THE FUTURE OF PROJECT MANAGEMENT

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THE WORLD IS CHANGING

Every year, new business models appear in the marketplace. Some of the new models change the way that an entire industry does business. Organizations that are successful have an unobstructed vision of the future. They see the light at the end of the tunnel and are willing to take the necessary steps to get there.

Some companies either never see the light or erroneously believe that they have sufficient time to adapt to challenging market pressures. A prime example is Blockbuster. Netflix, which was founded in 1997, developed a business model based upon streaming and slowly attacked Blockbuster's market. In 2008, Jim Keyes, CEO of Blockbuster, commented, "Neither Redbox or Netflix are even on the radar screen in terms of competition." Three years later, in 2011, Blockbuster went bankrupt thanks largely to Netflix.

Many of the companies that were hurt by their competitors' new business models were well-managed, had a talented labor force and were responsive to their customers' needs. Their mistake was spending more time worrying about near-term profits and less time focusing on their long-term success. Simply because there are no apparent competitive threats currently forecasted in your industry, doesn't mean that they aren't lurking in the bushes.

Exhibit 1 shows some examples of winners and losers resulting from new business models.

Winner	Loser
Apple	Record companies (e.g. Tower records)
Amazon	Bookstores (e.g. Borders)
Google	Encyclopedias and libraries
Craigslist	Local newspapers
Online training	Colleges and universities
E-mail	United States Postal Service

There are always early warning signs of potential changes in an industry. Well-managed companies react rapidly to the changes whereas other companies rest on their laurels. Successful companies are proactive rather than reactive. As stated by Mark Parker, CEO of Nike, "Companies fall apart when their [business] model is so successful that it stifles thinking that challenges it." This is often referred to as the failure of success.

When companies are successful and reluctant to change, we often hear the following arguments:

- "This is how we do business."
- "Our shareholders and other stakeholders are pleased with the way we perform."
- "We see no reason to change at present."
- "We are pretty happy with our command and control system."

> If these comments above are representative of your organization, then read no further. Just trash this white paper and watch the competition pass you by.

THE EARLY LANDSCAPE FOR PROJECT MANAGEMENT

Now, I have your attention. Modern day project management had its roots in the Department of Defense (DoD) and NASA. For years, most of the project management training programs focused heavily on the Earned Value Measurement System (EVMS) which was used for the "command and control" of projects. While other project management-related topics were often included, emphasis was on command and control using EVMS. Project management was rarely considered as a business model component.

Project management was a means to coordinate the creation of a deliverable or outcome. Project managers were assigned to operational projects rather than strategic ones. Strategic projects were managed by functional managers because executives trusted them more than the project managers. There was also an inherent fear by executives that project managers might start making decisions that were reserved for the senior-most levels of management.

Simply stated, the mistrust and fear of project managers led executives to create the position of a project sponsor. Project managers made predominantly technical and operational decisions. Business and/or strategic decisions were made by the senior levels of management or the project sponsors. Business-related information was often withheld from project teams. Information was a source of power which is one of the reasons why executives were reluctant to share such information. Even on multi-million-dollar projects, the PMs were often treated as just puppets.

Companies that tend to thrive on this type of culture usually have the following characteristics as to how they execute projects:

- Projects are identified, evaluated, and approved by senior management, marketing and/or sales, without any involvement by project managers. The project manager is then assigned and directed to "execute this."
- Executives continue to add projects to the portfolio and establish new priorities, but refuse to ask the PMs what resources and skills are required to deliver them.
- The PMs may have no say in the establishment of the budget, schedule or major milestones, but must live with decisions made by others who probably have never served as a project manager. In some companies, project planning is done by a centralized planning group, which may or may not include any personnel experienced in project management.
- Even though the planners may not fully understand the complexities of the project, given their lack of PM experience, the assumption is made that the planners can develop the correct baselines and plans which would remain unchanged for the project's duration.
- Team members are assigned to the project and are expected to perform according to a plan in which they may have had little input. PMs have no authority to hire, fire, have people removed from the project, and/or participate in wage and salary administration activities for project team members.
- Rigid baselines, often approved by senior management, are established without any input from the project team.
- Project success is defined as meeting the planned baselines.
- Scope changes are approved only if the existing baselines will not change very much.
- Project success is defined as meeting the triple constraints and producing deliverables, notwithstanding the fact that there may be no market for what was created and no business value was achieved. All that was accomplished was a waste of precious resources.

