Project Business Management2 [1]: Managing Portfolios and Programs in Project Business Management

Oliver F. Lehmann

"Annual income twenty pounds, annual expenditure nineteen [pounds] nineteen [shillings] and six [pence], result happiness. Annual income twenty pounds, annual expenditure twenty pounds ought and six, result misery."
Charles Dickens. – "David Copperfield"

Summary

Portfolio management and program management are two implementations of multi-project management. Their description commonly ignores commercial aspects that sit at the core of project business management (PBM). The inclusion of these aspects can help multi-project management gain more relevance for the practice in complex project supply networks (PSNs) working for paying customers.

Case Story: A Project Portfolio Needs to be Better Managed

Lucky Tapeworm, Inc.[2], is a prime contractor working mostly for corporations, doing projects at the crossing points of production hardware, production management software, and organizational development on customer side. When the author first made contact with the company, it was working on nine projects concurrently for different customers, and each of them had subcontractors, the smallest project five, the largest almost 100. Many of these subcontractors are involved in more than one of Lucky Tapeworm's projects, which makes the business relations in the company's entire supply network quite confusing. In addition, the company had a portfolio of seven internal projects, performed to resolve organizational problems that had accumulated over many years, and to make their business future-proof. Roughly half of the work inside these internal projects was also outsourced;

[1] *This is the second in a series of articles by Oliver Lehmann, author of the book "Situational Project Management: The Dynamics of Success and Failure" (ISBN 9781498722612), published by Auerbach / Taylor & Francis in 2016. See full author profile at the end of this article.*

[2] Name changed.

the other work was done by own people. Figure 1 shows the two project portfolios and their relationship to other companies.

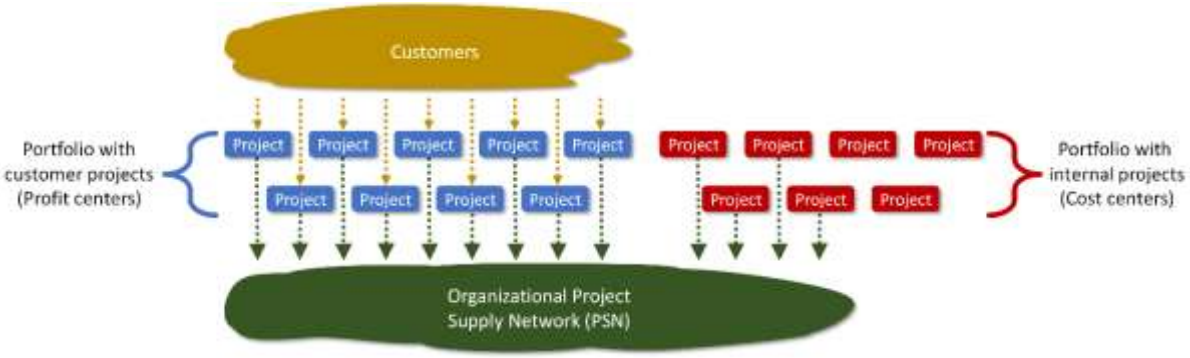

Figure 1: The two project portfolios of Lucky Tapeworm, Inc. The arrows point in the drection of payments.

The author's contact with the company as a trainer and consultant began, when Lucky Tapeworm's management asked for support to increase their hit-rates in business development for customer projects. As many other companies also do, Lucky Tapeworm, Inc., had fostered a habit of responding to all customer inquiries it received with a bid or a proposal. Less than every tenth offer finally led to a contract with a customer, which means that 90% of the offers were futile work that bound human resources but did not succeed in bringing business to the customer. To make things worse, the lucrative business commonly went to the company's competitors, while the tedious and poorly paid customer projects that made unpredictable use of the company's assets were too often won instead.

