Portfolio Title: Applications Infrastructure modernization portfolio

Organization: Amdocs Singapore Pte Ltd

Job Title: Portfolio Manager

Functional Reporting Area: IT/IT

Organization Primary Focus: Telecom

Number of projects/programs in portfolio: 3

Portfolio Size: 10 M USD

Date Started: Jun-2015 **Date Through**: Present

Portfolio Summary

Amdocs is a leading software and services provider to communications and media companies of all sizes, accelerating the industry's dynamic and continuous transformations.

Application infrastructure modernization portfolio within Amdocs focuses primarily on providing end-to-end application infrastructure management solution to communication and media companies.

I was assigned as a Portfolio Manager for Application infrastructure modernization portfolio.

Business need: Problems and Opportunities

As information technology continues to gain more prominence, new business processes and models are being developed around new, emerging technologies. The fast-changing environment opens a plethora of opportunities for businesses.

Portfolio/Solution Scope

And hence to leverage such vast potential, application infrastructure modernization portfolio ensured that customer's application IT infrastructure is well-equipped to identify and address the upcoming challenges in the fast-changing environment.

The portfolio also meets the organization's strategic goal of providing the most efficient and cost-effective technical solution to meet and exceed the expectation of the customers.

The portfolio scope includes developing the solutions with the latest open source technologies. This portfolio not only allows organization to deliver effective and efficient application infrastructure solutions in the most cost-effective way, but also allow applications to be more robust and easier to maintain.

Portfolio Goals:

Application infrastructure modernization Portfolio objective is to

- Increase revenue and profit
- Exceed customer expectations
- Use open source 3rd party technologies and optimize the solution.
- Modernization of the applications
- Deliver and implement the solution.

Portfolio Objectives:

Application infrastructure modernization Portfolio objective is to

- Attain revenue of USD 10 million for Amdocs in 5 years. Maintain a portfolio profit margin of 15%.
- Increase customer satisfaction with CSAT (Customer Satisfaction) score of 9/10 and above.
- Reduce overall infrastructure cost by 20% by using open source technologies and optimization of the customer solution.
- Ensure modernization of the applications and maximize the tech investments to exploit the next generation of business opportunities.

Some of the key program in my portfolio were:

- Component/Program: CTM C1 Convergent System Infrastructure Expansion and Modernization

This program focused on implementation and maintenance of telecom solution including required 3rd party hardware and software, on Test, Production and Disaster Recovery (DR) systems.

 Component/Program: Singtel R2 Billing, Customer and Care (BCC) Infrastructure Implementation

This program focused on implementation and maintenance of telecom solution including required 3rd party hardware and software, on Test, Production and Disaster Recovery (DR) systems.

- Operations: A de-centralized Support and Maintenance to sustain the 3rd party infrastructure and application benefits.

The business case was approved by the Portfolio Review Board and the portfolio was initiated in June 2015.

Experience Summary#1: Strategic Alignment

A. Identified and prioritized portfolio criteria and evaluated portfolio component priorities based on the organization's strategic goals and objectives.

Option Selected is B: Created and/or updated a portfolio roadmap based on the organization's strategic goals and objectives

The portfolio of implementing application infrastructure modernization was key to the success of organizations strategic objective. Creating and updating Roadmap was my key responsibility as a Portfolio Manager. For creation of Portfolio Roadmap, I started with Portfolio Strategic plan and Charter. This helped me with key information like the Portfolio SMART (Specific Measurable Achievable Relevant Time-bound) objectives, expected timelines and resources availability.

I interacted interactions with Business Heads of all Strategic Business Units (SBUs) of Billing and Customer Care within my organization to understand their priorities. These interactions aided me to identify stakeholders from respective locations who will be contributing success of Portfolio. I conducted series of meetings along with these stakeholders briefing about portfolio, objectives, their current processes, pain areas and completion timelines. These meetings helped me to Identify benefits which will contribute to the Portfolio objectives and find inter-dependencies for various portfolio components. For example, cloud native application support and strategy to identify such applications, its move from their current on-premise systems to the cloud, and how best to do so.

These discussions with stakeholders also helped me to identify customer wise priorities based on their business objectives and procurement volume. I used efforts vs benefits analysis to identify priorities. I regularly performed the Cost Benefit Analysis to ensure that the strategic goal of maintaining 15% cost-to-business margin from the portfolio is always maintained. E.g. Customer in Singapore already had part of the on-premise hardware available and hence changing to the cloud model was not cost effective for the Billing and Customer care business unit.

