

Project Business Management¹

The Cooperative Transformation

Oliver F. Lehmann

"It is the long history of humankind (and animal kind, too) that those who learned to collaborate and improvise most effectively have prevailed."

Charles Darwin



Summary

The growing trend to cross-corporate projects done as businesses between customers and contractors challenge the ability of organizations and individuals to cooperate. Humans and their organizations are generally able to cooperate, however, the specific setting with its issues on project management level as much as on legal and commercial level makes it particularly difficult. A transformation is necessary to benefit from this trend.

¹Editor's note: This series of articles is by Oliver Lehmann, author of the book "[Project Business Management](#)" (ISBN 9781138197503), published by Auerbach / Taylor & Francis in 2018.. See full author profile at the end of this article.

Innovating Innovation

I often think back to the late 20th century, when I was employed in a leading position in a process-engineering company. Processes here in the meaning of classical chemical and physical processes that were used in industries, such as automotive and aerospace. In my company, we had a Research and Development (R&D) department, internally, of course, that had a red “Entry for authorized personnel only” sign on its doors. The majority of corporate staff was prohibited from entering the rooms, in which the future products of our company were developed, those products that would secure our future. The innovative work was done inside the protective walls of the company, and the walls of the R&D added further protection.

I also remember the Chairman of the board of the company, an elderly, mostly unshaved man, who could spend days playing golf and nights in the R&D lab, mixing chemicals and developing physical processes for their application, and many of them were truly ground-breaking.

He was not formally educated in process engineering (I never found out, what his actual education was) and it was definitively not his ordinary job, but he was a kind of natural-born talent in process invention.

When he showed us in the morning the results of his long nights, everyone was impressed, however the next problem was, that he rarely documented his inventive work, so we had a perfect test tube of chemistry for which there was no recipe. It could not be reproduced, at least not accurately enough to deliver the lab performance.

I also remember that I received by that time an invitation by the University of Stuttgart to speak to their researchers. I was surprised to meet there the CEO of our direct competitor. He spoke before me and then listened to my lecture. We made a decision to sit together in a nearby restaurant after the event and talk about business. He was a man who loved talking, and I could derive a lot about the business situation of his company and where they stood with certain customers. Great information that I communicated home the next day.

The response was not a friendly one. “How could you sit and talk with that man? You are a soldier for the company, and you have to know, who the enemy is!” On that day, I decided to leave the company. I was their employee, not their soldier.

Today, as a trainer, I am a visitor in similar companies for preparatory talks and for in-house seminars. There are still internal R&D departments, of course, but for many of them, the entire working style has been changed. The lion share of the work is no more done internally but by contractors. The R&D department’s job is rather to distribute the work among them, to decide, which contractor does what research, and when.

There is not even certainty that the contractor does the work. The contractor may give it to one or more subcontractors, when specific skills are missing in-house, or when the lab capacity is not there to do the work. If the work is passed over, the customer may be aware and accepts it. Sometimes, customers are not aware and would not accept it if they knew.

Figure 1 illustrates, how projects such as R&D-driven innovation projects are no more done inside the more or less cozy world of the organization but extend out to external contractors. This brings new issues that need to be dealt with, such as contractual matters, non-disclosure of corporate secrets and general protection of intellectual property.

From a project management perspective, the traditional cross-functional character of internal projects is getting replaced with a cross-corporate fashion of doing projects, and the question remains, whether project managers are sufficiently prepared for this change.