Another problem was the input the company needed for developing the offers from its suppliers. Second-tier sellers were given the chance to support business development and become subcontractors when the business would be won by Lucky Tapeworm, but the information from them generally came late and not with the depth and quality of material required to win the business. These sellers had made the experience too often that Lucky Tapeworm would not win the contracts for which it had quoted and that they would therefore also not get the business. Their lack of motivation to support their direct customer in its strive to become prime contractor was among the reasons that the hit rate was so low.

Lucky Tapeworm, Inc., was a classical JAM company in project business management: It was "just about managing", and the low-value business did not enable the company to build the reserves potentially needed to cope with negative risks from a customer project turning into crisis.

Lucky Tapeworm had developed a process using templates and standardized text blocks for their offers. These helped the company to reduce the workload for the development of bids and proposals and made it possible for its proposal managers to respond to a higher number of enquiries. The disadvantage of the approach was that many enquiring buyers did not see their questions answered and their needs reflected in the offers. This was the cause of both, the low hit rate and the failure to win the worthy business. The first step to improve the business therefore was to replace the standardized offer development process with a customer-centric one. This began with a deliberate offer/no-offer decision, reducing the number of responses to enquiries and leaving more time for the development of a specific

argumentation. The customers could see that their requirements were understood and gain insights as to how the contractor would meet them.

As a second step, meetings were held with the company's suppliers to discuss the low hit-rates and how everyone could work together to improve them.

Based on these discussions, a strong "Mission Success First" culture was agreed upon, inside both the company and its supply network. On this, the company and its partners would focus the resources needed to win the contract once a decision had been made to submit a bid or proposal. Figure 2 shows the main criteria used for the offer/no-offer decision.

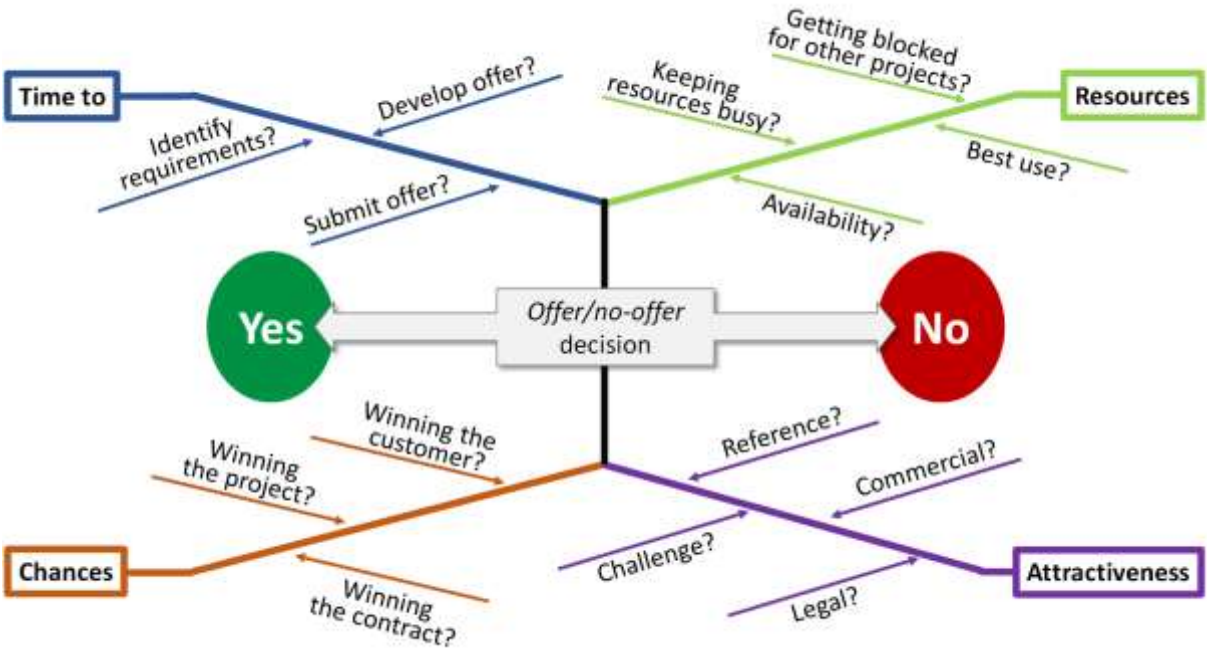

Figure 2: The major criteria discussed to make the offer/no-offer decision.