Our organizations' web based PMIS (Developed of SharePoint platform) became a key tool to manage the roadmap. Key input data of components, objectives dependencies, and high-level timelines based on the forecasts were plugged in the PMIS and a comprehensive timeframe-based strategy implementation approach in the form of roadmap was generated which demonstrated all the key milestones and dependencies to achieve full business value for stakeholders and ultimately for Amdocs.

At every Portfolio Review Board meeting, my portfolio Roadmap was key point for review. Using Progressive Elaboration technique, I used to put high-level milestones for various portfolio components. I used to take inputs from these review meetings to update Portfolio components. Under this, I was showing all the milestones and current status (e.g. yet to start, in-progress, completed, at-risk etc.) of the portfolio components for the upcoming 12 months. For the next 4 years, I was putting in the ball-park timelines.

I performed continuous assessment of the operational state by doing gap analysis between the current value the Portfolio solution was delivering against the organization business objectives. I ensured variance is analyzed and new Changes / Enhancements were proposed as corrective actions which also resulted in update to Portfolio Roadmap.

As a result of continuous effort toward monitoring the roadmap and communicating the updates of the roadmap to stakeholders, I ensured the portfolio objectives were aligned to the organization strategy and objectives.

Experience Summary#2: Governance

Option Selected Is A: Defined and Implemented a governance framework for the portfolio and/or portfolio components

B. Implemented and enhanced the governance aspects of the portfolio management plan in support of portfolio goals and objectives

During initial stage while forming Governance mechanism for implementation of Applications Infrastructure modernization portfolio, I studied governance plans of past similar portfolio.

I ensured that the portfolio governance framework (PGF) is tightly coupled with the corporate governance framework.

As part of developing the portfolio governance framework, I initially defined the core principles / values that would constitute the boundaries within which all work within the portfolio would need to be performed. These principles / values were derived from the corporate governance framework, articulated by various policies, and supported by excellent standards and best practices the company had institutionalized. Some of these core Portfolio governing principles are,

- a) Continually improve and innovate processes and systems to deliver best-in-class solutions and services; aligning processes, people, and technology to enhance quality and customer satisfaction.
- b) Institutionalized Risk Management framework to manage Portfolio value delivery objectives
- c) Customer Satisfaction in Primary metrics for Portfolio success.

Based on these identified principles and practices of Portfolio Governance Framework, I defined the roles and responsibilities of the portfolio manager, the component managers, the hierarchy, the portfolio review meetings (including the format, frequency, and mandatory participants), the phase gate reviews, the portfolio health checks, the approval process, and the issue escalation/resolution process.

My next step was to adopt a right-structure and well-balanced team, to help achieve portfolio objectives. Taking the Corporate Steering Committee in confidence, I created a multi-level hierarchical decision-making structure ensuring that one member will represent one layer of the board at a time. This helped in defining roles and responsibilities and applying filtering-criteria for decisions at each level. By involving our Portfolio Management Office, I created templates for the portfolio and its components to have a well-defined Component plan, Requirements Analysis documents, Minutes of Meeting, Stakeholder Register, Financial Reporting, Weekly / Monthly Status Report and Change Requests.

I urged Process Audits post implementation of each solution component. For process Audits, I proposed to form Internal Audit team from domain experts within Business Units which helped in portfolio value management.

I developed mechanism along with portfolio management team to ensure Quality focus of portfolio deliverables. As there were multiple Business Units which were having different processes and different operational challenges, it was essential that Portfolio Implementation address these and homogenize the operational & process challenges.

I designed a comprehensive Portfolio Dashboard that would, at any given point in time, clearly convey the status of the Portfolio with respect to the strategic goals as defined in the Portfolio Strategic Plan. I then integrated the PGF into the overall Portfolio Management Plan so that portfolio could be tracked regularly.

I additionally scheduled optimization & assessment of critical organizational resources as part of governance model which ensured all portfolio components including operations were absolutely resourced and continually boosting the value in accord with the portfolio milestone agreed with the strategic team.

Therefore, the efforts I made for effective implementation of governance framework, result in alignment of the portfolio deliverables against the organization's strategic and business needs.

