

## Project Business Management<sup>1</sup>

# Leading Project Teams Across Corporate Borders

**Oliver Lehmann**

*"Confusion is the charlatan's friend, noise its accessory "*  
Carole Cadwalladr

## Summary

The majority of projects today are not performed solely by internal teams. Project work is handed over partially or in full to external vendors who can build complex Project supply networks (PSNs), and project managers need to massively improve their skills to manage such PSNs professionally. Creating a "Mission Success Culture" based on a "Completing over competing" approach is an essential element of these skills.

## From "Simple" Procurement Management to Complex Project Supply Networks (PSNs)

### Case Story: An Uncomfortable Surprise in a Project Supply Network

Tarantula SE.<sup>2</sup> is a European manufacturer of machines for logistics and transportation purposes that are cutting edge technology and convince with low *Total cost of ownership* (TCO) in combination with high productivity. Located in Netherlands, they share the marketplace with a direct US-American competitor, Scorpio Corp., which has similar products, and like Tarantula invests heavily in new technologies, new applications for already existing advanced technologies and also tries to expand into future markets. For the development of a new machine type, a strategic decision was made to outsource more than the traditional 15% to 20%, in order to speed up the implementation time for innovations, tap external resources and reduce the need for management attention. The percentage of outsourced development rose during the project to about 60%, and the expectation was that this approach would shorten the product's *Time to market* by 25% to 40%.

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<sup>1</sup>This is the 4th 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.

<sup>2</sup> All names changed

One of the contractors hired was a Canadian company Lobster Ltd. that was awarded a contract to develop and later produce an intricate component made from carbon fiber reinforced polymer (CFRP). Lobster soon noticed that it would not be able to do the project, given the challenging specifications agreed with Tarantula, the customer, on the product. The number of companies that can make such products is small, and in the market, most companies know each other, so they talked with a third company, Bee Queen S.A. from France, who soon became the subcontractor for the business. Figure 1 depicts the relationships of the companies mentioned above.

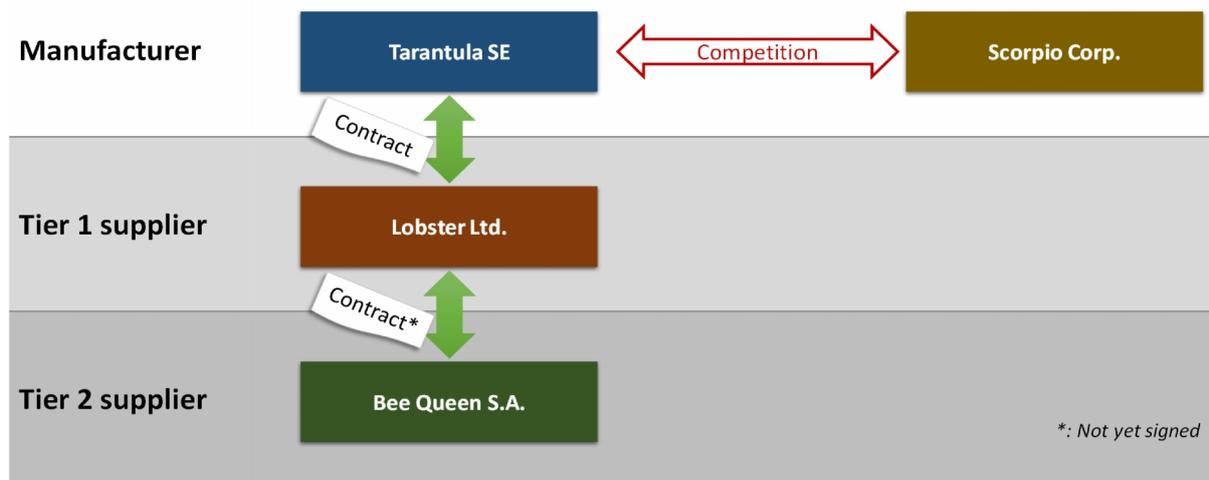


Figure 1: The layout of the small Project supply network in the case story.

The tight deadline for the component development forced Lobster’s project manager to ask Bee Queen to start development work, while the two companies were still in negotiations particularly on the price for the product development and for successive manufacturing. The two companies had a year-long business relation, and trust into Lobster and the desire to win the long-term business on Bee Queen’s side were strong incentives for the subcontractor to accept the business risk.

During these negotiations, it became clear for Lobster that the business would not be attractive for them at all. Between the price they would get paid by Tarantula and the costs of outsourcing to Bee Queen, the achieved margin became very thin. To make things worse: While the development project at Bee Queen was progressing fast and the deadline set by Tarantula was coming nearer and nearer, Lobster’s negotiation position deteriorated further. At a given time, the company was no more be able to switch to another supplier, but the price with the subcontractor was still not fixed. The thin margin would not only have to cover Lobster’s costs of managing the relation between the customer and the subcontractor, Lobster was also bearing the risk of missing the *Start of production (SOP)* deadline or of non-compliance with the specifications on the product, which would lead to contractual penalty payments that they would not be able to pass on to the subcontractor. To make things worse, the project blocked management resources at Lobster Ltd. that would be spent more wisely in winning and performing new business that would provide better margins. Lobster therefore

made a decision to get out of the business and let Tarantula work directly with Bee Queen S.A.