Thus, a focus on attractive customer projects was established, as well as an increased effort to show these customers how much their needs and wants were understood and their requirements would be addressed and satisfied. All this led to a quick jump of the offer hit-rate from under 10% to around 35%. Internal staff as well as subcontractors saw the dedication of Lucky Tapeworm to win the attractive contracts. They also saw that the results from this dedication and their desire to be a part of this success increased their motivation to contribute, which in turn increased the hit rate. The vicious cycle of poor hit-rate and insufficient effort for individual customers was stopped and replaced with a positive feedback loop of focus on attractive business and then winning it.

This brought Lucky Tapeworm, Inc., a new problem: A lack of resources for their internal projects. Corporate staff was increasingly involved in customer projects, which made the company more profitable, but management had identified needs to improve internal processes and adapt the organization to future needs. The author's second assignment at the company was to help the corporate Project Management Office (PMO) setting up a formalized process for tasks including:

- Project selection
- Project prioritization
- Project coordination
- Load balancing of resource allocation across the organizational units
- Unification of project processes and reporting

The development of the process had been taken very fast, when it was suddenly stopped by Lucky Tapeworm's CEO. While the person had for a long time been very supportive of the development of the process, this changed on the spot, when it was made clear to the CEO that for the first time in the company's history, they would have to stick to agreed rules. The person was instead used to the freedom of making quick decisions and would sometimes set up a project after reading an interesting article in a business magazine. The CEO would never give up this freedom of making ad-hoc decisions on internal projects.

Project Business Management (PBM)

This is the second article in the author's series on PBM. The previous article[3] focused on project supply networks (PSNs), that have gained a strong relevance in many projects and can be observed to grow in number[4], size, complexity and opaqueness. While there is some literature – not much – on questions of procurement management, like in the *PMBOK® Guide*[5], the true relevance of the topic and the specific challenges that it brings to project managers on the various sides of the business is rarely described. Robin Hornby's "Commercial project management"[6] is among the rare attempts to bring light into project business with a focus on the business process and the roles involved. This approach is valuable, but the focus of the "Project business management" series will be more on the challenges that project managers face when contracts replace internal agreements, and when with growing size of the project supply networks, project management knowledge is overlaid and to some degree superseded by business management knowledge. Many articles in this series touch neuland, areas so far not discussed in literature.

It is also important to understand that PBM does begin before project management begins. In many organizations, the disciplines of business development and project management on seller side are clearly separated. This is particularly true in very large organizations doing customer projects, which makes it hard to manage the business as a whole. Sales people and project management teams then hardly coordinate to make the best from the business opportunity for the own organization and the customer. The same is true on buyer side, where particularly in large organizations, project managers have to register their procurement needs to a purchasing department, giving away control over the buying process. After some time, the purchasing department will return its results to the project managers, following its specific success metrics that differ from those applied to the project manager. In essence those results are the contracts with selected suppliers. The

[3] (Lehmann, 2017b)
[4] (Lehmann, 2017a)
[5] (PMI, 2013a, pp. 355-389)
[6] (Hornby, 2017)

fragmentation and siloing on both sides makes it hard to develop and sustain a "Mission success first" culture, based on good faith and mutual trust and prioritizing completing over competing.

Exploring the world of project business management is interesting, and given the strong business aspects of the discipline, may be highly rewarding in the future. The author assumes that it is among the financially most significant disciplines in the world, taking into account that its descriptive and prescriptive findings apply for a plethora of small and medium-sized projects all around the world and also pertain to the largest mega-projects that exist. On its descriptive side, it is to some degree similar to anthropology or paleontology, where researchers have to build their evolutionary models on what they have found so far, and new findings will answer questions as much as they will raise new ones and force scientists to rethink their models. On the descriptive side, which is dealing with processes, organizational structures and management behaviors, project business management can build upon positive examples, where organizations could not only achieve successes but also repeat them. It can also incorporate lessons learned from failures, when poorly understood complexity drove organizations into vicious circles, depriving them from possible successes in the various aspects of business, among them money as the most visible and easiest to assess.

