The Total Economic Impact™ Of FUJITSU Integrated System PRIMEFLEX for SAP Landscapes
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## Executive Summary

SAP users tend to be large, sophisticated global firms. Their SAP environments have usually grown over the years both organically and through mergers and acquisitions and as a result have become increasingly complex. While they need to protect their existing investments, they also must respond to ever-changing business imperatives and offer a flexible and scalable SAP environment. They are looking for ways to modernize their SAP instances by creating a robust, agile infrastructure which supports business growth and innovation. These firms might be interested in exploring FUJITSU Integrated System PRIMEFLEX for SAP Landscapes powered by FlexFrame Orchestrator Management Software.

Fujitsu’s PRIMEFLEX for SAP Landscapes is an integrated system composed of a predefined, pre-integrated, and pretested combination of servers, storage, network connectivity, and software — designed, delivered, and supported as one product. It enables a simplified and secure set up of infrastructures optimized for SAP applications and databases. The integrated FlexFrame Orchestrator software offers consistent and standardized administration of infrastructure, databases, and applications.

To examine the potential return on investment (ROI) enterprises may realize by deploying PRIMEFLEX for SAP Landscapes, Fujitsu and SUSE commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the PRIMEFLEX for SAP Landscapes on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed two customers that had adopted Fujitsu’s PRIMEFLEX solution for their entire SAP landscape.

### Key Findings

**Quantified benefits.** The following benefits are representative of those experienced by the companies interviewed. Based on the results they obtained, we have estimated the likely financial impact on the composite organization described in this case study: a large manufacturing and distribution company with global operations and approximately 200 SAP systems (see page 6 for more details). The financial impact estimates are indicated as three-year risk-adjusted present values (PV).

- **Legacy infrastructure refresh cost avoidance estimated to approximately $4.2 million.** Following the introduction of the PRIMEFLEX solution, the legacy SAP infrastructure gets decommissioned and no longer needs to be refreshed. For the sake of this business case, we assume that the entire legacy infrastructure was up for renewal within the three years of this analysis.

- **Legacy infrastructure maintenance cost savings estimated to $2 million over three years.** The retirement of the legacy SAP infrastructure also results in direct maintenance cost savings.

- **Business value from faster provisioning of SAP systems estimated to $1.3 million.** The increased agility of the new SAP infrastructure has a real impact on the end users and the business. Based on the estimation of one of the interviewees, we assume that a new SAP system can now be provisioned 60 days earlier — time that can be used productively to help realize a positive business outcome and create value.

### Main Benefits

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP infrastructure cost savings</td>
<td>30%</td>
</tr>
<tr>
<td>Operational productivity gains</td>
<td>50%</td>
</tr>
<tr>
<td>Improved agility and faster provisioning of SAP systems</td>
<td>60 days</td>
</tr>
<tr>
<td>Reduced planned downtime per SAP system per year</td>
<td>½ day</td>
</tr>
</tbody>
</table>
Operational productivity gains estimated to approximately $988,000. The core SAP infrastructure team benefits from simplified administration, maintenance, testing, troubleshooting, and provisioning activities. Interviewed organizations reported productivity gains of 50%. In this example, we assume that six staff members can be reallocated to other valuable tasks.

Reduced planned downtime of SAP systems worth approximately $556,000. Due to the PRIMEFLEX solution, with its fully virtualized server environment, maintenance activities that used to require planned downtime can now be executed without disrupting the business. Based on the estimation of one of the interviewees, we assume a reduction of planned downtime of 12 hours per year per SAP system.

Costs. The interviewed organizations experienced costs in the following areas. We have estimated these costs for the composite organization described in this case study:

Infrastructure costs of approximately $5 million. These costs include the entire hardware of servers, storage, and network elements, as well as the associated software licenses (such as the FlexFrame Orchestrator) and maintenance costs for the new SAP infrastructure running approximately 200 SAP systems — 20 of which in production.