A meeting was set up with the project managers and other representatives of the three companies. Tarantula had already some knowledge that Lobster Ltd. had subcontracted parts of the development work, but has so far not been interested in more details of this business. They considered the development project in good hands and gave Lobster the freedom to perform the project in a way that would ensure meeting the deadline and the technical requirements. Tarantula assumed that the outsourcing to a trusted contractor allowed them to focus their management attention on other parts of the new machine. To ensure that progress was rely on a number of maturity reviews called “Quality gates”<sup>3</sup>, to give assurance that the development is on schedule, which it was. The development approach is sometimes referred to as “Rainbow model”, because as depicted in colors as shown (see Figure 2), there is some faint resemblance to a rainbow. The rainbow model can replace classical phase-gate models, allowing for asynchronous development at high speed, but poses a major challenge on project management.

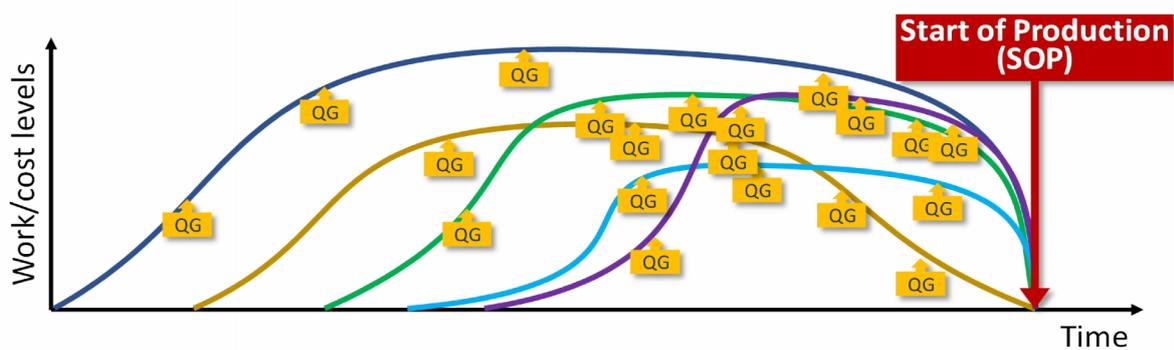


Figure 2: A project applying the “Rainbow model”. Work streams (colored lines) are performed internally or by vendors. All must deliver on time to allow for a timely start of production. So-called “Quality gates” (QG, see footnote) assess the maturity of the different work streams to ensure their timeliness.

During the meeting, the customer learned that Lobster’s subcontracting did not only relate to some work packages in the development endeavor, but included the entire project and the subsequent manufacturing. Lobster further explained to the customer that its role in the project would be dispensable. It recommended Tarantula to allow Bee Queen to step into the existing agreement and become a direct contractor with the customer instead of a subcontractor working for Lobster as an intermediate. They argued that this would expedite communications and give the customer direct access to the development team and the manufacturing operations on contractor side. As no party felt that it would have a disadvantage from the change, all agreed to release Lobster from the business. In the contract with Tarantula, the name of the contractor was changed, the changed contract was signed, and Bee Queen S.A. was from this moment on the direct contractor for Tarantula SE.

Following the procedures at Tarantula for new contractors and complying with contractual requirements, a number of audit teams were hastily sent to Bee Queen S.A., assessing their

<sup>3</sup> The term “Quality gate” or “Q-gate” is a misnomer but is quite common in in Europe.

management approach to quality, customer data protection and their general business situation. The latter of the teams came home from their review with surprising news: Bee Queen was a 100% subsidiary of Scorpio Corp., and as practically all of its business was done with its owner, it was in essence just another production place of the direct competitor of Tarantula. Without being aware of it, Tarantula had allowed its most explicit rival to join its project as a contractor. Tarantula discussed to immediately cancel the contract and get Bee Queen out of the project, but the project had proceeded to a point, where this was no more possible. The deadline to start production was too pressing and other manufacturers had no free capacities to step into the role immediately. They were already blocked with other development work for Tarantula's project and also with a new, similar project done at Scorpio.

The distrust at the beginning was high, particularly on Tarantula's side, as in order to develop the component, Bee Queen needed detail knowledge of the design of the new machine and also needed access to proprietary technology developments done at Bee Queen. Through Bee Queen, Scorpio knew the time line of Tarantula's project and was also aware, what challenges the company faced in the project. On the other hand, Bee Queen supported the project with technology developed at Scorpio that helped speed up their work for Tarantula's project and meet the deadline. The project became a channel for an involuntary exchange of technological knowledge, and the projects on both sides profited massively from this exchange. Both companies' projects missed their original SOP deadlines, but it was not the component made at Bee Queen, that caused the delays. Would there have been more cooperation between the corporations on development and manufacturing side without giving up the competition in the sales market, both corporations could have benefitted even more from the collaboration.

