Pipeline
It's in here.

The Yellow Brick Road

Choosing a Successful OSS Evolution Path

By Barbara Lancaster

Managers in the telecom Service Provider business have a lot to worry about: driving down operations costs, improving customer service, launching new products quickly, using their networks efficiently to make the most of their network investment. To be successful (that is, profitable) Service Providers cannot afford to slip up in any of these areas.

At the heart of every Service Provider operation sit their *Operational Support Systems.* The OSS environment is of critical importance, because it provides the tools to define and deliver services monitor and maintain networks, bill customers and collect the payments. All of this needs significant investment. Unfortunately, it seems that in recent years most OSS investments have failed to deliver the business benefits that were identified in the business cases that funded them.

Over the years, we've analyzed many OSS projects in lots of different Service Provider environments to try to uncover what works and what doesn't. Every month in this column we will provide ideas and information to help in planning and executing OSS projects. We'll suggest ways of building OSS evolution programs that bring people, processes and systems along together, which is essential if the looked-for improvements are going to be achieved, and sustained. Sometimes we'll tackle generic issues, like this month's look at how to create an ROI model that really supports objectives. Throughout the series we will also explore the business processes, requirements, policies, performance measures and metrics of each one of the major business functional areas, using the TMF Operations Map as our discussion framework.

With those requirements in hand, we'll also take a close look at the vendors of OSS components in each functional area too. We'll share experiences with which ones work, and which are still works in progress.

We'll offer ideas and suggestions that have resulted in millions of dollars in savings for our clients and brought many projects in on time. And throughout, we'll welcome ideas, suggestions and requests, to create a column as helpful as we can possibly be.

Pragmatic ROI

This month, we'll turn our attention to setting the foundation for a winning project: understanding its value to the corporation. Projects can't get funded without a good understanding of the business benefits that will be delivered, and how that achievement will be measured. This means sitting down and working out the Return on Investment.

Mention ROI and people react with drooping eyelids, or with gnashing of teeth, or by changing the subject. And, it is understandable given that… developing an accurate ROI calculation is always hard work, and sometimes nears impossibility.The complexity in defining ROI is trying to compare a hypothetical future state against an unquantifiable current state.

Hypothetical future state

Changing market conditions and changing business priorities can be modeled with a fair degree of accuracy, or at least consistency. The really challenging part of the forecast is to decide how close

a project will come to achieving the capabilities and benefits extolled by the OSS vendor or the Systems Integrator. Will all promised functionality be delivered? Will it work as promised? Will other changes to the OSS environment underway in other areas significantly affect what can be achieved? Has anyone ever achieved anything like the promised returns? Probably not becuase basing an ROI on uncritical acceptance of promised benefits is folly. An ROI also needs to contain estimates of projected costs… How much should we allow for extras and contingences? Double-digit safety margins are no longer safe… think 100% and upwards. Are maintenance, support and upgrade costs guaranteed? The list is long, but we'll provide some suggestions about what tp consider when it comes to issues like Risk Management and Total Cost of Ownership.

Unquantifiable current state

Even companies with extensive data warehousing capabilities are unlikely to have the ability to cost-effectively identify, quantify and apportion all of the factors associated with the specific functions that will be affected by a specific project. Even if the data is absolutely accurate, gathering details about staff involvement, information flow, task volume, exception handling, allocation of IT resources, by service, by territory, by customer segment, quickly becomes an exercise that costs more than it is worth. Sometimes it all seems like too much hard work. As a result, companies may make one of two big mistakes.

Common Mistakes

At one extreme, a company will go into decision limbo for weeks or months as operational and IT people struggle to put together an ROI model that will satisfy the accountants and company executives. They're never satisfied, because the future state is impossible to guarantee and the present state is too complicated to measure accurately. No decisions and thus no progress are made. At the other extreme, we have seen complex multi-million dollar systems being bought on the basis of no more than a gut feeling, or a buddy's recommendation, or the comfortable feeling created by a decent dinner in a fine restaurant, courtesy of a vendor. Either extreme can be bad news for a company.

It is generally agreed that the case for spending millions of dollars should always be made with a clear understanding of prospective benefits, costs and impacts. It is entirely reasonable to want to make fact-based decisions, and to want to be able to measure the effectiveness of any investment. So what can be done to make the ROI exercise more efficient, less painful and more useful?

The *Pragmatic ROI* is a model that can be used throughout the lifecycle of a project, from Concept, through Feasibility, Define and Design, into Implementation, and of course Post Implementation. It is driven by a combination of business facts and anecdotal data, seasoned with a large measure of caution and a sprinkle of skepticism. It can be initiated quickly and applied consistently.

Pragmatic ROI

What goes into a Pragmatic ROI? Part 1 establishes a baseline, and forms the core of the Concept phase of a project. Part 1 tries to answer the question: "Why should we do something?" Here are the key ingredients of Part 1:

1. **An agreed base of corporate metrics**. This is the base set of data that everyone in a company agrees is readily available, reasonably accurate, and descriptive of the corporate vision,. For example, if the vision is to be the leading supplier of high-speed services, then

the corporate metrics should include tracking the growth of those services. The kind of data that is reviewed by the executive team on a regular basis, it should be a cross section of information important to the overall corporation and therefore relevant when assessing the potential return on investment, to the corporation.