Innovation Projects

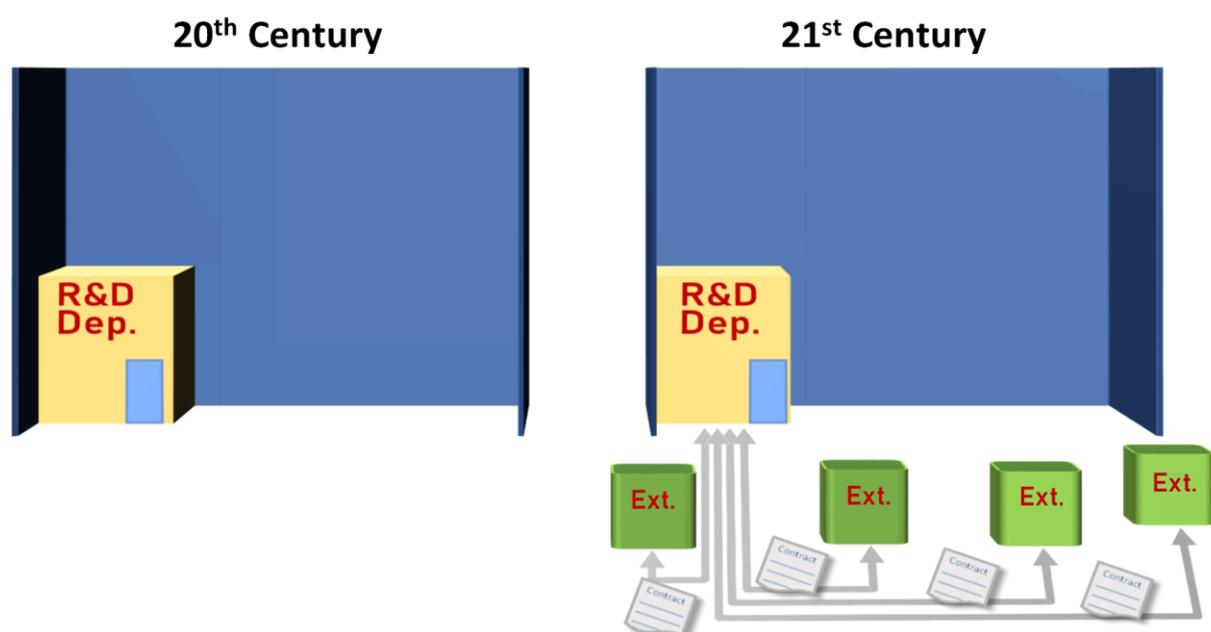


Figure 1: In the past, innovation projects, like many others, took place inside the protective walls of the organization. Today, many rely on work done by external entities under contract.

Cooperation and the Art of Survival

The current VUCA² times force organizations to navigate through a growingly complex business jungle and transform themselves faster on that way than before.

There are movements happening today on a massive scale, such as “Agile Transformation”, mostly related to software development, or “Digital Transformation”, which redefines how “learning” software, a drastically accelerated Internet, vast amounts of data, people, and things such as production equipment interact and work together. These transformations center around technological approaches, often connected with a changed “mindset” towards more responsiveness, bottom-up decision making, and technical interconnectivity. They

² VUCA stands for Volatility, Uncertainty, Complexity, and Ambiguity. Four aspects that describe the era of disruption, fast change, and unpredictability of the future. (Bennett & Lemoine, 2014)

respond to technological disruption, and are also part of this disruption. Some corporations may exaggerate this race to innovate, forgetting that new products, services, and processes need to be implemented. However, ignorance, indifference, or hesitation to adopt these transformations can be deadly to a company.

There are two approaches to deal with the need for fast change:

- Corporations hire people or, where these are not available on the job market, establish in-house academies to develop the skills that they need to become more adaptive. The benefit of this in-sourcing of innovation is that confidentiality of developments is easier to ensure, is better controllable, and it will not be impacted by opposing business interests of the parties involved. The price to be paid by the organization is the time lag between the measure is decided and the time it bears fruit. Another price is the asset-heaviness of the approach: A lot of people need to be hired and trained, and their productivity for the organization during that time is reduced, possibly down to zero. It may also be difficult to take them out from their recent jobs for the time needed to go through the learning process.

A further problem is that the staffing of these academies adds further needs to bring skilled people in.

- Outsourcing innovation work to contractors. Though procurement processes take their time, outsourcing is commonly faster than recruiting and development.

The decision to outsource is generally based on the assumption that the contractor has passed through the skill-building process for its staff and is immediately available to do such transformations.

