Project Management Institute

Business Demands and Project Managers' Skills: A Quest for the Right Fit

By Enrique Sevilla, PMP

Abstract

In this article, the author describes the definition of a systematic process to estimate and measure the adequacy between the business demands and the management skills of project managers. In other words, it describes a proposed process to answer a recurring question from upper level management: Do we have the right people managing our projects?

In order to answer the question, we first need to imagine the kind of response we are seeking. Should we look for a one-to-one relationship between a project and the fitting manager to run it? Is this systematically feasible for every project at any time in any place?

Our analysis is based on a generic model of a mid- to large-size company, running projects for external customers in different areas of interest and in different business types.

In this context, projects are not executed in an isolated setting. They are usually integrated in the company structure through the organizational concept of a business unit, which represents the specific implementation decisions of the company strategy to run the business. Those business units are, in turn, integrated into higher level units sometimes called management units or vertical markets. In companies with a decentralized approach, project managers are allocated to business units so we can properly say that project managers "belong" to the business units and to the management units where they work.

At the same time, the human resources (HR) department is often handling the manpower of the company with a centralized methodology. This usually means a lack of authority to efficiently reallocate the project management resources, if the need arises, because project managers report to the business unit managers in our decentralized hypothetical context.

The outcome of this situation is commonly a lack of agreement between the HR department and the responsible management unit with regard to talent management decisions, including a possible reallocation of project managers, training priorities, or even the dimensions of the business unit's management capabilities.

In consequence, we are primarily attempting to define a scenario where both the HR department and business management can agree on how well the project management workforce is adapted to business demands. If such agreement is feasible, it will be possible to design a common strategy to improve or develop a better talent management process.

A Basic Classification Approach: Innovation vs. Risk as Main Variables

Our aim is to define a common canvas depicting whether there is a good fit between business needs and the project management resource skills profile. To define such canvas,

> "Do we have the right people managing our projects?"

let us consider two main concepts that are frequently at the center of strategy decisions made by business units. Those are:

- The project or business innovation requirements; and
- The risk associated with the execution of the projects.

For the time being, let´s presume that we do not need a precise definition of both concepts, and that it is enough to think about innovation as the need to perform a non-repetitive job, or to introduce a new method, a new procedure, or product, etc. Let us consider risk as the subjective feeling of the chances of project or business failure. Assuming that these two variables constitute the driving criteria to sufficiently characterize the type of work initially being performed by a business unit, we could say that there are four basic types of business units, as depicted in Figure 1. Types 1 and 2 have a small amount of innovation requirements, while Types 3 and 4 have higher innovation demands. At the same time, Types 1 and 3 appear to have risk that is reasonably managed or contained, while Types 2 and 4 imply a greater degree of unmitigated risk.

Of course, real business units do not usually fit into just one of these types. They may have characteristics of the different types, but there is a strong chance that consolidated business units fit predominantly into one type. At the same time, a specific business unit may evolve from one type to another, depending upon the development stage of the business. For example, the business unit might start as a Type 4, creating a new product for a new customer, and evolve to Type 3 if there are no significant competitors for the product evolution; or evolve to Type 2 if other suppliers enter into the scenario; and end in a strictly Type 1 relationship at the pure recurring production phase.

With this approach, we could define a preferred profile of the project managers that should run the projects for each of the business unit types. Consequently, we may say, as shown in Figure 1, that conservative profiles may be preferred for Type 1 business units; high execution performers are required for Type 2; for Type 3, the project manager would provide a greater degree of innovation to reinforce stable customer confidence and future business; while the Type 4 project manager will need the vision to create new business models and products to open new markets and create new opportunities.

In summary, if we can systematically calculate profile types for each business unit and the project management resource skills profile, we may be able to say "There is an x% correlation between both profiles," and can make decisions accordingly.