Setup and migration costs of approximately $644,000. These costs account for the internal labor and professional services costs related to: the initial setup of the new PRIMEFLEX solution; the migration of the existing SAP systems; and the decommissioning of the legacy SAP infrastructure.

Initial training costs of approximately $50,000. These costs account for the cost of the trainer, training materials, and the time spent on initial training for the SAP infrastructure team.

Forrester’s interviews with two existing customers and subsequent financial analysis found that an organization based on these interviewed organizations would have experienced benefits of approximately $9 million over three years versus costs of $5.7 million, adding up to a net present value (NPV) of $3.3 million and an ROI of 57%.
TEI Framework And Methodology

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing Fujitsu’s PRIMEFLEX for SAP Landscapes solution.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that Fujitsu’s PRIMEFLEX for SAP Landscapes solution can have on an organization:

- **DUE DILIGENCE**
  Interviewed Fujitsu stakeholders and Forrester analysts to gather data relative to PRIMEFLEX for SAP Landscapes.

- **CUSTOMER INTERVIEWS**
  Interviewed two organizations using PRIMEFLEX for SAP Landscapes to obtain data with respect to costs, benefits, and risks.

- **COMPOSITE ORGANIZATION**
  Designed a composite organization based on characteristics of the interviewed organizations.

- **FINANCIAL MODEL FRAMEWORK**
  Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organizations.

- **CASE STUDY**
  Employed four fundamental elements of TEI in modeling Fujitsu’s PRIMEFLEX for SAP Landscapes’ impact: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester’s TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Fujitsu and SUSE and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in Fujitsu PRIMEFLEX for SAP Landscapes.

Fujitsu and SUSE reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester’s findings or obscure the meaning of the study.

Fujitsu provided the customer names for the interviews but did not participate in the interviews.
The PRIMEFLEX for SAP Landscapes Customer Journey

BEFORE AND AFTER THE PRIMEFLEX FOR SAP LANDSCAPES INVESTMENT

Interviewed Organizations

For this study, Forrester conducted two interviews with Fujitsu PRIMEFLEX for SAP Landscapes’ customers. Interviewed customers include the following:

› Nakilat. Nakilat is a Qatari shipping and maritime company with the world’s largest fleet of liquefied natural gas (LNG) carriers. The company’s fleet comprises of 65 LNG vessels and four large liquefied petroleum gas (LPG) carriers. Nakilat also operates an extensive ship repair and construction facility via two strategic joint ventures. The company also offers a full range of towage, agency and other marine support services to vessels operating in Qatari waters.

› A global manufacturing company. This organization — which chose to remain anonymous — is headquartered in Europe and is primarily known for its design, research and development, and manufacturing activities in a number of different industrial sectors. The company has more than 200 production locations in 40 countries and employs more than 130,000 people worldwide.

These two companies are running between 140 and 270 SAP systems and have between 1,200 and 55,000 SAP users.

Key Challenges

Prior to adopting PRIMEFLEX for SAP Landscapes, both companies were running their respective SAP environment on legacy infrastructure and had the following challenges:

› Rising operational costs. For both organizations, the SAP environments have grown over the years — both organically and through mergers and acquisitions. As a result, the legacy infrastructure was composed out of elements from multiple vendors and technologies and increasingly complex and costly to maintain.

› Maintaining a broad technical skill set. Another consequence of the heterogeneous SAP infrastructure was the requirement for the SAP infrastructure teams to maintain expert knowledge in the many technologies involved.

› Long implementation cycles. Both interviewed organizations reported long implementation and provisioning times with their legacy SAP infrastructures that did not meet the requirements of their businesses anymore.

› General maintenance activities that required downtime. With an environment that was only very partially virtualized, activities such as patching the underlying operating systems or refreshing the underlying hardware elements required very careful planning as the depending SAP systems had to be taken down during this time — which is of course a challenging situation for organizations with global operations.

“Our business was requesting faster SAP implementations, more flexibility in allocating system resources, and near-zero planned downtime. We realized that — with our legacy environment — we no longer could fulfill those requirements.”