Companies that behave in the ways expressed above generally have one, and only one, project management methodology. They believe that one size fits all. The organization may perform continuous improvement activities, but they are restricted to updates of the forms, guidelines, templates and checklists used for the command and control of projects. PMs are evaluated on their adherence to the methodology and free thinking is often discouraged.

If any type of continuous training is provided for the project managers, it must support the use of the existing methodology. Once again, the focus is on operational or tactical project management activities rather than strategic or innovative project management. Pressure is imposed on the employees to become more efficient and effective at what they are currently doing rather than preparing them for tomorrow. These companies still haven't recognized the value of project management and the training needed to establish a competent, professional workforce.

One of the reasons why companies were reluctant to continuously train and educate project managers was rooted in their misguided belief that project management was a fad that would soon disappear. Some training institutions such as The George Washington University and Western Carolina University established degrees in project management, but there were still many companies that viewed project management as just a trend that might disappear and were reluctant to provide additional education.

If the information presented above is representative of your organization, then perhaps you should read no further. This is your second chance to just trash this white paper and watch the competition pass you by.

PMI® TO THE RESCUE

In the mid-1980s, the Project Management Institute (PMI)® set the standard for professionalism in project management with the establishment of the Project Management Professional (PMP)® certification exam. In addition, PMI® mandated that each PMP® acquire 60 Professional Development Units (PDUs) every three years to remain certified.

While the intentions were laudable, a large number of training programs and seminars appeared on the marketplace to make it easy for people to get recertified. Unfortunately, many of these programs simply reiterated the principles that the certified PMs had already learned and only focused on operational/tactical rather than strategic project management endeavors. These types of programs trained people for the here-and-now and focused almost exclusively on the waterfall approach to project management. While there is certainly a need for these programs, they did not properly prepare project managers for what their job might look like in the future.

When students would ask me what companies they should work for to become proficient at project management, I would tell them to focus on those companies that provide continuous training opportunities for their employees; and especially companies that have a vision of the future and some plan for how to get there.

THE LANDSCAPE FOR PROJECT MANAGEMENT: FOUR NEW PRINCIPLES

I started this white paper discussing business models. What type of project management training opportunities do you believe are available to project managers in most of the companies that today have successful business models? Now, we will put several of the pieces of the puzzle together by discussing four new principles.

First, and probably most important, project management is now seen as a business process where project managers are expected to make business decisions as well as project-based decisions. Where are project managers obtaining the training to make business-type decisions?

IBM, for example, has found a solution by asking their project managers (and they have 46,000 PMs) to earn their PMP® certification and complete IBM's internal certification program. Most PM methodologies today contain an abundance of business processes as well as information related to the EVMS. The purpose of IBM's internal certification program is to educate their PMs on the use of their business processes, many of which are part of IBM's approach to project management, including Agile and Scrum. PMs are now expected to make project- and business-related decisions, including the selection of which project management approach (waterfall, Scrum, Agile, hybrid, etc.) is the most appropriate for their projects.

Second, project management is no longer seen as merely a set of operational or tactical activities to create a deliverable or outcome. It is now treated as "strategic project management" which is designed to meet strategic business objectives. Project managers are now managing strategic projects and are allowed to make, or participate in, strategic business decisions.

Third, project management is now seen as the delivery system to create the desired business benefits and business value. Today, the project selection and prioritization system for projects is heavily oriented toward those projects that will produce the greatest business benefits and business value over the long term. The focus is on long-term strategic thinking rather than short-term thinking. Project managers are now expected to manage strategic projects that can result in a sustainable competitive advantage for the company.

Fourth, project management is no longer just another career path in an organization. Because of the three principles above, project management is now a strategic competency. Every year or two, well-managed companies complete a study to identify the four or five strategic competencies that the firm must cultivate for the future. Project management almost always makes the list.