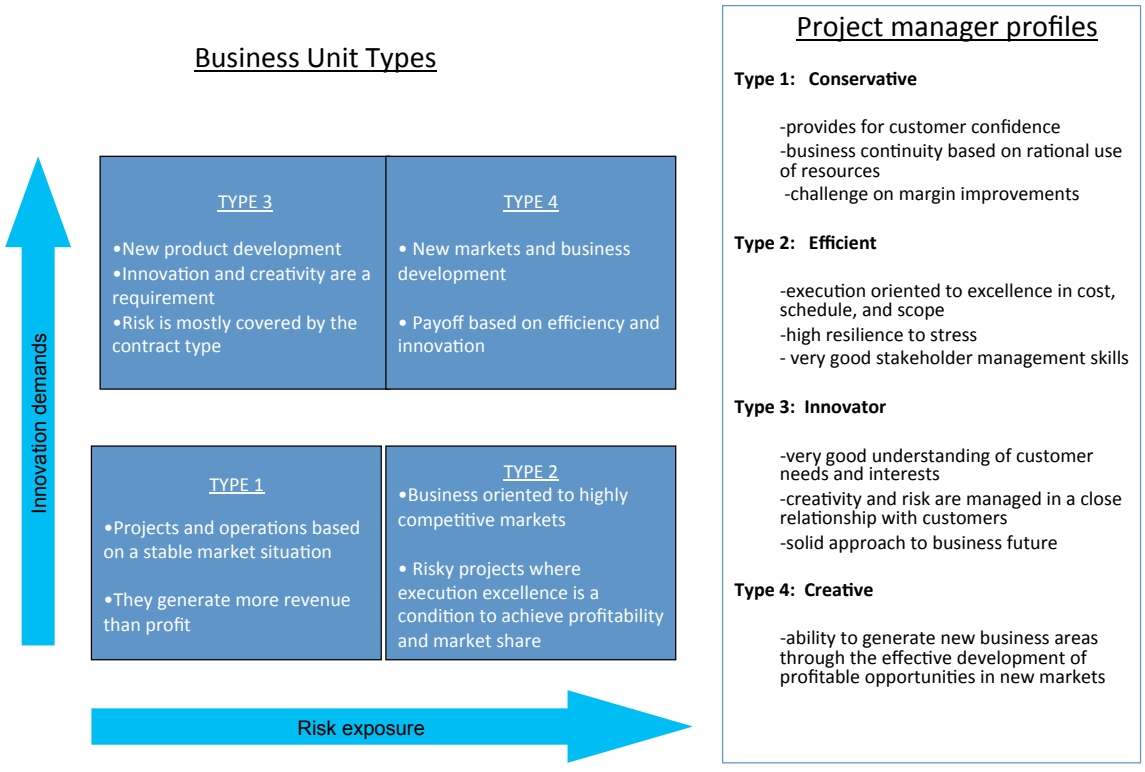

Figure 1: Innovation Demands vs. Risk Exposure as Classification Criteria

Getting to Know Business Unit Types

Projects are typically classified inside the company Project Management Information System (PMIS) to cope with the different statistical, monitoring, supervision, and reporting needs. In this sense, it is possible to define an appropriate algorithm that estimates how much innovation is required to run a set of projects within a specific business unit.

For example, projects are usually classified as development, fabrication, or production; IT operation; technical assistance; or other project types. The PMIS may even provide support to allocate a percentage (budget wise) of those types for every project. For example, the project is 50% development and 50% fabrication. Additionally, we could say that the amount of innovation required in a project may be estimated as a percentage of the budget allocated for development. In other words, we could formulate the amount of innovation as a function of the foreseen budget for development activities.

$$I=f(\text{development \$})$$

The amount of innovation demands (vertical axis of the classification diagram in Figure 1) for a set of projects, may be displayed as a set of four values ranging from "little" to "very high," each with a percentage associated. The data in Figure 2 should be read as follows: 18% of the budget allocated to projects of this specific business unit requires a very high level of innovation, and so on.

Risk exposure is another variable that may be estimated in different ways, yet its systematic calculation by the PMIS is highly dependent on the degree of implementation of a risk management process linked to the enterprise project management tool. In the cited example, the PMIS directly provided the risk exposure value associated to each business unit. For our purposes, risk exposure is defined as the impact in cost of the project residual risks, estimated as a percentage of the business or management unit's overall available projects portfolio budget.

By applying a risk exposure scale correction factor to the Innovation profile, we can obtain a definitive business unit type. The correction factor would be composed of rules including:

"An innovation level below high, together with a risk exposure below a specific threshold, such as 5%, means that the business unit belongs to Type 1."

little	35%
medium	25%
high	22%
very high	18%

Figure 2: Innovation Profile Example for a Business Unit

We could then obtain the business unit type profile for a particular management unit by combining the results for all of its business units.

Defining Project Manager Types and Characteristics

In a similar way, project managers are classified as belonging to one of the identified four types. In this case, the input data for the classification does not come from the projects that are being executed by the business units. This classification is based on indicators identified by the HR department to perform talent management related tasks. For the purpose of our study, we used data from the individual performance evaluation process, the assignment history, and the available résumé of the project manager. A new algorithm is then applied based upon the data provided by these tools, so every project manager is characterized by a predominant type (1 to 4) in accordance with Figure 1.

As a result of the process, another profile is obtained that depicts the percentages of each type in the project management resources within the business unit or management unit.