### The Lure of the *Buy* Option

Outsourcing project work to contractors is a strong and robust trend. The author showed this in a previous article in this series named "Customer Projects: What is the Future of the Business?"<sup>4</sup>: The number of *Make-or-buy* decisions, in which the *Buy* option is chosen, is increasing for projects around the globe and of all sizes. Organizations like corporations, agencies, associations etc. buy more project work from external vendors of products and providers of services in order to tap external resources, like infrastructure, people, knowledge, technology. The external key resource acquired in many of these outsourcing cases is in fact management attention: the opportunity for managers to consider project work in good hands so that they can focus instead on other pressing things. Management attention is among the scarcest resources in most organizations, as the number of things that require managers' attentiveness and care has increased dramatically over the last decades and often overwhelms the ability of even very well-educated people for simultaneous responsiveness to a variety of different tasks so.<sup>5</sup>

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<sup>4</sup> (Lehmann, 2017a)

<sup>5</sup> The author described this effect in his article "Crisis in Your Customer Project? Try Benefit Engineering" (Lehmann, 2017b, pp. 10-12)

## The Complexity of PSNs

The case story showed an example of a very simple supply network, which began with three parties involved, a customer (Tarantula SE), a prime contractor (Lobster Ltd.) and a subcontractor (Bee Queen S.A.). After the prime contractor was squeezed out, there were only two parties remaining, a customer and a contractor, working together under a contract. Such a two-party relationship is the simplest form of a *Project supply network* (PSN).

There are extreme examples on the other end of the spectrum, where one can find projects with impressive numbers of organizations involved. An example of them is the Airbus A380 development around the year 2000, the largest commercial airliner in the world. As with all complex products that are intended to be made in numbers, there are actually two projects necessary to bring them to life, developing the product and developing the operational production processes and systems for it. Add further development projects for customer-specific configurations, marketing and selling, then for the provision of MRO<sup>6</sup> systems and other services that are needed to operate the aircraft in numbers, one gets an understanding of the complex PSN that had to be in place before the first aircraft could become airborne as a commercial airliner, which happened in 2007. The author asked an Airbus representative for some rough numbers on the project's PSN, and here are their answers:

- Parts: 4 Million
- Suppliers: 1,500
- From countries: 30
- Distributed over: 5 continents

Most readers of this article, who are in the world of project business management, are either working for a customer, a contractor, or for an "in-between" like a prime contractor, who is both customer and contractor at the same time; see Lobster Ltd. In the initial case story, their projects probably lie between the two extremes in size and complexity.

PSNs of various sizes and complexity have many characteristics in common, that could already be seen in the case story:

### **Opaqueness**

Many of the players in the PSN are unknown to others, and the risk is high that organizations can become members of the PSN, with whom one would prefer not to work with. In the example, it was a competitor, but it may also be companies of bad reputation or on the way into insolvency.

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<sup>6</sup> Maintenance, repair and overhaul

## **Dynamics**

The roles of players in the PSN change often, making it very hard to actively engineer they are structure, and also to know, who is a member of the network.

## **Multiplicity of interfaces**

The companies involved have a number of contractual relations among them, mostly in the form of legal customer-contractor dealings. They are many other forms of relations, particularly in technical, organizational or interpersonal interfaces.

## **Multiplicity of cultures**

This multiplicity can make it difficult for PSN member companies to cooperate, as they have difficult styles and expectations on such cooperation, for example when one organization sees the relation between a vendor and a buyer as of mutual dependency on eye level, while the other one considers it as a hierarchy with the customer at the top of the contractor at the bottom.

## **Multiplicity of legal systems**

Often overlooked. When two contract parties are located in different countries, at least one of them has to work under a foreign legal system. From a lawyer's point of view, the solution seems simple: Make sure that the other party has this disadvantage. If the PSN is built on a "completing over competing" attitude, which assumes that the contract is closed between partners that depend on each other, not parties fighting for own benefits to the disadvantage of the other, the contract party, whose home law has been chosen would support its contract partner to navigate in the other system.

## **Multiplicity of interfaces**

Different Information Technology (IT) systems and software programs in use can lead to changed data, when one software needs to import data from another one. Further complexity is added for data and privacy protection rules that the organizations must comply with, particularly, when they are located in different countries. Each of these interfaces is furthermore another Achilles heel in the intent of organizations to protect themselves from malware and other forms of digital intrusion and is also a potential cause for miscommunication.

This list is not complete. Whenever two corporations act together as buyer and seller in a project context, new risk causes are turning up, that would not exist in an internal project. The risks that originate from these causes can all be effectively managed, but organizations are only partially prepared to do that. Their staff rarely has the necessary risk awareness and not many people are trained to respond effectively to such risks. To make things worse, such risk responses take time, cost money and require strong management attention, just the things that companies hoped to save by choosing the "Buy" option.