2. **Current pain points**. Capture specific examples of how the pain manifests itself – lost records, long holding time, missing payments, customer complaints, network outages, missed commitment dates, etc. These are great for getting started on defining Business Requirements too…!
3. **A description of the impact of the problem**. Anecdotal data is an excellent way of helping others understand the problem. We all learn from stories – both good news stories and horror stories – because we can relate to them and remember them much better than impersonal data sets. This is especially true when trying to gain support from people with little or no background in the problem. In today's cautious investment environment, it is often the case that executives from all areas of the company will be involved in deciding which projects to fund – compelling anecdotal data is essential to winning support from the Engineering Director for a Billing project.
4. **Describe as clearly as possible how the company would function if the problem were eliminated**. Decide how to measure that the problem had been fixed. This is also good input to Business Requirements definition, to the development of User Acceptance Test cases, and to identifying where performance measurements are needed.
5. **An assessment of the impact on the current OSS Architecture** and OSS Investment Plan. This should include a high level analysis of changes in information flow, data requirements, any DCN impacts, etc.
6. **A risk assessment**. Another common corporate component that should be used for every evaluation. Consider factors such as the number of initiatives underway, success with similar initiatives, availability of skilled people and funding, enthusiasm and persuasiveness of the likely executive sponsor, degree of reliance on vendors, degree of technical challenge, estimated project duration, number of interfacing systems, etc.

The Pragmatic ROI, part 1, is then ready for review. Part 1 is an initial view, the core of the Concept phase of a project. Without any estimates of how much it might cost to solve the problem, it sets the baseline for determining how much effort should go into solving this problem – its corporate priority, and the upper limit of how much the corporation is willing to spend to solve it. Part 1 can be completed very quickly; a few weeks at most. Unlike in a traditional approach to ROI, the baseline figures gathered in this phase need only be good enough, not perfect. Key decision makers get a chance to determine what 'good enough' means before moving on. We find that it is much easier to establish consensus on a 'good enough' baseline as a separate, pragmatic first step than when it is already built into a finished business case. Part 1 of the Pragmatic ROI establishes consensus on: "Something Must Be Done".

If the benefits identified in Part 1 appear to be worthwhile, then the project moves into its Feasibility phase. "As is" and "To be" process modeling gets started, as does the definition of detailed Business Requirements, performance objectives, and performance measures. This will provide a view of just how much has to change to get from "today" to "tomorrow", an important indicator of the size of the project. At this point, one should have a good understanding of the

most important changes to achieve. Whether it is the ability to process 35% more orders, or to reduce the run time of each billing cycle by 28%, or to improve the utilization of the network by 43%, one should know what "done" should feel like, and why

At this point, the OSS Architecture team also begins investigation of software application options – build, buy, or outsource. Discussions with vendors are initiated, or an RFI is issued. Based on the preliminary results, Part 2 of The Pragmatic ROI can be completed, adding in the cost estimates gathered from potential vendors. Being rather skeptical of vendor claims (based on my experience of OSS projects in general), I suggest doubling all cost estimates to complete the Part 2 figures.

At the end of Part 2, we will have reached an understanding that: "Something *Can* be Done, and This is What It Looks Like."

If the project benefits still appear to outweigh the (doubled) cost, then the project moves out of Feasibility and into Definition. This is when detailed analysis of solution options begins, as does rigorous project planning in an effort to reach agreement on: "This is What We're Going to Do". We'll talk more about these areas in future columns.

As the project moves into Design and Implementation, The Pragmatic ROI performs another essential function: it serves as a formal, pre-agreed reference point for every project milestone. Incorporated into the delivery contract, and the project plan at each milestone review, a formal "go/no go" decision can be taken, based on how closely the project is actually conforming to the costs and the benefits agreed. By making The Pragmatic ROI a formal part of the project review, a great deal of emotion and ego is eliminated from the project. It becomes simply an agreed performance objective. Deviations of more than "x" mean formal Executive Review, and deviations of more than "y" mean immediate project suspension with intent to terminate. When drafted into the delivery contract, The Pragmatic ROI helps keeps all parties focused on achieving the agreed results. Using our previous example, if increasing the number of orders that can be processed each day is a critical requirements, then "proven capability to push "x" orders (that 35% improvement number) should be one of the explicit exit criteria stated in the contract. More on this when we explore "contracting for success" in a later column, but the idea is to write down as precisely as possible what the expected achievement, and make sure to agree with the vendors how results will be tracked. This may mean establishing some new performance measures and new reports before starting the deployment, so it is essential to determine early on what information is required, where it will come from, and how it will be reported. With this information in hand, it becomes a cinch at User Acceptance time to know if one should sign off on that Acceptance Certificate, or not!

The Pragmatic ROI approaches corporate decision making in manageable incremental chunks, involves all key decision makers at each stage and takes a balance approach to metrics, combining hard facts where available with intelligent supposition. Pragmatic ROI is in my experience, an effective tool for determining which projects are most important to success, and an even more effective tool in helping to achieve that success. It sure as anything beats sending two or three unfortunate folks into a room for several months with instructions to generate a cast-iron business case out of thin air. And it's got to be better than credulously buying the first thing an SI suggests..

Next month: Setting contract terms for your success.

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LTC is focused on helping our clients in the communications industry grow efficiently and profitably. With dozens of years of first hand service provider experience, LTC's Business Operations Architects are uniquely qualified to contribute to your success.