> If the information presented above is not the way that your organization envisions the future of project management, then once again you should read no further. This is your third chance to just trash this white paper while you watch your colleagues pass you by with better career path opportunities.

THE NEED FOR NEW SKILLS

To understand the importance of project management, we must recognize that it is today, and most likely will continue to be in the future, a critical component of a firm's business model because it is the delivery system for long-term sustainable business value.

As such, many project managers today (employed by firms that abide by the four principles we just defined) are required to deliver presentations to corporate executives rather than to lower levels of management. Therefore, given this importance, what key information and skills are needed?

First and foremost, presentations to corporate executives must provide critical performance information that often requires more metrics than just time, cost and scope. This is based upon the organization's maturity level as seen in Exhibit 2 (page 10).

If an organization is still conducting business at Level 1, which we shall refer to as PM 1.0, they may be using the metrics shown in Exhibit 3 (page 10).

As stated previously, project managers are now expected to be more actively involved in making business decisions. Therefore, project managers must understand, measure and track other metrics as shown in Exhibit 4 (page 11).

However, there are other metrics that could also be included such as reporting alignment to strategic business objectives, tracking changes to the assumptions in the business case, and reporting the creation of business value. For simplicity's sake, I refer to this as PM 2.0, as shown in Exhibit 2.

Not all projects will require the tracking of business and/or financial metrics. Innovation projects will require such tracking and project managers may work closely with marketing personnel in obtaining information to support the tracking of these metrics.

EXHIBIT 2. LEVELS OF PROJECT MANAGEMENT MATURITY BY METRICS

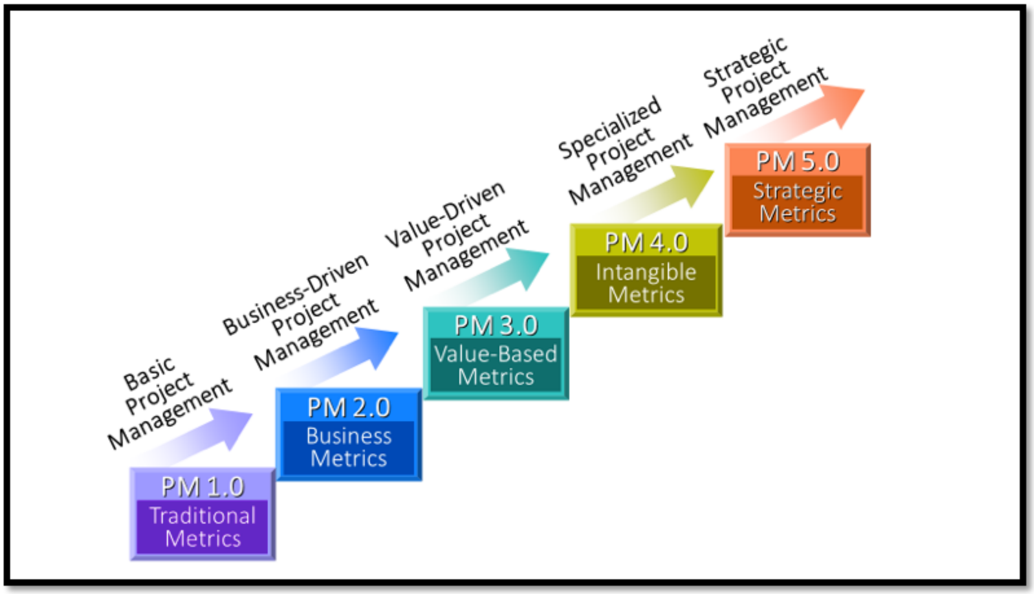
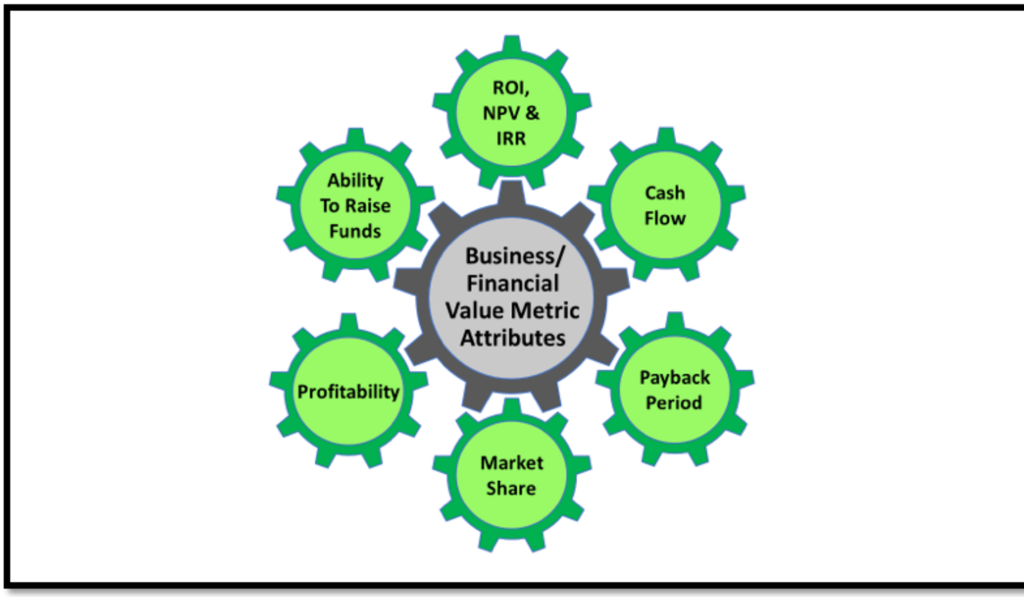