In PSNs with multiple players, the number of interfaces between the organizations involved is growing fast, and with this the number of risk causes, as can be seen in Figure 3. Education in simple procurement management may not be sufficient to manage this multitude of dependencies and interactions, and new approaches are necessary to engineer these supply networks and monitor and control their dynamics.

### Interfaces between Organizations in Project Supply Networks (PSNs)

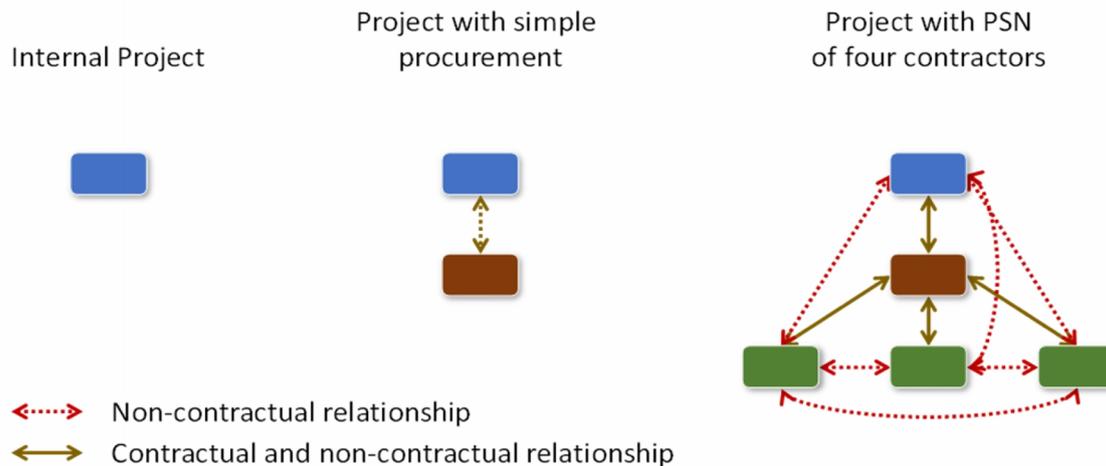


Figure 3: The number of interfaces between members of a PSN is growing faster than the number of its members, as long as each member has a relationship to another member, contractual or not.

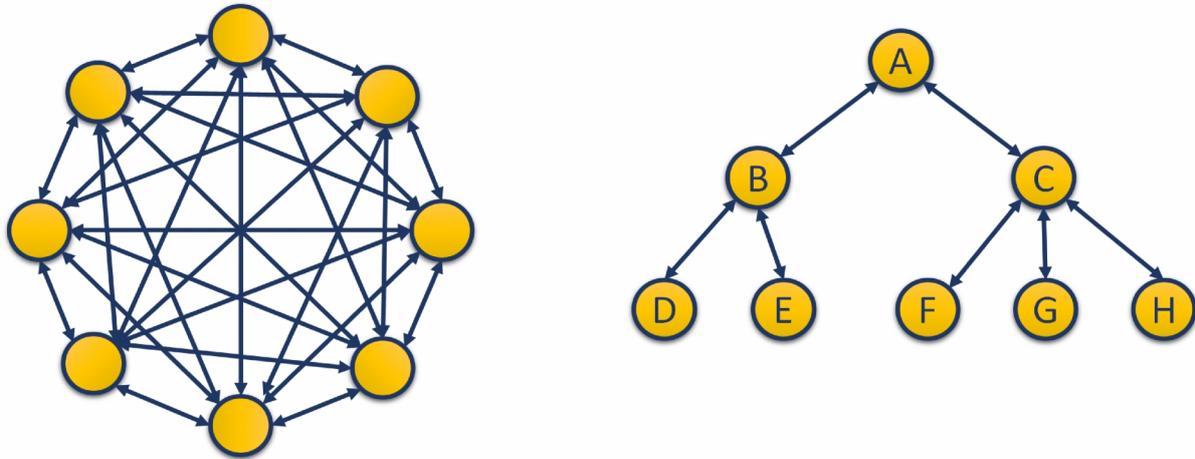
### Organizing Vendors in Project Supply Networks

There is a formula for the development of the number of relationships, when the number of members of the PSN is growing:  $n * (n - 1) / 2$ , with  $n$  being the number of members involved. This formula is popular among project managers as the number of communication channels between team members and is valid there, when one assumes that each team member is allowed to talk with each other team member. As the number can grow very quickly, at one point in time the team communications may be no more manageable.

To give an example of the problems, a project manager may require to be on CC in every project related email and to be informed of any personal communication through a meeting note or a similar document. When the team grows to a certain size, the project manager may no more be capable to process all emails and meeting notes he or she is getting, and then the desire to be kept informed can no more be fulfilled.