Experience Summary#3: Portfolio Performance

A. Managed portfolio performance to optimize portfolio effectiveness and efficiency (may include resource utilization, revenue enhancement, expense reduction)

Option Selected Is B: Evaluated continuous progress toward the achievement of business or strategic goals through the measurement of portfolio value.

The criticality of the Applications Infrastructure modernization portfolio in achieving organizational strategic goals implied continuous monitoring on the progress. While outlining the Portfolio Performance Management Plan, I have ensured, through multiple engagement and communications sessions that every stakeholder understand the value of and confirm their commitment for the portfolio value delivery.

Furthermore, I have confirmed that there is a system in place to ascertain that the values from portfolio would be delivered and portfolio would always be aligned with the strategic goals. My suggestion to conduct portfolio reviews every quarter (as well as based on any specific requests/escalations from the Portfolio Management team), was accepted and implemented. I recommended Benefits Realization analysis, Value scoring and measurement analysis, and SWOT (Strengths Weaknesses Opportunities Threats) analysis as part of Benefit Review process. Multi-layer Portfolio governance board structure helped me in continuous progress monitoring toward the portfolio value delivery. I ensured that, the top layer of governance board gets BRAG (Blue, Red, Amber, and Green) report, Bubble chart report, Pie chart, Histogram, and other forms of dashboard reports for making quick and right decisions. The middle and bottom layer of governance team members, who were accountable for making delivery and

execution related decisions, were furnished with more detailed reports such as bar chart report, sensitivity and scenario analysis report. Tools like Results chain and Outcome probability analysis helped me to increase the intended benefits accruing to the portfolio.

I have also performed resource leveling to ensure balancing between the demand and supply that helped in gaining efficiency, consistency and maximizing productivity of scarce organizational resources. I performed the PESTEL analysis (Political, Economic, Social, Technological, Environmental and Legal) analysis to measure the impact on portfolio value as external enterprise environmental factors also have a qualitative impact on Applications Infrastructure modernization portfolio performance.

I used the Efficient Frontier technique to design the optimal portfolio that would strike a perfect balance between risk and return. I mapped the portfolio value measurements to the strategic portfolio goals and objectives and made this a key part of the performance reports.

I have performed trend analysis to check progress and future course of action in order to align portfolio with organization strategic goals and objectives. I have also performed new technology analysis to get highest portfolio returns on resource utilization. I used scoring models to financially measure those benefits, which had initially appeared to be intangible. I performed Cost Benefit Analysis (CBA), using various techniques like EVM (Earned Value Measurement), NPV (Net Present Value), IRR (Internal Rate of Return) and ROI (Return on Investment) to quantitatively measure portfolio performance.

To ensure that there are no or minimum issues during or after the transition of the solution, I assured that teams involved in change management, implementation teams and operations were synchronised, which in turn benefitted in the portfolio value realization.

Due to my continuous focus on the portfolio performance and benefits delivery, I was able to measure portfolio value, ensure strong executive support and achieve the organizational strategic goal.

Experience Summary#4: Portfolio Risk Management

A. Defined and/or enhanced the portfolio risk strategy, including tolerance and thresholds, based on the portfolio goals and objectives

B. Enabled the organization to capitalize on opportunities or manage threats based on portfolio risk management processes, methods, and/or techniques.

Applications Infrastructure modernization portfolio envisaged work in highly fluid environment characterized by changes in Legalities, Rules and Regulations across geographies, state-of-the-art research in allied fields including Experience Cloud Migration, Security, Network and corresponding architectural/standards evolution in Billing and Customer Management Experience Industry. Thus, risks and opportunities were likely to emerge from technology, expertise, standards-regulations, etc. besides other external and internal factors; and hence required aggressive management, which I ensured right from the beginning.

Since many portfolio members were new to the organization, I ensured detailed orientation and trainings leveraging organizational-risk management procedures, making each individual aware of their role/responsibilities in ensuring delivery of portfolio value. I also prepared an exhaustive portfolio risk

management plan, working closely with the Portfolio Management Office and Portfolio Governance Board to operationalize the same.

I used Benefits Dependency Map in 'layer', with the high level used to engage business leaders, external stakeholders and guide communications. I used the more detailed versions to identify assumptions, dependencies, and risks, guide the delivery team and assess the impact of changes. This allowed the common benefits to be identified easily at a portfolio level as well as a good line of sight between all strategic objectives and each of the contributing projects. I used Portfolio architecture baseline and portfolio work breakdown structure (PfWBS) to understand inter-dependencies at portfolio components level, categorization level and at work packages level of details. This inter-dependency analysis eventually helped in risk management and portfolio optimization activity.