IT manager, global manufacturing company
Solution Requirements
The interviewed organizations searched for a solution that would allow them:
› To simplify and harmonize their SAP infrastructure.
› To reduce operational maintenance costs.
› To work with one single partner rather than with various vendors and service providers.
› To increase the flexibility of their SAP environment.

Key Results
The interviews revealed that key results from the PRIMEFLEX for SAP Landscapes investment include:
› Cost savings with regards to legacy SAP infrastructure. In addition to direct saving on maintenance costs for the retired legacy infrastructure, the organizations also avoid having to refresh the legacy environment altogether. One of the interviewees reported that the company’s SAP infrastructure footprint was reduced by 50% and estimated that the total infrastructure costs were reduced by 30%.

› Operational productivity gains. Both interviewed organizations reported major efficiency gains for the SAP infrastructure team. Processes are now standardized and partly automated. General maintenance and administration activities are simplified. Testing the high-availability capabilities and disaster environment requires less efforts. Finding the root cause of a problem now requires less coordination between different vendors and due to the harmonization of the infrastructure, the team overall needs to maintain a smaller set of skills. The interviewed organizations estimated the productivity gains to roughly 50%.

› Higher business agility. One of the key benefits noted by the interviewed organizations was the increased flexibility of their SAP environment. They can now respond faster to new and changing requirements from the business and are in a better position to support the company's growth. Business users benefit from faster delivery of new functionality. One of the interviewees reported that its end-users generally had to wait for three months for the provision of a new SAP system — something that the team can now deliver within a day.

› Increased system availability. Interviewees described that PRIMEFLEX provides them with a better and less complex high-availability architecture which also enables them to run maintenance activities without having to disrupt the service. One of the interviewees reported that the organization was able to reduce the amount of planned downtime by an estimated average of twelve hours per SAP system per year.

“We did not want to engage three different providers; to ask one company to provide the infrastructure, a second to provide the operating system, and then another provider to do the migration. We were looking for a single partner who could deliver all three to us — and this is why we chose Fujitsu.”
IT manager, Nakilat

“PRIMEFLEX allows us to act as a private cloud provider inside our company. […] In addition, we were able to cut our SAP infrastructure and support costs in half.”
IT manager, Nakilat

“PRIMEFLEX allowed us to simplify, standardize, and — to a certain degree — automate the maintenance of our SAP landscape.”
IT manager, global manufacturing company
Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of the two companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

› A large manufacturing and distribution company with global operations.
› About 35,000 employees including 10,000 SAP users worldwide.
› Legacy SAP landscape, involving 200 SAP systems (including 20 in production), was running on heterogeneous infrastructure elements with a low degree of virtualization. In total, the entire legacy SAP infrastructure was running on approximately 80 physical servers.

The company realized that the legacy SAP infrastructure was increasingly costly to maintain and could not provide the flexibility that was required by the business. After having evaluated different options, the organization chose to deploy Fujitsu’s PRIMEFLEX for SAP Landscapes solution.

The company’s main business objectives for the introduction of Fujitsu’s PRIMEFLEX for SAP Landscapes solution were to:

› Increase the flexibility of the SAP infrastructure to better support the business.
› Reduce operational costs.

The deployment was rolled out in several phases:

› **Initial phase**: setup of the initial PRIMEFLEX solution to host 50% of the SAP systems.
› **Year 1**: migration of 50% of the SAP systems and extension of the PRIMEFLEX solution to host the remaining 50% of the SAP systems.
› **Year 2**: migration of the remaining 50% of the SAP systems.