To avoid a too large number of communication channels, the solutions are delegation and use of other forms of gatekeepers, who channel the communications. In its very essence, these gatekeepers mean banning other communications that would circumvent their channeling function. This approach can make communications less overwhelming. Figure 4 shows a team in which the number of communication channels has been reduced to the minimum by delegation, which is generally calculated with the formula  $n - 1$ .

## Communication Channels in a Team with 8 Members



Maximum communication channels: 28  
 $n * (n - 1) / 2$

Minimum communication channels: 7  
 $n - 1$

*Figure 4: Communication channels can be reduced by delegation or other forms of gatekeeping.*

The reduction of communication channels comes with a price: The number of nodes that a communication needs to pass is going up. If team member E in Figure 4 wants to communicate a message to team member F, the message must be transferred over three nodes up to the top of the hierarchy and back down. This consumes time and brings the risk of miscommunications. The principle is known from the children's game that seems to be popular all around the world. In most countries it is called "broken telephone" or just "telephone".

From a certain team size on, project managers will try to engineer and structure their teams so that communication channels remain manageable without getting too long. There is no standard set up or "best practice" what such a structured team communication would look like, instead it depends on a number of situational factors that are specific to the project and to the people involved in it.

In a PSN, the topic turns up twice. The member companies of the PSN have interfaces among them that work similar to the communication channels between team members. In addition, inside these member organizations, there are teams, whose structures need to be developed, and a person trying to engineer and structure the project supply network will want to influence both the structures among the companies and inside them to a degree that is acceptable for all parties. It is recommendable to describe this degree of influence already in the contract.

A project manager on customer side should structure and engineer the PSN based on some simple principles:

1. Build a PSN architecture based on a small number of core suppliers, who ideally build a more static and long-lasting framework, which then contract other suppliers temporarily as needed.
2. Know the member companies of the PSN.
3. Reject subcontracting to unknown vendors.
4. Reserve the right to reject certain companies' membership in the PSN that the customer does not want to have in the project.
5. Develop a "*Mission success first*" culture over the PSN, that is driven by the parties' desire of "completing over competing". An example of how to implement that practically is given at the end of the article.

### Developing a *Mission Success First* Culture

In an article in *Datamation* magazine of 1968, Malcolm Conway wrote, that "the structures of large systems tend to disintegrate during development, qualitatively more so than with small systems."<sup>7</sup> He further noticed, that "organizations which design systems are constrained to produce designs which are copies of the communication structures of these organizations."<sup>8</sup> His focus was on software development, but the principle expands beyond the limits of this industry.

In essence, he says that the quality of communication among development teams gets mirrored in the communications between the subsystems that they develop, and when the teams do not cooperate well, the final system will also not do that.

Project supply networks are systems of companies working together, and the deliverables that they are creating, products, service enablement, or other kinds of results, are also systems. If the communication structures of such PSNs are disrupted, the systems that they develop will also work poorly, and disasters are predictable.

Around the year 2000, NASA did analyses on a number of failed projects, particularly unmanned Mars missions, that got lost due to misunderstandings of onboard systems or of ground-based teams.<sup>9</sup> The analyses showed that a root cause of NASA's failed missions was a basic approach called "Faster, Better Cheaper". This paradigm postulated three priorities, and it was often not clear, which would be the leading one. Missions got lost when "faster" and "cheaper" trumped "better", and risk management was generally not among these priorities. Replacing this motto with "Mission Success First" brought some very fundamental benefits:

- Now, there was only one priority guiding decisions in each of the projects, and the priority was valid for each company and person contributing to the project.
- When risk management was needed to achieve mission success, or any other activity from another knowledge area, it would be clear that this would be implemented.

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<sup>7</sup> (Conway, 1968)

<sup>8</sup> This is often referred to as "Conway's law."

<sup>9</sup> (NASA, 2000)

- Contractors had to subordinate to the paradigm if they wanted to be part of the project, or they would be rejected from participation in the project.
- There was a clear success criterion, mission success as defined early in the project. With “Foster, Better Cheaper...”, one would need to define a “...then xyz” to be later able to say whether the project has been successful or not. A comparative without a baseline for comparison is in essence meaningless.

The “Mission Success First” approach requires all members of the project supply network to act together as a kind of family, pursuing jointly a shared set of great goals. The understanding of all participants is that they have to feel personally responsible for the other members of the PSN in order to ensure that the work is profitable for all and worthwhile to do together. They apply the legal principle of “good faith”, which means that they show interest in the personal, organizational and also commercial well-being of the other PSN members. When they find information that is important for another PSN members’ technical and commercial success, they communicate this information, and they also expect the other members to do the same in return. They are rather partners under contract than parties. For a subcontractor, the customer of the customer is also the own client, and for the customer, the contractor’s contractor is also the own supplier. The PSN is looked at as a whole, it is managed as an organization brought to life by contributing organizations, and care is taken for its well-being as much as one would do for that of a living being. The first question of the participants is not “what’s in it for me?” but “what can we achieve together?”, and the share that one gets from the common success is rather a function of the greatness of this success than of the percentage that one can squeeze out from the network to the detriment of the other players. The success of a co-player is then not regarded as a failure for oneself but as something that enriches the own achievements.