In past articles in this series, I have shown that when asked, a majority of practitioners responded that the trend for their organizations when it comes to Make-or-Buy decisions is strongly towards the “Buy” option³. In another survey, the trend was confirmed from the vendor side, where a majority of project managers, asked whether they are doing internal projects or projects for paying customers, opted for the second. A repetition of this survey showed an even higher percentage of project managers in customer projects, as shown in Figure 2.⁴

There is obviously a strong trend to do projects in cooperation with other companies as acting as partners, clients or contractors, and this trend is not limited to Research and Development. It can be shown in all fields, where projects are done, and there are many.

In theory, cooperation to ensure survival should not be a difficult task for human beings⁵. In biology, recent research on evolution of species has shown that cooperative fitness might have a stronger impact on survival of species and their biodiversity than competition.⁶

³ (Lehmann, 2017)

⁴ (Lehmann, 2018)

⁵ ([Editorial], 2018)

⁶ (Gatti, 2016)

Research on humans shows that cooperative behavior is typical for mankind and that even children at the age of six are competent in that⁷. However, there are limitations.

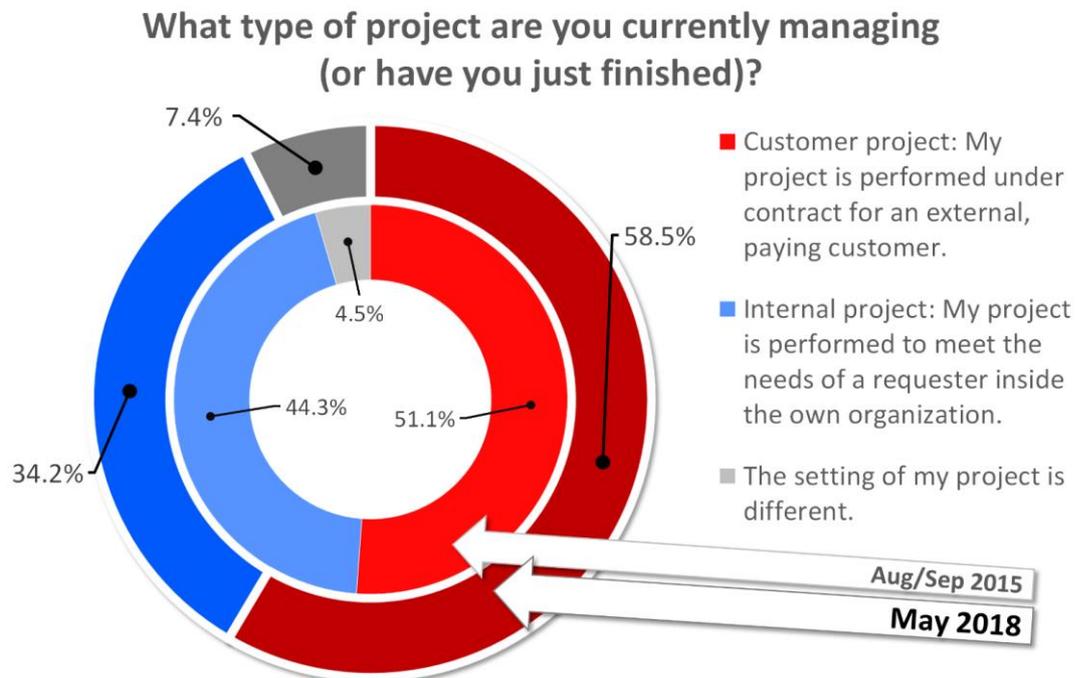


Figure 2: Responses to two surveys showed that projects as a business for paying customers are a major part of project management (2015: n = 245, 2018: n = 325)

The Cooperative Challenge in Project Business

When your team is a motley crew of people coming from different companies with different business interests, corporate cultures, big egos at the helm, and other divisive factors in place, the ability of the people involved to cooperate across corporate borders may be limited.

More challenges come from the attitudes these people bring with them, that often limit their preparation to cooperate to clearly defined groups. In a project, for example, promoters of highly predictive approaches separate themselves from agilists, who in turn claim that everything outside their world is “Command and control”. “Us-and-them” thinking applied by both parties divides project teams, and the borderline may be along corporate borders, but may also run through the companies’ teams involved. This thinking leads to a loss of trust and as a consequence to fear and reduced team performance.

