active services, bandwidth of services and whether or not the collections team is lockstep with services provided.



Establish Team	Define	Plan and Test	Execute	Close
<ul style="list-style-type: none"> <li>• Right Personnel</li> <li>• Right Delivery Model</li> <li>• Right Timing</li> <li>• Right Engagement</li> </ul>	<ul style="list-style-type: none"> <li>• AS-IS to TO-BE</li> <li>• Physical and Network map</li> <li>• Apply Industry Standards</li> <li>• Customer Engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Roll out plan</li> <li>• Test Critical parameters</li> <li>• Inclusions and Exclusions</li> <li>• Exception Management</li> </ul>	<ul style="list-style-type: none"> <li>• Migration of services</li> <li>• Maintain service quality</li> <li>• Real-time control and mitigation</li> </ul>	<ul style="list-style-type: none"> <li>• Review completion to objectives</li> </ul>

## The picture of an ideal network migration setup

'Planning' is the most critical step in a migration process. A successful migration is a result of clear planning across project tasks - ordering, provisioning, turn-up, cut-over, equipment installation and smooth running. Immaculate planning increases the probability of positively impacting customer expectations, managing service issues, CSAT scores and reduces the burden of customer escalations. It avoids the risk of mismatch on the OSS and BSS stack, which normally occurs when the actual migration deviates from the conceptualized plan.

Appropriate inventory management has a direct impact on Service Assurance. To get it right, a timely involvement between the Engineering team for core telecom requirement and the Finance team for estimating cost of network, network consolidation, opting for a technically advanced network, and planning the migration remains an important stage.

If these checks and balances are not set right, right from start, telcos begin to feel the heat half-way into the transition due to unanticipated costs, technology requirements and customer desires for enhanced services that the current network cannot provide.

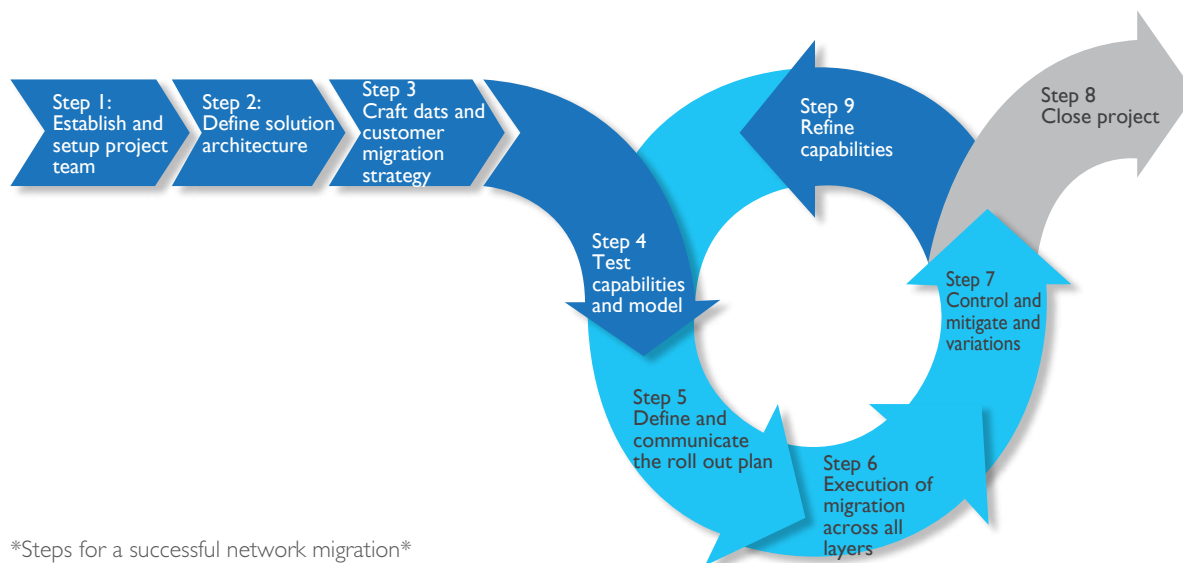
Evidently, smooth migrations are a result of a well thought out plan, proven delivery models and managed by a core project team that sits outside of your delivery team. The credit belongs to this core project team that comprises of telecom experts, delivery experts, customer interface experts and the project management experts. This team is responsible for establishing a roadmap for migration - a good plan will help meet time lines, client's core objectives, cost estimates, optimize resource utilization, predict and reduce cost of failure, integrate legacy and new systems and combat any adverse customer impact. The telco benefit from a shortened migration cycle time.