Readers of the first articles of this series may find that they have experiences, observations, and knowledge to contribute, and the author would like to encourage them to share these[7]. Complete articles are welcome, but also shorter snippets that could become part of larger articles, either as narrative case stories or analytical contemplations, or both.

Definitions: Portfolio Management and Program Management

In a project management context, portfolio management and program management are two facets of multi-project management. Projects are grouped together to allow for management and governance on a higher level than that of typical project management. A fundamental difference between the two approaches is how they are grouped. The author recommends the following definitions:

Portfolio: A grouping of projects and other activities that are performed by a common organization or an entity inside an organization, like a business unit or a group of business units performing similar tasks.[8]

Program: A grouping of projects and other activities sharing a set of common goals that an individual project alone would not be able to achieve.[9]

If a project is part of a portfolio, the most importance consequence for its project manager or project management team will be competition for resources with other projects inside

[7] Contact: oliver@oliverlehmann.com
[8] Compare: Standard for Portfolio Management, 3rd Edition (PMI, 2013b, p. 3)
[9] Compare: Standard for Program Management, 3rd Edition (PMI, 2013c, p. 4)

the same portfolio. These resources can include people, equipment, monetary resources, and more. The key resource of all is often overlooked: Management attention. The results of these projects may not be interrelated at all, they can be completely independent from each other.

If a project is part of a program, the resources being used may be completely independent from each other, but the results of the projects are components needed to build a more complex system, whose creation would be the goal of the program. The program may have project character, which means it will be finished when the project goals have been achieved. Or it has a rather operational character and operations of this type will be sustained by an ongoing result stream from a sequence of projects until operations are terminated because they are wearing off, outdated, or no longer able to meet requirements for other reasons.

Managing the Portfolio in Project Business Management

Portfolio management, as described in the case story, has some core tasks, including:

- Project selection
- Project prioritization
- Project coordination
- Load balancing of resource allocation across the organizational units
- Unification of project processes and reporting

The description of portfolio management in literature is assuming that the portfolio includes projects done for the own goals of an organization – internal projects. An example is *The Standard for Portfolio Management*[10], which restricts its descriptions on portfolios with internal projects. Matters of profitability are discussed, but examined considering the profitability from project deliverables, not as profits made by the project for a customer. With the knowledge that the number of customer projects is robustly growing[11] and seems to already exceed the number of internal projects, the standard ignores half of the project portfolios, possibly more.

The case story shows how portfolio management in a project business environment happens at many places, formalized or ad-hoc. For readers unfamiliar with the most basic players, the diagram in gives an overview.

[10] (PMI, 2013b)
[11] (Lehmann, 2017a)