EXHIBIT 3. TYPICAL TRADITIONAL PROJECT MANAGEMENT METRICS

EXHIBIT 4. BUSINESS/FINANCIAL VALUE METRICS



In Exhibit 2, we defined Level 3 as PM 3.0 and used the word "value." Value applies to all levels because we realize that the purpose of working on projects is to create long-term business value. Therefore, all the metrics identified for all the levels must focus upon some form of value measurement.

In the future, we can expect the definition of a project to be *"a collection of sustainable business value scheduled for realization."* The definition of project success will be *"achieving the desired business value within the competing constraints."*

This is where employing an Agile framework, such as Scrum, can be beneficial, because Scrum is all about delivering business value continuously throughout the project's life-cycle, not just at the end. Through the execution of planned Sprints that last about a month, the Development Team, working on items from the Product Backlog prioritized by the Product Owner (who is responsible for maximizing the value of the product), delivers a potentially releasable increment of product functionality. This functionality represents business value to the organization. Accordingly, the Scrum Team (Scrum Master, Product Owner, Developers) has a laser-like focus on creating business and financial value on an incremental as well as a long-term basis.

Value may very well become the most important word in the project manager's vocabulary. It certainly is a word and concept inherent in Agile and Scrum. After all, a Sprint is executed to deliver value and not just to get work done. Value is determined by the Product Owner based on the items placed in the Product Backlog.

Value can appear in many forms and can be measured. In Scrum, as each backlog item is completed, the Product Owner and others are able to measure, at some level of accuracy, what value has accrued to the organization. Employing burn-up and burn-down charts, the Scrum Master, Product Owner and Development Team can readily see how much value has been created, and how much more is left to realize. But there are other examples of value measurement as well.

For example, as project management becomes critical for the delivery of business value, companies are measuring the organization's leadership value elements as shown in Exhibit 5.

Another example, which is related to leadership value, is how the firm manages their social responsibility projects such as sustainability. Typical value attributes are shown in Exhibit 6 (page 13). Exhibits 5 and 6 illustrate the beginning stages of strategic project management.