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**Key assumptions**

- Large manufacturing and distribution company
- 10,000 SAP users
- 200 SAP systems
## Analysis Of Benefits

**QUANTIFIED BENEFIT DATA AS APPLIED TO THE COMPOSITE**

### Total Benefits

<table>
<thead>
<tr>
<th>REF.</th>
<th>BENEFIT</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>TOTAL</th>
<th>PRESENT VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atr</td>
<td>Legacy infrastructure refresh cost avoidance</td>
<td>$1,676,750</td>
<td>$1,676,750</td>
<td>$1,676,750</td>
<td>$5,030,250</td>
<td>$4,169,829</td>
</tr>
<tr>
<td>Btr</td>
<td>Legacy infrastructure maintenance cost savings</td>
<td>$494,000</td>
<td>$988,000</td>
<td>$988,000</td>
<td>$2,470,000</td>
<td>$2,007,919</td>
</tr>
<tr>
<td>Ctr</td>
<td>Business value from faster provisioning of SAP systems</td>
<td>$311,040</td>
<td>$622,080</td>
<td>$622,080</td>
<td>$1,555,200</td>
<td>$1,264,257</td>
</tr>
<tr>
<td>Dtr</td>
<td>Operational productivity gains</td>
<td>$243,000</td>
<td>$486,000</td>
<td>$486,000</td>
<td>$1,215,000</td>
<td>$987,701</td>
</tr>
<tr>
<td>Etr</td>
<td>Reduced planned downtime of SAP systems</td>
<td>$136,800</td>
<td>$273,600</td>
<td>$273,600</td>
<td>$684,000</td>
<td>$556,039</td>
</tr>
<tr>
<td></td>
<td>Total benefits (risk-adjusted)</td>
<td>$2,861,590</td>
<td>$4,046,430</td>
<td>$4,046,430</td>
<td>$10,954,450</td>
<td>$8,985,745</td>
</tr>
</tbody>
</table>

### Legacy Infrastructure Refresh Cost Avoidance

The interviewed organizations used to refresh their legacy SAP infrastructure every four to five years. When moving to a whole new infrastructure, an organization will avoid the refresh costs of the previous environment. This should be factored into a business case such as this one that compares the future state (i.e., operations with Fujitsu’s PRIMEFLEX solution) with the pre-investment state (i.e., operations as usual).

Both interviewed organizations reported that their legacy SAP infrastructure had only a low degree of virtualization and was not very efficient in terms of resource utilization. One of the interviewees estimated that the legacy environment had actually a 50% larger footprint in the data center and was approximately 30% more expensive as compared to the new PRIMEFLEX infrastructure.

For the composite organization, Forrester assumes:

- The cost of the entire legacy SAP infrastructure was roughly 30% higher than the new SAP infrastructure.
- The entire legacy SAP infrastructure was up for renewal during the three years of this analysis. We assume that the organization avoids refreshing one third of the legacy infrastructure each year.
- In addition, the organization avoids the labor costs for these refresh projects — estimated to 100 person-days at $350/day or $35,000 on average.

Finally, Forrester adjusted this benefit down by 5% to account for uncertainty in the refresh cost avoidance estimation, resulting in a risk-adjusted total present value for this benefit of approximately $4.2 million over three years.

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of slightly under $9 million.
Legacy Infrastructure Refresh Cost Avoidance: Calculation Table

<table>
<thead>
<tr>
<th>REF.</th>
<th>METRIC</th>
<th>CALC./Assumption</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Assumed total cost of legacy infrastructure</td>
<td>$5,200,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>Refresh cost avoidance</td>
<td>A1/3 (rounded)</td>
<td>$1,730,000</td>
<td>$1,730,000</td>
<td>$1,730,000</td>
</tr>
<tr>
<td>A3</td>
<td>Estimated labor costs avoided</td>
<td>Assume approx. 100 person-days per year at $350/day</td>
<td>$35,000</td>
<td>$35,000</td>
<td>$35,000</td>
</tr>
<tr>
<td>At</td>
<td>Legacy infrastructure refresh cost avoidance</td>
<td>A2+A3</td>
<td>$1,765,000</td>
<td>$1,765,000</td>
<td>$1,765,000</td>
</tr>
<tr>
<td></td>
<td>Risk adjustment</td>
<td>↓5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atr</td>
<td>Legacy infrastructure refresh cost avoidance (risk-adjusted)</td>
<td></td>
<td>$1,676,750</td>
<td>$1,676,750</td>
<td>$1,676,750</td>
</tr>
</tbody>
</table>

Legacy Infrastructure Maintenance Cost Savings

With the decommissioning of the legacy SAP infrastructure, organizations also save the associated annual hardware and software maintenance fees.