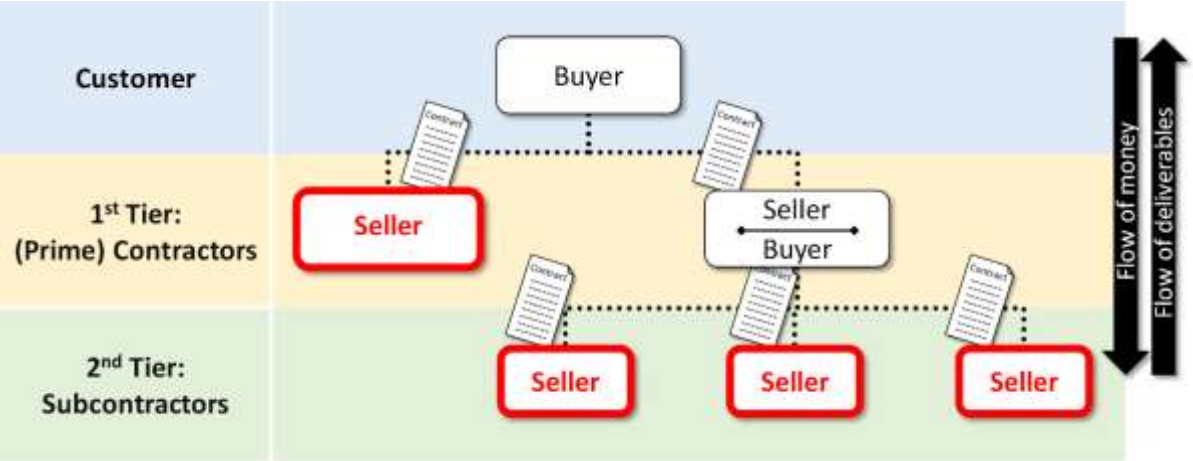

Figure 3: The project business of Happy Mollusk IT Services, Inc. turned by the end of the year from a profit into a loss.

Some constituents may be customers and contractors at the same time. A typical example are prime contractors, organizations that have been mandated under contract to perform the project for the customer, and who in turn have subcontractors working for them. Subcontractors may in turn have their sub-subcontractors, being essentially in the same position as the prime contractor on another tier.

To discuss the linkage between PBM and project portfolio management, it is helpful to first look at the basic process of PBM, as shown in Figure 4.

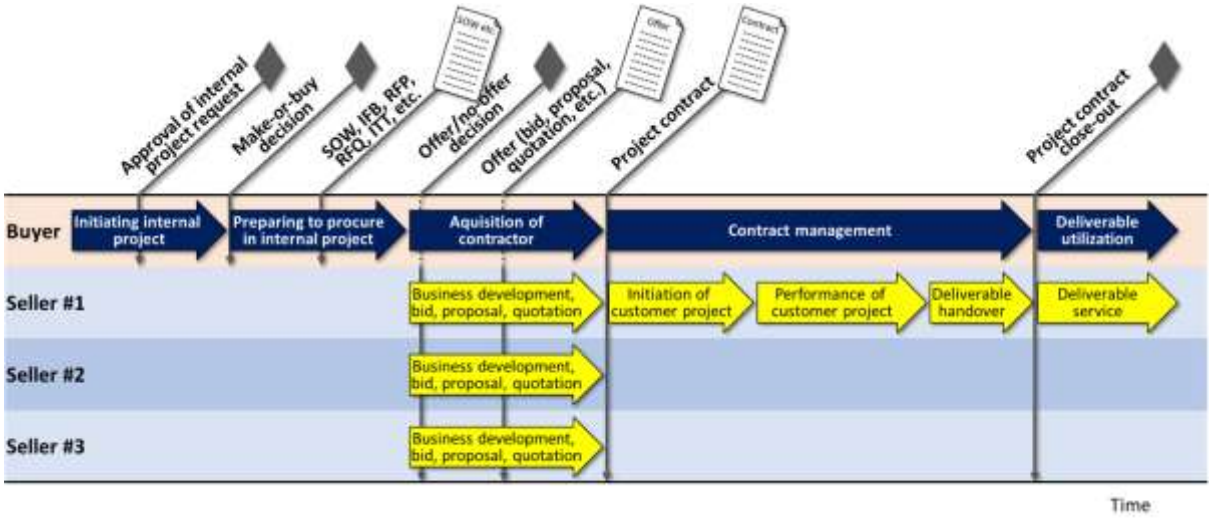

Figure 4: The project business of Happy Mollusk IT Services, Inc. turned by the end of the year from a profit into a loss.

Several decisions have to be made that are part of project selection, a core task of portfolio management. These decisions influence the own organization as much as other organizations, namely those that can become contract partners, depending on the options taken in the decision:

- **Buyer side:**
    1. The decision on buyer side to initiate and charter an internal project:
       The new project will become a member of the organization's portfolio of internal projects.
    2. The Make-or-buy decision, when the option "Buy" is chosen:
       Gives sellers the opportunity to make the project or the outsourced part of it part of its portfolio of customer projects.
    3. The formal request for response sent to sellers:
       The request for proposal (RFP), invitation to bid (ITB), or similar document in combination with the statement of work (SOW) or similar document lays out the requirements and the conditions of business on buyer side.