Again, this does not mean that an individual characterized as Type 1 or Type 3 will always act according to the characteristics. It is an assessment of his/her main attitudes when running projects in view of his/her performance data and history. In other words, if the project manager is assigned to a project that requires a higher level of competency in handling risk, he/she may need training or other resources to fully understand the nature of the business and react accordingly. In any case, we all know managers that maintain a very good level of performance under stress (Type 2) in a competitive contract, while that same manager may have difficulties managing the evolution of a product and maintaining an excellent relationship with a single customer as is required for Type 3.

Putting Results to Work

Figure 3 displays an actual example of the application of these concepts in a correlation study between the business demands (business unit profile) and the project management skills profiles (resource profile). This particular analysis was performed on a set of 30 business units belonging to a single management unit with a workforce of around 200 project managers.

Correlation index (CI), a new indicator, was defined to represent the relationship between both series of data, resulting in a value of 63, 54% in this case.

Looking at the picture, could we say that we have the right people managing the projects in this market at this time?

We will try to answer the question looking at the nature of the business and at the data displayed.

Figure 3 illustrates a business area that is providing products and services mainly in the IT arena. Its business profile shows the following:

- The budget dedicated to recurring effort (42%) may indicate that previous products have been successfully developed and installed, and additional deliveries are being required to consolidate the product; and
- At the same time, it appears that new product developments are being addressed and a significant number (18% of the budget) require a more innovative and risky approach.

The project management resource profile on the other hand may indicate that:

- There is a lack of required talent to address the demands of more innovative and risky projects;
- There is a capacity of 40% (T3) to handle new product developments of consolidated customers and a capacity of 30% (T2) to compete in the open market to offer and sell consolidated products. Both of these could be considered in excess of the business demands; and
- There may be a slight lack of management manpower to ensure the timely delivery of recurring projects as 42% of the budget is being handled by 28% of the available management workforce.

These preliminary results and interpretations require further discussion and refinement by management in light of the benefits realization plans for the unit. If the situation is then found unacceptable by the unit management and the HR department, a plan should be defined to improve the correlation index for the management unit and consequently its performance.

For example, the plan outlines the following:

- Identify additional managers to take care of all Type 1 efforts. This could mean a specific training plan to prepare Type 1 managers from the engineering level;
- Define a selection process and perhaps a training plan, to move workforce from Type 2 and Type 3 toward Type 4 capabilities (business development strategy concepts and soft skills development); and
- Review the business development plans to take full advantage of Type 2 and Type 3 resource extra capabilities.

There could be other considerations and factors to take into account, yet this objective diagnosis and the resulting action plan may provide the required starting point for a dialog between HR and the appropriate management teams to improve the efficiency of the project management workforce.

Bottom line, the main advantage of this approach is that it should provide a systematic tool to periodically review the degree of adequacy between business needs and the project managers' skill profiles.

About the Author

Enrique Sevilla, PMP, has more than 20 years of experience as a project and program manager, working mainly for international contracts in the defense industry. He has also been in charge of the corporate PMO of a major company, with full responsibility for the development of the project and portfolio management methodology, monitoring of the training process for project managers, and the new requirements definition and implementation for the PMIS. He participated in the PMI EMEA Corporate Networking Group, and has also been an active member of the research committee of the PMI Global Executive Council. He currently acts as an independent consultant in project management. He may be contacted at esevilla@gmail.com.

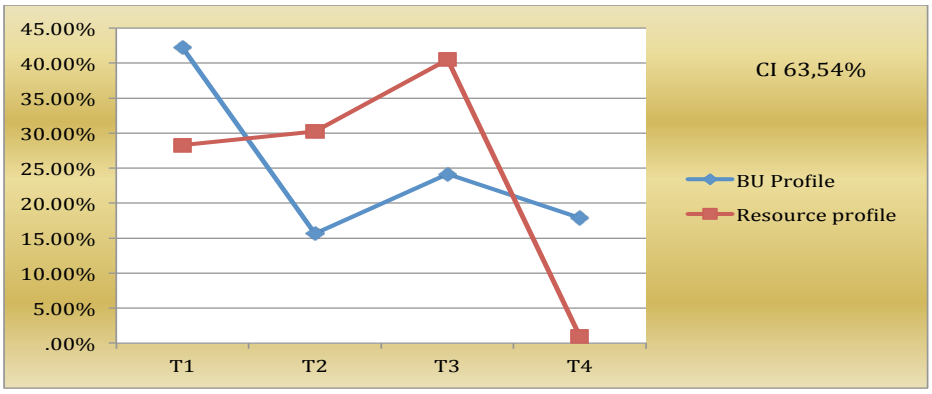

Figure 3: Business Units and Resource Profiles Example