After calculating the risk score, I assigned myself or my portfolio team members as risk owners for those risks that had a high or medium risk score. I gave the risk owner complete authority in case the risk occurred. I also developed escalation matrix in case of risk occurrence. Residual risks and those risks with a low risk score were maintained in the watch list and monitored less frequently compared to high and medium risks.. Multiple what-if scenarios were discussed with the portfolio team and PfMO and wherever necessary, with the Portfolio Review Board. Based on this analysis, negative risks were to be avoided, transferred or mitigated and positive risks were to be enhanced, exploited or shared.

I defined the risk tolerance limits and aligned to risks categories and got approval from Portfolio Review Board. Moreover, for the contingency and management reserve determination and to ensure that organization resources are not blocked for long duration toward this risks reserved, I approached and collaborated with the key risks owner who were also SMEs and planned the response strategy accordingly.

I used the portfolio communications plan and the stakeholder engagement strategy to communicate the risks to the relevant stakeholders. Thus, my proactive steps as a Portfolio Manager helped maximize the portfolio benefits realization. In every meeting with the Portfolio Review Board, I devoted considerable time to risk management. This helped the organization in being better prepared to deal with negative risks and take advantage of the positive risks in order to meet the organizations goals and objectives.

Experience Summary#5: Communications Management

A. Developed and/or updated a portfolio communications strategy to support effective decision making and achievement of portfolio goals and objectives

B. Engaged stakeholders to set and manage expectations and influence the success of the portfolio

After I had completed alignment of portfolio objective, which was to optimize security & modernize application & increase customer satisfaction with the organization's objective of revenue enhancement from new channels of business, it was then imperative that these portfolio objectives become KRA (Key Result Area) of all portfolio stakeholders. These stakeholders showed deemed commitment toward fulfilling their KRA target. However, before even assigning KRA and seeking commitment toward it, it was important to identify these key stakeholders.

I had facilitated multiple meetings with corporate governance team and functional heads to identify these stakeholders. Some of the tools used during these meeting sessions were power/interest grid, power/influence grid and stakeholder power map or stakeholder network diagram. Once, the stakeholders were identified and benefits to be derived from portfolio objective were assigned, I had developed stakeholder engagement strategy and communication management plan for their ongoing alignment. The first thing I did, as part of developing stakeholder engagement strategy was to understand stakeholders current and desired level of engagement in the portfolio and this was achieved through stakeholder engagement assessment matrix tool. This assessment matrix had five levels of engagement category like, Unaware, Resistant, Neutral, Supportive and lastly Leading. I had assigned this responsibility of assessing current and desired level of stakeholder engagement with my portfolio management team and received support from portfolio management office. Post knowing the current and planned level of stakeholder engagements, the strategy was extended to bridge the gap between these engagement levels. Considering, it is not very easy to change the engagement level of stakeholders who were resistant towards portfolio objectives of Supporting or Leading the portfolio objectives, it was important to understand why these stakeholders were resistant and what will it take to make them supporters.

I developed communication management plan with the help of these stakeholders to bridge this engagement gap. Besides, this communication management plan was aligned with corporate communication policies that has been provided by PfMO. The first thing I did as part of communication planning was to do stakeholder analysis to understand why the stakeholders are resistant toward portfolio implementation and followed it with requirement analysis to make them supportive of the portfolio.

As part of stakeholder analysis, I developed 4-quadrant matrix and plotted Benefits Expected parameter on Y-axis and Change required parameter on X-axis. This analysis gave me clear picture that, the resistant stakeholders are those stakeholders who are having low benefit and high change in their current business operations. As part of requirement analysis, to change the engagement level of these stakeholders from resistant to supportive of the portfolio goal and objectives, I did negotiation, conflict resolution, and face-to-face meetings with these stakeholders. Finally, it was also important that, the stakeholder engagement strategy and communication management plan remained relevant to changing business environment. My portfolio management team timely incorporated governance decisions designed for handling these business environmental impacts.

By closely interacting with all stakeholders, I kept the communications strategy and plan consistently relevant to changing business environment throughout the portfolio duration.