- **Seller side:**
    4. The Offer/no-offer decision, when the option "Offer" is chosen:
       The seller has decided in a formal process, or simply following a habit, to consider the buyer a prospect and the customer project an opportunity for business to obtain.
    5. The formal offer to the customer:
       The seller lays down in a proposal, bid or another kind of offer document the requirements it is prepared to meet and the conditions under which the company is prepared to do the business.

- **Buyer and seller side:**
    6. The signature under the contract by both parties:
       This is commonly the last step in a highly complex project selection process.

This is the process as it was most commonly observed by the author. Many other processes are possible: For example, when the initiative comes from the seller, not the buyer, or when on either of the sides teaming occurs. This teaming could enable a group of customers to purchase project work together, or a group of contractors to join forces to win the business and later perform the project together in form of a prime contractor – subcontractor relationship or a consortium, a temporary joint venture of companies.

In contrast to the negligence of portfolios of customer projects in literature on portfolio management (at least as far as the author is aware of such literature), they do exist in reality, as much as is the case for internal projects. It can also be observed that a well-working portfolio management process is often easier to implement for customer projects than for internal projects, as the initial case story has shown: The first part of the assignment of the author was intended to establish a formalized process for project selection on seller side, focusing on steps 4 and 5 in above sequence of project selection decisions. These consisted of having a clear evaluation process for all offer/no-offer decisions and following those enquiries that the company decided to respond to with a much stronger will to particularly win them. The process ensured that organizational resources were focused and dedicated to those projects that would be beneficial to the company, and also to ensure that these benefits could be realized during the lifecycle of the project.

Customer projects are typically[12] profit centers. Laying down the processes that a company implies to make profit and ensure happy customers is a common way to streamline the business and enhance its predictability in any kind of for-profit organization, and even in not-for-profits. Transferring this approach to organizations performing customer projects is not difficult. Process definition is also done to allow top management to delegate decision processes, freeing time and energy for other management tasks, especially those that help to develop the company in a fast-changing environment. Process definition can limit the freedom of employees involved, in the case of Lucky Tapeworm's portfolio of customer projects, the effect was rather that of unburdening the skills of business development and project management personnel from time and effort spent for unattractive business to focus it on winning the customer, the business and finally the project.

The project to implement portfolio management for the internal projects in the case story of Lucky Tapeworm, Inc., failed, due to the different nature of these projects.

The management of an organization may have a favorite customer project, but generally no pet projects inside this portfolio. Customer projects are mostly performed to protect the past by being profitable and to build a future by ensuring a happy customer.

Internal project portfolios are different. Many of them are a kind of self-expression of managers who have a vision and a strategy, describing where they desire to see the organization in a nearer or farther future, and internal projects are then used to help them turn that vision or strategy into reality. The agility, sometimes even mercuriousness, of managers' decisions is something many of them dislike to see limited, especially when this decision is made on top management level. This is not necessarily bad news: Many top managers achieved the position by their ability to respond to a fast-changing business environment swiftly with experience and intuition, while others are losing time with impact assessments and business case evaluations. In other situations, the more considerate approach of the second group of managers may be more appropriate.

Another reason for objections against the development of a working portfolio management process are mandatory projects: Some projects have no business case, and managers are not free to decide whether to do them or not: Legal obligations or other kinds of compulsory regulations must be met. While one can hear the teeth of managers grind when they are forced to assign resources to these projects, one may understand that they are against assigning further resources to a portfolio management process for them as long as possible.

From a project business management (PBM) perspective with its focus on customer projects, the good news is that PBM and project portfolio management are going well together. Portfolio management can benefit from the commercial clarity that comes with PBM, and PBM in turn can benefit from the process-driven character of portfolio management.