To many readers, this may sound like a fantasy approach to project management, an unrealistic unicorn, given the fundamentally competitive nature of human behavior, as many perceive it. The approach builds on trust given to parties, each with its own business interests. Conflicting business interests are indeed the number 1 cause of conflicts in PSNs, as an international survey shows, that the author did in July 2017 (Figure 5). Trust comes with risks, trust the wrong person or organization, but it will rip you off. On the other hand, distrust against people and organizations that deserve trust deprives one from opportunities that could be exploited together. It is important to make sure that one trusts the right people and that these people return this trust. “If you want to be trusted, be trustworthy”<sup>10</sup> seems easily said, but it builds on the courage to accept the risk, that the trustworthiness shown to others may not be returned by them.

One may also develop an approach to build the aspiration of mutual trustworthiness and trust into the contract, and the following example shows that this is possible.

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<sup>10</sup> (Covey, 2004, p. 43)

## Frequency of Occurrence

Average values. Scale 0 (never) - 5 (frequent)

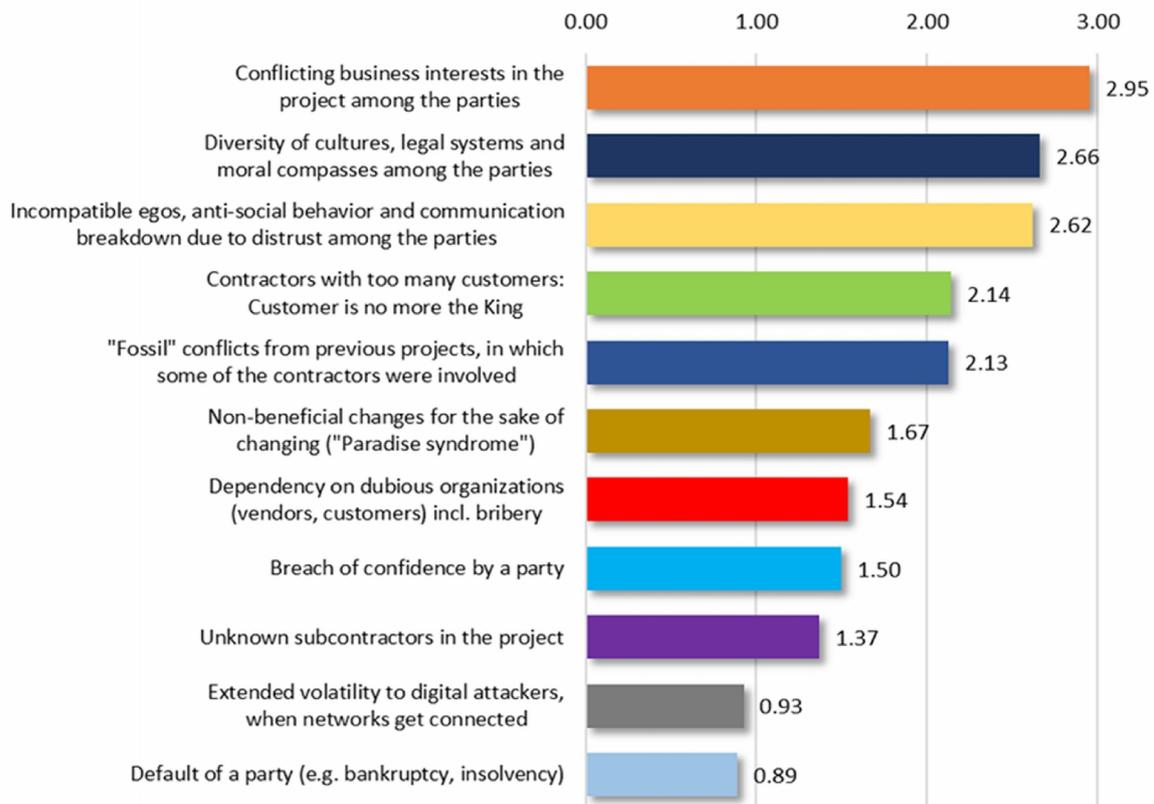


Figure 5: The most common cause of quarrels in Project Supply Networks are conflicting business interests (survey per July 2017, n=302).

### *A Rolling Award Fee Added to a Contract*

Award fee contracts are on the first glance not easy to understand. They use a monetary incentive on top of a fixed price, a time and material (T&M), or a cost reimbursable contract, whose payment is contractually agreed if the contractor delights the customer.<sup>11</sup> If the customer is not happy, the fee will not be paid, and this rejection is not subject to appeal in a court, because a contractor cannot sue a customer for being unhappy or dissatisfied with the contractor's performance and the delivered work.