Perfect picture of a successful migration promises retained customers, retained revenue pipeline, and enhanced network for consumers that provides multiple services and above all meets cost challenges as per plan. Even if there are minor possibilities of a downtime during the process, a good project team will ensure open communication and prepare the telco in advance for the downtime.

## Steps for successful network migration

As stated in the beginning, network migrations are not perfect however the secret lies in the attempts to score 10! Here are a few steps that must be perfected and carried out in a sequence for increased success:

1. Establish the project team - Select a team with the right set of credentials. Include a mix of specialists who understand the OSS BSS stack, the delivery model, business objectives and thereby the network requirements with proven experience of managing projects. In case a third party/vendor is trusted with the network migration piece then this is the right time to get them involved. It is also perfect timing to involve the Finance team. Follow it up with the announcement of the project support team, reporting structure and reporting intervals, financial teams, data setup and the HR setup.
2. Define the solution architecture and craft the migration strategy - Begin with service mapping (as-is state v/s to-be state). This needs to happen across both levels - physical (on the ground) and network (inventory). Also decide on the nomenclature and service level specifications at this stage. The solution architecture must take into account all the aspects that need to get migrated and have a drill down at various levels to an industry standard framework (example: eTOM). Data migration strategy needs to be spelt out clearly; it must tell how the data migration will line up with the customer migration strategy (system level, manual or scripted). Once migrated, the customer data needs to be in sync (data and system). Conclude this step with conducting data mapping and modeling for fitting data into the to-be state.
3. Test the architecture and strategy - Conduct a simulated test on services that are actually migrated. Test to know if the model actually works on ground, identify show stoppers, fix them across data and inventory levels, and document this information. This will give clear scores to your architecture and solution strategy.
4. Plan the migration rollout - Define the phases of the migration. Chose the logic basis which you will line up queues for migration - based on geographies, top 500 customers, critical customers, network types, service types, etc. Within each queue you need to have an execution plan, control plan and a mitigation plan - these three constitute the rollout plan. Entities that you need to consider in the rollout are resource planning (people, systems), times lines, outcomes expected, control plan (quality) for each outcome and a mitigation plan for every risk identified.



\*Steps for a successful network migration\*

5. Execute – this step is governed by the plan built in step 4. Project management needs to be installed to oversee the execution plan and to check if it adds up to the overall plan. A control/quality team must ensure adherence to the quality plan. In case the project over runs during the real time mitigation; it is this team that has the onus of addressing the real time execution challenges.
6. Close the migration project – this is a step for status check to determine whether or not the goals and objectives that we set out to achieve are met. A set of questions asked to the decision makers of the project, before the migration commences will determine the urgency of the migration and the expectations at every stage.

## Finding your trusted partner for network migration

There is a constant need for telcos to adapt to change rapidly and offer new services to customers while operating in an efficient manner. For this to happen, agility is of utmost importance. While you focus on your core business, you can decide to find a technology partner to manage your network migration. In doing so, evaluating your service provider on two critical parameters will go a long way in guaranteeing success. 1) Capability - experience in managing end-to-end migrations, right mix of expertise (consultants, technicians, network engineers, project management team, reporting, client service team), investments in tools, technology and platforms, domain knowledge, ability to connect to your business objectives that is steering this migration plan, delivery prowess and multi-geo reach 2) Ability to deliver within the budget – your technology partner should be able to offer you cost effective competitive rates with credentials that match up.

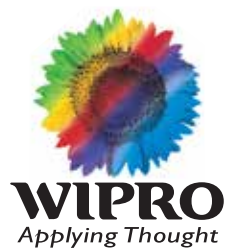
We are seeing an increasing shift from traditional copper and legacy networks to MPLS and IP based networks. A follow up to this is a step change for telcos in operational flexibility and efficiency while reducing the total cost of ownership. And it's not surprising that these changes bring added intricacies to network migration. The various services need to be tested on the new setup and it becomes compulsory to factor different communication protocols. The big ticket items in migration are core network (core infrastructure), services and updating the customer on the progress and anticipated down time – all simultaneously. This is where and why we think a framework to plan and oversee migrations comes to rescue. It gets easier when entrusted to a third party who abides by industry guided frameworks. If the balance is right you can be rest assured that you are stepping towards successful closure of the planned migration. You will certainly have iterations based on learnings but they will be in safe boundaries. I repeat – aspire to get closer to a perfect 10!

## About the author

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With extensive experience across delivery and operational management, process and business transformation, client stakeholder engagement and revenue building, Mathew has a keen eye for consistency in delivery, business process transformation and innovative methods of delivering differentiated services. Mathew is an MBA graduate in Systems from Pune University.



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