For the composite organization, Forrester assumes that:

- The annual maintenance fee of the legacy SAP infrastructure was slightly over $1 million, corresponding to 20% of the total legacy infrastructure costs.
- Due to the phased introduction of the PRIMEFLEX solution, only 50% of the legacy SAP infrastructure was decommissioned in Year 1 and therefore only 50% of the maintenance costs were saved in this year.

Finally, Forrester adjusted this benefit down by 5% to account for uncertainty in the maintenance cost saving estimation, resulting in a risk-adjusted total present value for this benefit of approximately $2 million over three years.

Legacy Infrastructure Maintenance Cost Savings: Calculation Table

<table>
<thead>
<tr>
<th>REF.</th>
<th>METRIC</th>
<th>CALC.</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>Legacy maintenance costs saved</td>
<td>20%*A1</td>
<td>$1,040,000</td>
<td>$1,040,000</td>
<td>$1,040,000</td>
</tr>
<tr>
<td>B2</td>
<td>Percent avoided (ramp-up)</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Bt</td>
<td>Legacy infrastructure maintenance cost savings</td>
<td>B1*B2</td>
<td>$520,000</td>
<td>$1,040,000</td>
<td>$1,040,000</td>
</tr>
<tr>
<td></td>
<td>Risk adjustment</td>
<td>↓5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Btr</td>
<td>Legacy infrastructure maintenance cost savings (risk-adjusted)</td>
<td>$494,000</td>
<td>$988,000</td>
<td>$988,000</td>
<td></td>
</tr>
</tbody>
</table>
Business Value From Faster Provisioning Of SAP Systems

Both interviewed organizations reported that their new SAP environment based on the PRIMEFLEX for SAP Landscapes solution is now much more flexible and allows them to better support the business. They namely cited the ability to faster provision new SAP systems as an important benefit of the overall investment.

One of the interviewees estimated that it used to take them three months to provision a new SAP system — mainly because they had to procure and install new hardware for every new request. With the PRIMEFELX solution, this now takes them half a day.

For the composite organization, Forrester chose to take a very conservative approach to estimating the incremental business value of this reduced time-to-market by basing the incremental contribution of the users on their average salary rate. Readers should, however, evaluate the potential, incremental business value in their specific cases.

- The business of the composite organization initiates six projects per year (three in Year 1) that require the provisioning of new SAP systems.
- On average, the new SAP systems are delivered to the business users 60 days earlier.
- On average, 1% of the total number of SAP users benefit from this faster time-to-market.
- As a conservative proxy to the business value, we assume that the impacted users generate 10% incremental productive output for the company during the additional 60 days, with the “output” just valued at their own salary rate.
- The blended average, fully loaded, daily salary rate for a SAP user across the composite organization is $192, corresponding approximately to an annual rate of $50,000.

The potential value to the business to be able to start working with the requested SAP systems varies by company and use case. To take into account the uncertainty of the assumptions made for the composite organization, we risk-adjusted this benefit and reduced it by 10%. In this case, the risk-adjusted business value from faster provisioning of SAP systems has a present value of approximately $1.3 million over the three years of the analysis.

"Instead of three months we now can provision a new SAP system in half a day. That has a real impact on the business as we can react to changing market requirement or new ideas much faster.”

IT manager, global manufacturing company

Business value from faster provisioning of SAP systems: 14% of total benefits
Operational Productivity Gains

The use of pre-integrated infrastructure components optimized for SAP, the general harmonization of hardware and software, the standardization of processes, and the move to a fully virtual server environment resulted in productivity gains for the core SAP infrastructure team — estimated at approximately 50% by the interviewed organizations. Among the streamlined activities, interviewees cited for example simplified upgrades of operating systems and applications, a simplified security patch management, simplified back-up and restore processes, easier maintenance of high-availability and disaster recovery environments, and faster provisioning of SAP systems. Furthermore, working with a single partner requires less coordination efforts between vendors when for example searching for the root cause of a problem. Finally, interviewees reported that due to the harmonization of the infrastructure there were a few technical skills that were no longer required.