EXHIBIT 5. TYPICAL LEADERSHIP VALUE METRICS

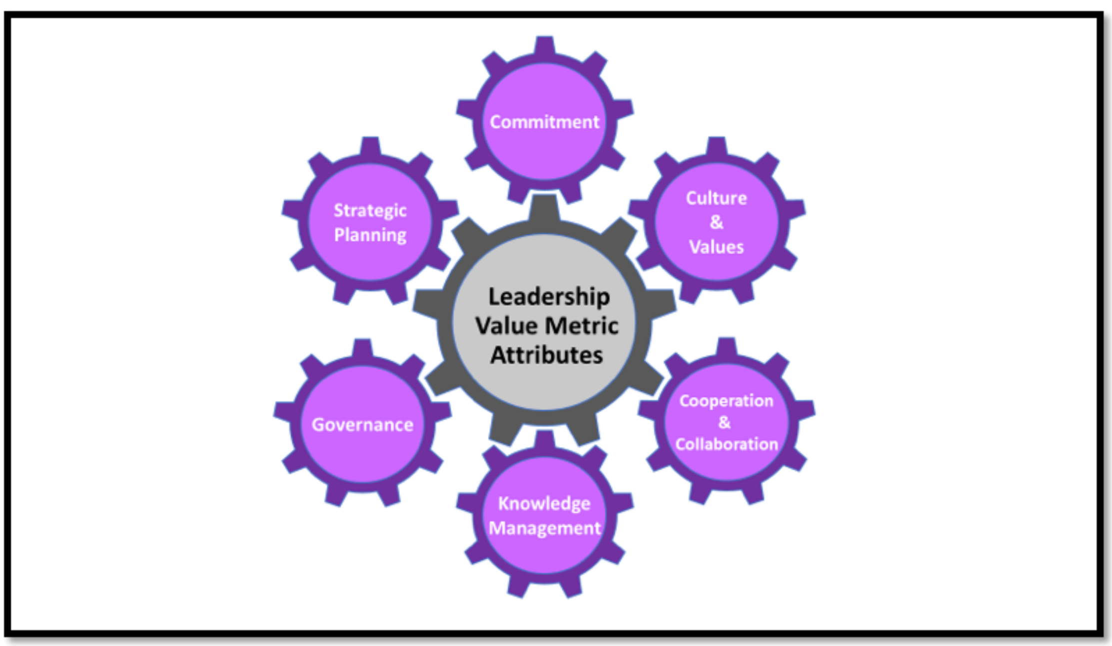


EXHIBIT 6. TYPICAL SOCIAL RESPONSIBILITY VALUE METRICS

Level 4, which we shall refer to as PM 4.0, focuses on the measurement of the value of business intangibles such as patents and intellectual property. For decades, we avoided measuring intangibles because we simply did not know how to measure them. Today, we believe we can measure anything.

For decades, we had questions about intangibles, specifically related to project management, that were difficult to answer:

- Are corporate project management assets tangible, intangible or both?
- Can we define intangible project management assets?
- Can the intangible project management assets be expressed in financial terms and impact the corporate balance sheet?
- Can intangible project management assets be measured?
- Are they value-added and can we establish intangible project management metrics?
- Do they impact the performance of the organization in the future?

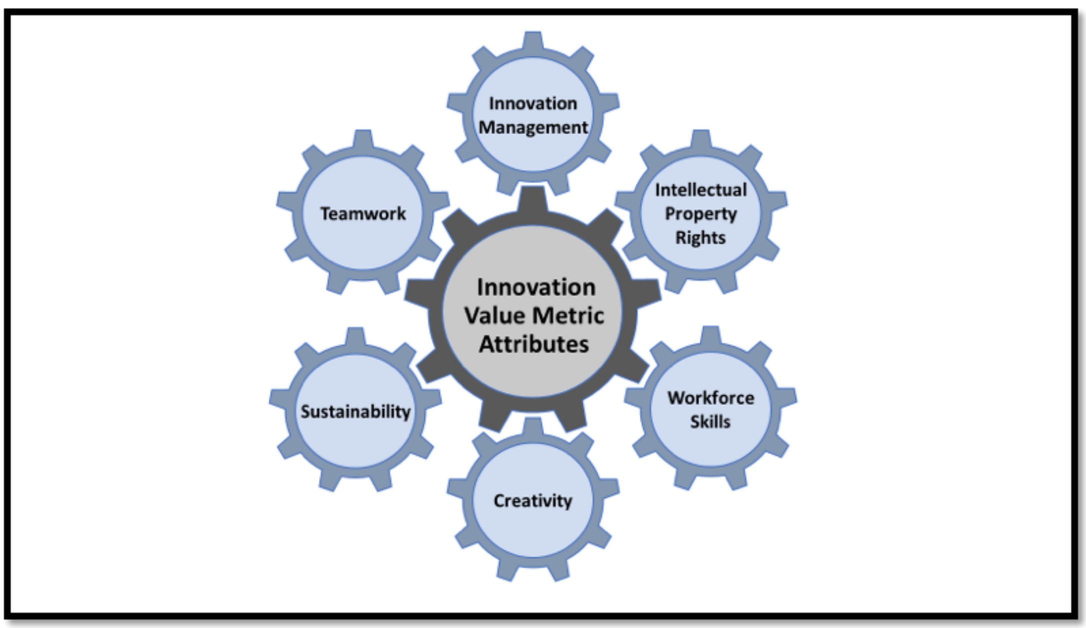
Today, we can measure intangible as well as tangible factors that impact project performance. Intangible benefits and value are now seen as intangible assets and can be evaluated by accounting personnel. An intangible asset is non-monetary and without physical substance. Intangibles may be hard to measure, but they are not immeasurable. As an example, what are the long-term benefits of owning patents?