To make cross-corporate projects successful, people and companies must put completing over competing. However, that’s not a task for just one party. If the contract parties in a cross-corporate project become partners that keep up their trustworthiness and make decisions

⁷ (Koomen & Herrmann, 2018)

based on trust to the other parties, the project can be successful. However, one party behaving non-cooperative and competitive can damage the entire trust-based system.

A discipline that deals with this kind of problems in the overlapping field of the disciplines of mathematics, sociology, ecology, economy, and business sciences is game theory⁸. It describes situations in which individual interests trump a common interest in mechanism that, on the first glance, is hard to overcome. Such situations, called game-theoretical dilemmas, can be seen in many real life examples, such as the over-fishing of the seas. Fishermen all around the world take many more fish out of the oceans than what is sustainable and ruin their own basis of income. However, a single fisherman or fishing company that decides to protect fish stocks will not help, others will catch more.

Game theory brings in new aspects when games are played repeatedly. In small numbers of repetitions, non-cooperative behavior seems to be generally more promising. Ripping off a family in a tourist hot-spot with fast turnover of customers is easy to do for a restaurant owner. When one dissatisfied customer has left, the next is already at the door and asks for a table. In a quarter, where a restaurant has to live on customers, who come back, prices for meals are generally more reasonable and the quality of the cuisine is often higher.

Another aspect is the size of the group, in which the business is taking place. In private, the cost of non-cooperative behavior is lower. When one has to assume that a group hears of such behavior and the perception of trustworthiness by many can be impacted, people and organizations tend to be more cooperative.

So, cooperative behavior has a temporal and a special dimension: How far into the future will my behavior affect my business, and how far goes the circle of people, with whom my future business will be impacted.

In project business, both aspects can become a problem: The business relation between a contractor and a customer is temporary. In “Gig economy” contracting, this temporary aspect can be driven to the extreme, when project work is decomposed into very small work packages that are given to a large number of contractors, in contrast to a “Start-to-checkers”, which builds on a long relationship with a contractor, who assumes the responsibility over a whole project lifecycle.

⁸ An introduction to game theory and discussion of its links to project management and can be found in my book “Situational Project Management – The Dynamics of Success and Failure” (Lehmann, 2016, pp. 58-47)

Contractor Responsibility in Project Business

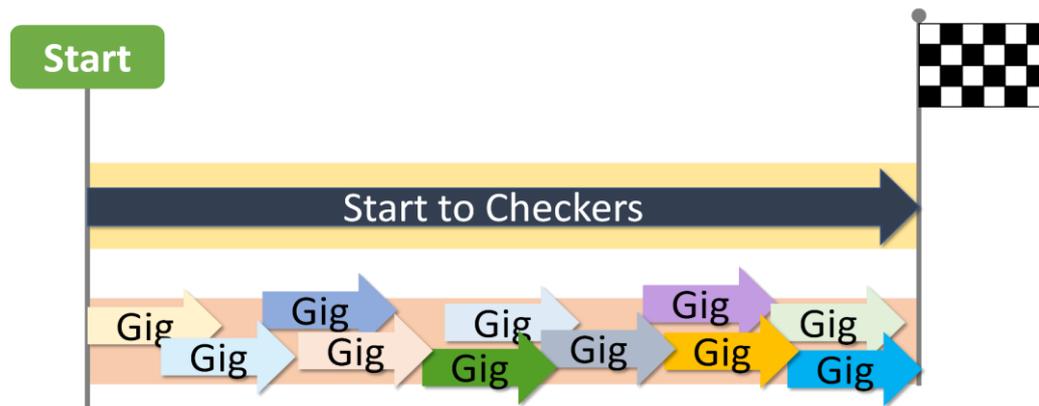


Figure 3: Two approaches for contractor responsibility in project business: Start-to-end ("checkers") versus short-term contracts ("Gigs")

The confidential nature, that many of these projects have, has the effect that the number of people involved is limited. Another driver for dilemmas.