For the composite organization, Forrester assumes:

➢ Originally, the SAP infrastructure team was composed of 12 staff.
➢ Three SAP administrators are reassigned to other tasks in Year 1 and three more in Year 2 of the analysis.
➢ The average, fully loaded, annual salary rate for a SAP administrator at the composite organization is $90,000.

The number of administrators that that can be reassigned varies of course by company and depends on the complexity of the legacy SAP infrastructure. To take into account the uncertainty of the assumptions made for the composite organization, we risk-adjusted this benefit downward by 5%. In this case, the risk-adjusted operational cost savings have a present value of approximately $988,000 over the three years of the analysis.

Business Value From Faster Provisioning Of SAP Systems: Calculation Table

<table>
<thead>
<tr>
<th>REF.</th>
<th>METRIC</th>
<th>CALC.</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Number of new projects per year</td>
<td></td>
<td>3</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>C2</td>
<td>Average waiting time eliminated (in days)</td>
<td></td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>C3</td>
<td>Average number of SAP users of a given new SAP system</td>
<td></td>
<td>1% of SAP users</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>C4</td>
<td>Average fully loaded daily salary</td>
<td></td>
<td>$192</td>
<td>$192</td>
<td>$192</td>
</tr>
<tr>
<td>C5</td>
<td>Assumed incremental productive output as conservative proxy for business value</td>
<td></td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Ct</td>
<td>Business value from faster provisioning of SAP systems</td>
<td></td>
<td>C1<em>C2</em>C3<em>C4</em>C5</td>
<td>$345,600</td>
<td>$691,200</td>
</tr>
<tr>
<td>Ctr</td>
<td>Business value from faster provisioning of SAP systems (risk-adjusted)</td>
<td></td>
<td>$311,040</td>
<td>$622,080</td>
<td>$622,080</td>
</tr>
</tbody>
</table>

“With Fujitsu, we now have one central contact and no longer need to bring five different providers to the table to solve a problem. That’s a big relief for us.”

IT manager, global manufacturing company
Reduced Planned Downtime Of SAP Systems

Both interviewed organizations appreciate the built-in high availability and disaster recovery capabilities of Fujitsu’s PRIMEFLEX solution. They stated that since the solution’s introduction they have had no problem meeting their uptime service level agreements, and also, they are able to reduce the planned downtime of their SAP systems. Many of the general maintenance activities that used to require downtime can now be executed without impacting the business. An IT manager of a global manufacturing company explained,

*“PRIMEFLEX provides us with a better and less complex high-availability architecture which enables us to run maintenance activities without having to disrupt the service.”*

For the composite organization, Forrester conservatively estimates the business value of reduced planned downtime by basing it on increased user productivity. For the sake of this case study, Forrester assumes that:

- Planned downtime is reduced by 12 hours on average per SAP system per year.
- The planned downtime used to impact 1% of the SAP users.
- During the planned downtime, the impacted users were 10% less productive.
- The blended average, fully loaded, hourly salary rate for a SAP user across the composite organization is $24, corresponding approximately to an annual rate of $50,000.
- Fifty percent of the time saved is transformed into productive output.

The potential value to the business of increased uptime of course varies by company and depends on the specific use case of the SAP systems that had to be taken down previously. To take into account the uncertainty of the assumptions made for the composite organization, we risk-adjusted this benefit and reduced it by 5%. In this case, the risk-adjusted business value from reduced planned downtime of SAP systems has a present value of approximately $556,000 over the three years of the analysis.