It seems confusing that a contract includes a clause with such an unclear description, which allows the customer to decide arbitrarily and in the organization's own discretion, whether the bonus payment to the contractor will be made or not. In a traditional PSN world, which is driven by competition and mutual distrust, one would not expect the customer to make the payment at all. Such a clause would then not help the project to be more successful and achieve the intended joint mission success.

<sup>11</sup> Compare PMBOK Guide, 6<sup>th</sup> Edition (PMI, 2017, p. 472)

In practice, award fee contracts can be highly successful and help ensure that the different parties, which are expected to jointly contribute to mission success, are happy to provide this contribution and work together in a cooperative way.

The problems that the *Rolling award fee* contract addresses are very practical by nature:

**Restrained communications:**

As Conway's Law has shown, communications among the system-building teams are necessary to build systems that work. In an environment, which is dominated by contractual dealings, it seems often wiser for the parties involved to not communicate too much, particularly not in writing. Every statement made by a party may turn up later again in a conflict, and in a worst-case scenario may be used against the party that made the statement. Many lawyers' first advice, when a conflict with legal implications emerges, is to no longer communicate in writing on top of what is absolutely inevitable. From a legal standpoint, this is appropriate behavior in a competitive situation, for a project, this leads to additional costs and delays and often to disaster.

Behavior of members of a PSN that improves communications comes with risks but saves money to the customer.

**Restrained proactiveness:**

A contractor, who sees a technical or commercial threat for another member of the project supply network may communicate it to that party or may decide, not to do that, as long as the failure for the other party does not impact the own business success. In an environment that is not driven by trust but by suspicion, the party that receives the warning may consider the warning as intrusive or even humiliating. The same is true when one party sees a potential opportunity for another party and deliberates, whether to communicate this prospective benefit or not.

Proactive behavior by a contractor can save a customer a lot of avoidable costs or bring additional monetary benefits from the project.<sup>12</sup>

**Resources deployed for the project:**

A contractor can decide to use "low-cost" personnel, equipment, materials, and other resources, that allow the organization to save costs at the expense of the customer. The decision may cause additional costs to the customer already during the course of the project, or later, when the deliverables are used and their operating costs are soaring.

The contractor can save costs to a customer by selecting high-value resources, which may make it more expensive for the contractor to work for the customer.

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<sup>12</sup> (Lehmann, 2017b)

### **Ignored safety protocols**

A contractor may also save costs by ignoring rules and regulations that protect people, data, the environment, or other items of value. This in turn can lead to extra costs for the customer to bring the project and its deliverables into compliance with these rules.

By adhering to safety protocols, the contractor saves money for the customer and protects the organization from the consequences of noncompliance.

### **Neglected documentation**

Documenting project work and its deliverables is a time-consuming and often costly activity, which binds resources that a contractor would probably prefer to assign to productive work, which is the basis for invoicing and therefore generates the income for the contractor. Neglected documentation can lead to massive problems for the contractor later, when the deliverables need to be maintained, repaired or overhauled, or when additional future products need to understand the interfaces of the existing product in order to connect to them.

Ensuring usable and accurate documentation helps the customer making efficient use from the deliverables of the project, thus saving future costs.

### **Rejected or delayed response to change requests**

Assessing the impact of change requests that the customer suggests, and deciding on their feasibility in order to select beneficial changes to the project is a time-consuming activity for the contractor, which is in most cases not billable to the customer. From a customer perspective, slow processing of change requests or not processing them at all are behaviors wasting opportunities to improve the value of the project or to save money for the customer.

Swift and professional processing of change requests is another way to reduce costs for the customer.

### **Management attention**

One reason for many customers to outsource project work is the expectation that the contractor will dedicate the level of management attention to this work, which the customer's management would not be able to devote to it. This expectation may be disappointed, and the benefits that were expected from contracting work out can then no more be achieved.

A contractor, who dedicates the required management attention to the project, brings a benefit to the customer, which includes a high monetary value.

## **Attentiveness to the customer's directions**

A factor that often leads to massive cost increases in projects is work done at a time and place different to what was planned and communicated. Contractor staff deployed to the wrong location, possibly at the wrong time, goods dispatched at a mistaken address, work done in incorrect order etc. lead to costly and time-consuming rework.

The contractor, who listens to and understands the directions given by the customer and ensures adherence to them, saves the customer costs otherwise caused by nonconformity.

A contractor who is steering clear of such avoidable surplus costs for the customer brings a benefit, that may be shared with the organization as a motivator and also as a way to say "thank you". The rolling award fee has this benefit sharing as its underlying business case: Get a benefit from the contractor and give a part of that back.

Further monetary and non-financial benefits come with a smoother running project, less conflicts, errors, rework etc., and probably with much more joy and comfort by all contributors to the project. Doing a good project together with other great people is pleasurable and satisfying for most passionate project enthusiasts.

