



Research Report #16
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APPLICATIONS PORTFOLIO MANAGEMENT

In today's fast paced Information Technology (I/T) world, how many organizations have a formal process for assessing already deployed applications, their impact on the business, and I/T's ability to deliver?

Every I/T organization should have Application Strategies that deliver value, where:

Value = Benefits/Cost.

Costs can be minimized by reducing or eliminating low value work, reducing cycle time, and minimizing defects.

Benefits can be maximized if we work on the right things, deliver quality applications, and are responsive to changing business needs.

One of the major challenges facing many CIOs is that of bringing some level of objectivity to the task of selecting which business application systems to replace, enhance, minimally maintain or simply scrap. This issue of "working on the right things" is rarely easy and within I/T the identification of those "right things" is often complicated by vocal proponents and the pressing need to "get the job done" which tends to obscure the fact that what is "getting done" isn't "getting done" very well.

This article focuses on a technique called Application Portfolio Management (APM) that is used to ensure you are working on the right things. Just like your stock investment portfolio, applications need to be managed. Some applications may need to be retired (sell), some may require new investment (buy), while others should be minimally maintained (hold).

Using APM, one company was able to reduce their maintenance/enhancement workload by 25% by eliminating low value work. In another case, an I/T executive discovered that an application he believed had been very successfully deployed, was no longer being used by its customers because it failed to deliver value to its users.

Definitions

Application - An application is a collection of computer programs and data that work together as a system to perform one or more business functions. Sometimes called "application system" or "system. The definition is intended to allow for some flexibility in interpretation. You will decide what is an application, but a good test would be: ABC is an application if the customer views ABC as an entity when making decisions about investing in it.

Applications Portfolio - An application portfolio is a compilation for a given customer, of the high-level and detailed information necessary for I/T and the customer to develop an investment strategy across the customers' applications (i.e. develop specific improvement or investment plans for each application where improvement or investment are merited).

Application Portfolio Management (APM) – Application Portfolio Management is the process customers and I/T use to keep the portfolio data current and to make investment decisions.

The APM Process

In facilitated sessions, I/T staff and its customers assess each application using three different measures. How an application scores relative to the other applications in the application portfolio help guide investment decisions.

The three measures used to assess each application are:

Technical Quality – The application is evaluated against factors such as maintainability, stability, and effective use of technology. This assessment is performed in facilitated meetings with the staff that supports the applications.

Functional Quality – This is a measure of how well the application meets the needs of the business. Factors include system usefulness, ease of use, reliability, and responsiveness to changes to the business. This measure is determined in a facilitated survey with the operational users of the system and managers/executives who use the system for management or strategic decision-making.

Strategic Value – This measures the relative importance of a business function to the company and how critical the application is in performing that function. The ratings (**High, Medium, or Low**) are assigned by company executives. A **High** indicates that the function and application give the company a competitive advantage. A **Low** implies that the application is not critical to the business.

A Critical Success Factor in all of these measures is “fair & balanced” comparisons. It is generally best if one person or a very small team facilitate all of the measurement sessions to insure a consistent approach.

Results

The exhibits presented below are samples from an APM effort SCC conducted recently. Names have been modified to protect client confidentiality.

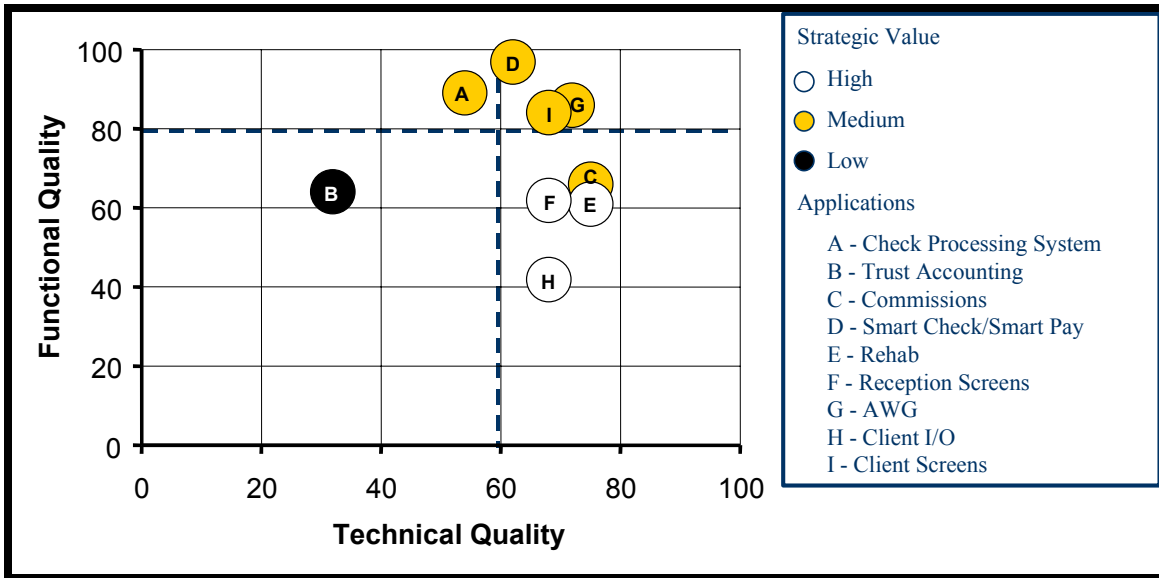
Figure 1 presents a list of the applications evaluated in the portfolio and the ratings assigned to each application on the three measures.