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**Operational Productivity Gains: Calculation Table**

<table>
<thead>
<tr>
<th>REF.</th>
<th>METRIC</th>
<th>CALC.</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Number of SAP infrastructure team members reassigned</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>D2</td>
<td>Average fully loaded salary rate</td>
<td>$90,000</td>
<td>$90,000</td>
<td>$90,000</td>
<td></td>
</tr>
<tr>
<td>Dt</td>
<td>Operational productivity gains</td>
<td>D1*D2</td>
<td>$270,000</td>
<td>$540,000</td>
<td>$540,000</td>
</tr>
<tr>
<td>Dtr</td>
<td>Operational productivity gains (risk-adjusted)</td>
<td>$243,000</td>
<td>$486,000</td>
<td>$486,000</td>
<td></td>
</tr>
</tbody>
</table>

$556,039

three-year benefit PV

Reduced planned downtime of SAP systems: 6% of total benefits
### Reduced Planned Downtime Of SAP Systems: Calculation Table

<table>
<thead>
<tr>
<th>REF.</th>
<th>METRIC</th>
<th>CALC.</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Reduced planned downtime per SAP system per year (in hours)</td>
<td></td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>E2</td>
<td>Number of SAP systems on PRIMEFLEX</td>
<td></td>
<td>100</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>E3</td>
<td>Total number of SAP users</td>
<td></td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>E4</td>
<td>Assumed average number of users impacted by planned downtime</td>
<td>1%</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>E5</td>
<td>Assumed average efficiency lost</td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>E6</td>
<td>Average fully loaded hourly salary rate</td>
<td></td>
<td>$24</td>
<td>$24</td>
<td>$24</td>
</tr>
<tr>
<td>E7</td>
<td>Productivity captured</td>
<td></td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Et</td>
<td>Reduced planned downtime of SAP systems</td>
<td>E1<em>E2</em>E4<em>E5</em>E6*E7</td>
<td>$144,000</td>
<td>$288,000</td>
<td>$288,000</td>
</tr>
<tr>
<td>Etr</td>
<td>Reduced planned downtime of SAP systems (risk-adjusted)</td>
<td></td>
<td>$136,800</td>
<td>$273,600</td>
<td>$273,600</td>
</tr>
</tbody>
</table>

### Flexibility

The value of flexibility is clearly unique to each customer, and the measure of its value varies from organization to organization. There are multiple scenarios in which a customer might choose to implement PRIMEFLEX for SAP Landscapes and later realize additional uses and business opportunities, including:

- **Introduction of SAP HANA.** Fujitsu also has a deep expertise in SAP HANA. It has built infrastructure and services solutions that enable organizations to simplify the deployment and operation of the SAP HANA platform. Organizations that have already deployed the PRIMEFLEX for SAP Landscapes solution might benefit from the already installed infrastructure, defined processes, and established partnership.

- **Increasing the SAP footprint.** Organizations that increase the internal usage of SAP or made an acquisition will benefit from the initial investment in the PRIMEFLEX solution due to its inherent flexibility and scalability.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A).
Analysis Of Costs

QUANTIFIED COST DATA AS APPLIED TO THE COMPOSITE

Total Costs

<table>
<thead>
<tr>
<th>REF.</th>
<th>COST</th>
<th>INITIAL</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>TOTAL</th>
<th>PRESENT VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ftr</td>
<td>Infrastructure costs</td>
<td>$2,000,000</td>
<td>$2,300,000</td>
<td>$600,000</td>
<td>$600,000</td>
<td>$5,500,000</td>
<td>$5,037,566</td>
</tr>
<tr>
<td>Gtr</td>
<td>Setup and migration costs</td>
<td>$280,000</td>
<td>$250,000</td>
<td>$170,000</td>
<td>$0</td>
<td>$700,000</td>
<td>$647,769</td>
</tr>
<tr>
<td>Htr</td>
<td>Training costs</td>
<td>$50,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total costs (risk-adjusted)</strong></td>
<td><strong>$2,330,000</strong></td>
<td><strong>$2,550,000</strong></td>
<td><strong>$770,000</strong></td>
<td><strong>$600,000</strong></td>
<td><strong>$6,250,000</strong></td>
<td><strong>$5,735,335</strong></td>
</tr>
</tbody>
</table>