[12] In a later article in this series, "Freebie projects" will be discussed, projects under contract that follow the benefit generation lifecycle of an internal project but are organized as customer projects. Freebie projects are costs centers for both buyers and sellers.

Managing a Program in Project Business Management

The understanding of a program (in the project management context) is based on the assumption that it is generally an internal grouping of projects—however, these do not necessarily add up to a common burden on the performing organization's resources, as a portfolio does, but are coordinated to jointly achieve goals and create benefits. This includes that the projects and other activities inside a program may be performed by several portfolios, which means, these projects but can be assigned to different companies, including prime contractors and subcontractors. This makes a program a typical playfield for project business management (PBM) which describes the interfaces among these companies.

In historical documents on program management, this is easily recognizable. To give an example:

The famous 14 Skunk Works®[13] Rules, laid down by Clarence "Kelly" Johnson in the time between 1952 and 1975 for the development center of Lockheed Martin Corporation for high-performing military aircraft[14], begins as a first rule with the description of the power that the program manager should have: "Full control". Rules 2 and 7 to 12 make it then clear that Lockheed Martin acts as a contractor to government agencies, mostly the military. Rules 7 and 8 show that major parts of the program work are given to vendors as sub-contractors, and that their quality and timeliness is essential for the success of the program.

Image 1: Lockheed's Skunk Works are today located in Palmdale, CA, USA.

Program management seems to originate from project business, and a program in its original understanding is rather a complex business environment with multiple players

[13] Skunk Works is a registered trademark of Lockheed Martin Corporation.
[14] See the full listing on the website of Lockheed Martin (Johnson, 2017)

including a customer and contractor over various tiers than an internal endeavor of a company or another kind of organizations; an endeavor that has grown too large and complex to be called a project. Kelly Johnson's program managers are probably best understood as project managers in charge for projects with complex interfaces "upstream" to the customer and "downstream" to a complex project supply network, as shown on the right-hand side of Figure 3.

It is interesting to note again that literature on program management either ignores its business management aspect completely or does not assign much importance to it. PMI®[15]'s *Standard for Program Management* as an example describes the constituting projects as preceding their benefits[16], which is common for internal projects, but not for customer projects: These have to generate the benefit from the project mostly concurrent with the project, as for the contractor, the typical benefit generation cycle begins with the first payment from the customer and ends with the last[17].

The PMI standard briefly notes the outsourcing of program components under cost estimating and budgeting[18], however, it ignores the other management challenges from teaming up with external contractors. Conflicting business interest and the necessity for organizations to work with companies as business partners, with whom they have no previous experience, poses very different challenges to assignment of projects to internal business units or task forces. When programs span over several organizations, these have to build trustful relationships among them in very short time. As much as the organizations involved are important, with their skills and their preparation to cooperate, significant for mission success are also the interfaces among them, which are defined by hard contractual arrangements as much as by soft interpersonal skills. The observation that literature like PMI's Standard for Program Management puts the focus on internal programs seems strange, given the observation that for many programs, a majority of the constituting projects are done by external organizations. These programs grow beyond the limitations of the customer organization to become complex project supply networks and then necessitate more than just sound project business management skills by all parties involved. To generate benefits and be finally considered successes in technical and organizational aspects as well as in business perspective, proficiency is needed that includes well-trained business management skills and the ability to master complex and often dynamic and opaque project supply networks.

Conclusion

Portfolio management and program management are two disciplines in the professional vicinity of project management that can benefit from a better understanding of project business management by all parties involved. The commercial aspects of project business management, which include matters of cooperative profitability inside the project supply

[15] PMI is a registered mark of Project Management Institute
[16] (PMI, 2013c, p. 5)
[17] (Lehmann, 2017b, p. 11)
[18] (PMI, 2013c, p. 80)

network and satisfaction of the customer and other stakeholders are core considerations in the two forms of multi-project management as well, and adding the commercial aspect to these management disciplines will help them to further gain relevance.

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