Figure 1 – List of Applications Evaluated in APM

<i>Application Name</i>	<i>Strategic Value</i>	<i>Functional Quality</i>	<i>Technical Quality</i>
Check Processing System	M	89	54
Trust Accounting	L	64	32
Commissions	M	66	75
Smart Check/Smart Pay	M	97	62
Rehab	H	61	75
Reception Screens	H	62	68
AWG	M	86	72
Client I/O	H	42	68
Client Screens	M	84	68

These results are mapped on a portfolio quadrant chart as shown in Figure 2 on the next page.

Figure 2 – APM Results Shown on Portfolio Quadrant Chart



A portfolio quadrant chart maps the technical quality, functional quality, and strategic value of each application in a given portfolio. Each quadrant suggests a range of investment alternatives for an application as shown in Figure 3.

Figure 3 – Portfolio Analysis

<p>High Strategic Value</p> <ul style="list-style-type: none"> ◆ Aggressively Enhance <p>Medium Strategic Value</p> <ul style="list-style-type: none"> ◆ Enhance <p>Low Strategic Value</p> <ul style="list-style-type: none"> ◆ Minimally Maintain 	<p>High Strategic Value</p> <ul style="list-style-type: none"> ◆ Planned Maintenance <p>Medium Strategic Value</p> <ul style="list-style-type: none"> ◆ Minimally Maintain <p>Low Strategic Value</p> <ul style="list-style-type: none"> ◆ Minimally Maintain
<p>High Strategic Value</p> <ul style="list-style-type: none"> ◆ Package or Rewrite ASAP <p>Medium Strategic Value</p> <ul style="list-style-type: none"> ◆ Eliminate or Package <p>Low Strategic Value</p> <ul style="list-style-type: none"> ◆ Eliminate 	<p>High Strategic Value</p> <ul style="list-style-type: none"> ◆ Reconfigure ASAP <p>Medium Strategic Value</p> <ul style="list-style-type: none"> ◆ Reconfigure <p>Low Strategic Value</p> <ul style="list-style-type: none"> ◆ Eliminate or Package

As shown in Figure 2, application H (Client I/O) resides in the lower right-hand quadrant. It has high strategic value but is rated low in functional quality. This suggests that the company should invest to improve this application as quickly as possible. On the other hand, application B (Trust Accounting) has low strategic value and is in the lower left hand quadrant. The technical quality of the application is relatively low while functional quality is

average. APM suggests that this application should be eliminated.

Benefits

Following are benefits to be gained from using an application portfolio management process:

1. Ensures that investments in I/T applications are directed in areas that provide the most value to the company.
2. Allows I/T and its user community to interact and to jointly make decisions regarding applications and investments.
3. Highlights areas where the company can save money by identifying applications where support should be reduced or eliminated.
4. Helps the business unit and I/T identify and focus on applications that are high risk to the company (i.e., high strategic importance, but low in both technical and functional quality).
5. Creates a complete inventory of all applications.
6. Provides the I/T user community the capability to view their entire application portfolio and each application's relative value to the business.

Where To Start

The process is really quite simple and quick to implement. SCC can work with you to customize key questions to be used in the assessment and to identify company staff that will participate in the APM process. We can conduct interviews, facilitate the group meetings, and conduct the surveys. Finally, we will tabulate the results and suggest actions to be taken.

We are ready to start, are you?

This report was prepared by the Systems Consulting Consortium, Inc. (SCC) as a service to our past, present, and future clients. The author, Dave Mitchell, is a seasoned people-oriented leader with a proven track record in effective and efficient Information Technology delivery. His areas of expertise include information technology planning, high performance global Infrastructure management, applications delivery, and information technology assessments. Before joining SCC, Dave served as the General Manager of the Computer Applications and Computer Operations Departments at Chevron.

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