On top of the business challenges on project cooperation and the tendency towards game-theoretical dilemmas due to the temporary and confidential nature in many projects, Legal considerations pose further challenges. From a project management perspective, the most important basis underlying cooperation is communication. If one side drills a 6mm hole and the other side brings a 8mm bolt to screw in, the parts cannot be assembled. The result will be incompatibilities, rework, risks, and reduced performance. All the things we try to avoid in projects to make them more effective and efficient and protect the project from dysfunctionalities.

Lawyers in contrast recommend to be parsimonious in communications, at least on top of what is undeniably required by contract. Every statement made, particularly in writing, may later be presented at a lawsuit, the worst case when the relationship between the parties turns sour, and when it comes to negotiate a settlement may weaken the own position.

Project managers do not need to be top legal experts. However, in project business, they have to make a big number of micro decisions with potential contractual and legal impact. One can compare it with driving a car: In traffic, a driver is unlikely to be a legal expert but must be familiar with traffic law. Project managers in project business are in a similar position. They need the basic legal knowledge necessary to do they daily work without every time having to ask the corporate Counsel what to do.

However, here is the next problem: Project managers are not getting prepared for the management of project business. There is no "Body of Knowledge"⁹ for that, very few

⁹ Such as the "Guide to the Project management Body of Knowledge" (PMBOK Guide®) of PMI®, the Project Management Institute, which focuses on internal projects (PMI, 2017).

literature, not much education, and no research. Professional associations also widely ignore the topic.¹⁰

In absence of effective education, project managers still have to learn the needed skills for project business on both buyer and vendor side through trial and error.

Trial in project business is expensive. Error even more.

Seven Enabling Rules for Cooperative Transformation of Project Business Management

It may be helpful to follow a limited set of enabling rules that give guidance for day-by day project business on both sides, clients whose projects are mostly performed by contractors, possibly over more than one tier, and vendors working for these clients directly or indirectly.

Here is a proposal for such enabling rules:

- Rule 1: “Project Mission Success First” should be the driving force for the project.
- Rule 2: The enabler to awake this force is mutual respect of the partners’ business interests, especially, when they are divergent.
- Rule 3: This respect necessitates turning contract parties into project partners.
- Rule 4: A fundamental prerequisite for partnership is professional integrity of the players involved.
- Rule 5: Integrity comes with good faith and trustworthiness.
- Rule 6: Trust and community spirit improve the project’s performance.
- Rule 7: Trustworthy people make better projects and with that better project business.

Not a rule but a recommendation may be: Don’t try it alone.

Emeshed in routines and non-cooperative behaviors, organizations may find it difficult to do the transfer with in-house means. A cooperative transformation project is definitively another cross-corporate project.

¹⁰ I had recently a discussion with a manager of a European National association on the topic. He told me, they had a survey among their members, and 80% of the respondents said, they were in internal projects, using mostly internal resources. He saw this as evidence that project business is not a big field. Given other surveys that say, more than 50% of project managers are in project business, I consider it rather a signal that they do not allure members from this field.

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About the Author



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Oliver F. Lehmann, MSc., PMP, is a project management author, consultant, speaker and teacher. He studied Linguistics, Literature and History at the University of Stuttgart and Project Management at the University of Liverpool, UK, where he holds a Master of Science Degree. Oliver has trained thousands of project managers in Europe, USA and Asia in methodological project management with a focus on certification preparation. In addition, he is a visiting lecturer at the Technical University of Munich.

He has been a member and volunteer at PMI, the Project Management Institute, since 1998, and serves currently as the President of the PMI Southern Germany Chapter. Between 2004 and 2006, he contributed to PMI's *PM Network* magazine, for which he provided a monthly editorial on page 1 called "Launch", analyzing troubled projects around the world.

Oliver believes in three driving forces for personal improvement in project management: formal learning, experience and observations. He resides in Munich, Bavaria, Germany and can be contacted at oliver@oliverlehmann.com.

Oliver Lehmann is the author of the books:

- "[Situational Project Management: The Dynamics of Success and Failure](#)" (ISBN 9781498722612), published by Auerbach / Taylor & Francis in 2016
- "[Project Business Management](#)" (ISBN 9781138197503), published by Auerbach / Taylor & Francis in 2018.