Total Costs

This section lists the incremental costs that the composite organization incurred to achieve the above benefits. The costs fell into the following three categories:

› **Infrastructure costs.** These costs include the entire set of hardware (servers, storage, and network elements), associated software licenses, and maintenance costs for the new SAP infrastructure running approximately 200 SAP systems — 20 of which are in production. It also comprises the costs of the FlexFrame Orchestrator software. For the composite organization, we assume that the new SAP infrastructure is purchased in two equal blocks (one in the Initial phase and the other one in Year 1) — each block supporting about 100 SAP systems. In total, over the three years of the analysis, the infrastructure costs have an estimated present value of approximately $5 million.

› **Setup and migration costs.** These costs account for the internal labor and professional services costs related to the initial setup of the new SAP infrastructure, the migration of the existing SAP systems, and the decommissioning of the legacy infrastructure. After setting up the initial PRIMEFLEX infrastructure, the composite organization migrated the first 100 SAP systems in Year 1 and extended and prepared the infrastructure for the second wave of migrations which was then executed in Year 2. For the composite organization, the setup and migration costs have an estimated present value of approximately $644,000.

› **Initial training costs.** These costs account for the costs of the trainer and training materials as well as for the time spent (five days) on initial training for the core SAP infrastructure team of 12 people. The training costs have been estimated to $50,000.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to be a PV of approximately $5.7 million.

“We setup PRIMEFLEX and migrated all of our SAP systems over within eight months. Fujitsu was very committed in meeting our deadlines. We finished on time, on budget, and never missed a single milestone.”

IT manager, Nakilat
Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization’s investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

<table>
<thead>
<tr>
<th>Cash Flow Table (Risk-Adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL</td>
</tr>
<tr>
<td>Total costs ($2,330,000)</td>
</tr>
<tr>
<td>Total benefits $0</td>
</tr>
<tr>
<td>Net benefits ($2,330,000)</td>
</tr>
<tr>
<td>ROI</td>
</tr>
<tr>
<td>Payback period</td>
</tr>
</tbody>
</table>
Fujitsu PRIMEFLEX for SAP Landscapes: Overview

The following information is provided by Fujitsu. Forrester has not validated any claims and does not endorse Fujitsu or its offerings.

Fujitsu’s PRIMEFLEX for SAP Landscapes is an integrated system — designed, delivered, and supported as one product. It enables a simplified and secure setup of infrastructures optimized for SAP applications and databases. The predefined, pre-integrated, and pretested combination of servers, storage, network connectivity, and software from Fujitsu and specialist partners ensure the highest quality and fast time-to-value.

The integrated FlexFrame Orchestrator software offers consistent and standardized administration of infrastructure, databases, and applications. It facilitates the operation of SAP applications, SAP databases, and the SAP HANA platform. It simplifies the management of complex SAP environments, optimizes planning, operation, and change management.

Comprising advanced orchestration and administration capabilities, PRIMEFLEX for SAP Landscapes provides an optimized operational concept for the entire SAP landscape. Centralized SAP software components can be dynamically deployed across physical and virtual resources based on business demand. The result is faster provisioning of innovations resulting in an empowered, agile business. This can be applied for all IT provisioning models, on-premises, as a managed or hosting service or deployed in the cloud.

Main features:

- Smooth implementation and operation thanks to ready-to-run delivery, industrialized services and processes, and professional life cycle management.
- Business continuity — integrated and automated high availability for all applications and databases.
- Fast response to business needs through simple enhancement and fast introduction of innovations, updates, and the new SAP applications like SAP S/4HANA even for HANA.
Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company’s technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

Total Economic Impact Approach

**Benefits** represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

**Costs** consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

**Flexibility** represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

**Risks** measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on “triangular distribution.”

The initial investment column contains costs incurred at “time 0” or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.