There are many forms of intangible assets in an organization. The following are often regarded as intangible project management assets and can be measured: governance, leadership, commitment, lessons learned and best practice, knowledge management, intellectual property rights, working conditions, teamwork and trust.

Intangible assets are more than just goodwill or intellectual property. They also include maximizing human performance. Understanding and measuring intangible asset value improves performance. Intangibles are now seen as long-term measurements and most companies no longer focus on just the short-term results. Companies now recognize that intangibles impact their long-term bottom line, they are not fearful of what the results will show and do not argue that they lack the capability to measure intangibles.

Project management is now being applied to innovation activities. We are now training people to perform as innovation project managers. The output of innovation can be intellectual property rather than just products or services as shown in Exhibit 7. Some people believe that the valuation of intangible assets can have a greater impact on long-term performance than the tangible assets.

EXHIBIT 7. TYPICAL INNOVATION VALUE METRICS



As stated previously, project management is now at the core of many business models. As such, project managers are now working closely, for example, with marketing to understand consumer behavior. This is critical for those project managers that are actively involved in managing innovation projects.
PMs must now assist marketing personnel with the metrics shown in Exhibit 8 which is representative of PM 5.0, strategic project management. Even though we tend to label these metrics as marketing metrics, they have a direct bearing on the organization's strategic competitiveness and long-term sustainability.

EXHIBIT 8. TYPICAL STRATEGIC METRICS

ARE YOU PREPARED TO BE A NEXT GENERATION PROJECT MANAGER?

Companies must take a hard look at the expectations they will have of their project managers over the next decade or longer, and what type of additional training is required. In this white paper, I just scratched the surface on a few topics and provided you with some ideas as to what the future might look like. I believe that investing in project management training should be a strategic necessity if there is an effective tangible or intangible ROI expected from the training.

In the previous paragraphs I introduced you to five important topics that I believe should be mandatory for preparing the next generation of project managers. The topics appear in Exhibit 9.

EXHIBIT 9. RELATED TRAINING TOPICS

TRAINING TOPICS	STRATEGIC BENEFITS
PM 2.0 – PM 5.0	An understanding of what changes are appearing in the marketplace and how project management will contribute to long-term sustainable competitiveness
Project Management Metrics, KPIs and Dashboards	An understanding of how real-time dashboard reporting systems are replacing written reports to improve fact-based decision making
Benefits Realization and Value Management	An understanding that we manage projects for the expected benefits and value rather than to just focus on budgets and schedules
Best Practices in Project Management	To understand the process that companies go through to capture best practices and provide the information throughout the organization
Innovation Project Management	An understanding of how innovation project management will differ from traditional project management practices, including business model innovation activities

There are certainly more topics than the five mentioned above. Some topics are industry specific and others may be organization specific. But in all cases, with the growth expected in the responsibilities of the project managers, we must begin thinking now as to how they will be educated.

Now that you have read through the entire white paper, aren't you glad you will not see any more of these boxes...until perhaps my next white paper?

ABOUT THE AUTHORS

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