The rolling award fee is a way to achieve these benefits. A simple process should be followed to ensure that the fee becomes effective to save costs and strengthen trust in the business relationship, as distrust would destroy the positive effects, financial and otherwise:

1. Have a set of clear criteria, against which the performance of the contractor will be rated. It is recommendable to limit the criteria to seven, in order to not develop a bureaucratic monster but a lean and easy to understand feedback system, on which the payment of the fee will be based upon. *Figure 6* gives an example, what such a set of criteria may look like.
2. Weight each of the criteria, so that the contractor and the customer have a joint understanding of their prioritization. A range from 1 to 10 has shown practicable in reality, but any other range of values would be also acceptable.
3. Rate the contractor on a monthly basis. It is important that the contractor does not have to wait too long to see the latest rating. Monthly rating and payments when the passing score has been achieved are signals to the contractor that the customer is serious about paying the fee when the contractor has performed as desired. A range from 0 to 10 is a good practical solution, but any other range for the ratings can be agreed upon as preferred.
4. Set a passing score on a level that is achievable for the contractor, but only when the performance is as desired by the customer.

5. In the first two or three months, don't be too strict when rating the contractor, as it is helpful for the company to experience that the payment is a serious incentive and not a hollow promise like a carrot on a stick that cannot be achieved. Later in the project, the rating may be stricter, but the contractor should be informed about the tightening of the rating to not be surprised with changing rules.
6. Ratings multiplied with the weights for each criterion give scores, and when the sum of the individual scores achieves the passing score, the award fee will be paid.

Figure 6 shows an assessment sheet for the contractor named Red Ant. A passing score was set at 396 points or 72% (out of 550 points), and with an actual score of 411 points or 74.7%, the contractor is entitled to get the fee for this month.



**Monthly Award Fee Assessment Sheet**

Contractor	Red Ant		
Month:	Jun-15		
Fee earned and awarded:	Yes!		
Maximum score	550		
Passing score for award payment:	72% (= 396)		

Criteria	Weight (W)	Rating (R)	Score (W × R)
Communication: Proactiveness, responsiveness	10	5	50
Human resources employed: Aptitude, team spirit	7	8	56
Safety protocols: Compliance, communication	9	7	63
Documentation: Timeliness, correctness, quality	6	7	42
Change requests: Responsiveness, management	5	4	20
Management attention	8	10	80
Execution of task orders: Pace, correctness, attentiveness	10	10	100
Total score:			411
% achieved:			74.7%

Signed	Approved
A Miller	JJ Kilroy

Figure 6: The assessment sheet for the contractor in a month, when the award fee is paid.

An important aspect of the award fee mechanism is that the payment should be made by the customer joyfully. Much better than a feeling of pity that the award fee will be paid is an attitude of delight and happiness: The good work of the contractor and hopefully of the other contractors in the project supply network accelerates the project, makes it less costly and reduces avoidable rework and distress to a minimum. In such a project, it is much easier to satisfy stakeholder requirements, win the support of managers inside the organization and have a good sleep throughout the night as the project manager. The award fee is just a share of these benefits, and if the contractor has fairly earned that, the customer should consider it good news that the fee can be granted.

### Benefits of the Award Fee

On top of the benefits described above, the award fee brings more benefits. The project manager on contractor side has a business case that he or she can use in discussions with his or her own management to arrange more commitment and investment in the customer project. An additional investment of \$100,000 for the project does not seem unreasonable when it brings the opportunity to gain \$200,000 in return, and when the chance to earn this amount is not in the far future but at the end of the current month. Carefully used can the award fee bring the customer into a VIP role with priority treatment over other customers.

For the contractor, the award fee assessment is also a quick and simple feedback form, which tells the project manager and the organization what they have done well, and where there is room for improvement. This feedback is connected with monetary consideration, which gives it additional value and meaning.

Another benefit is the provision of the contractor with the financial resources needed to perform the project without risking the survival of the own organization. Most organizations looking for contractors will be very price-aware, while many contractor organizations are JAMs, just about managing. Many are at any given moment at the brink of insolvency, and a minor incident can push them over the edge. A bankrupt contractor can cost more money to the customer than what was originally saved by selecting a “cheap” vendor. Stabilizing the contractor on the monetary side, particularly when it is a small company, may protect the project from the troubles that a ruined contractor brings.

One should not forget that these benefits for the contractor are preceded by a set of benefits for the customer regarding cost, time, distress and many other factors.

The most important benefit is probably the materialization of a *Mission success first* paradigm. The seriousness of this paradigm is emphasized by the award fee and the benefits from its implementation are immediately visible and tangible to the parties involved.

### Is the Award Fee Addition to a Contract a Universal Solution?

Probably not. It is a situational solution for contractual relations that meet some prerequisites:

- The relationship should be planned to last for several months, so that the award fee will be paid often enough to be considered a normal form of additional payment, not as something exotic and unachievable.
- The customer must be in a position that allows assessing the performance of the contractor. Situations are not rare, when the contractor works in isolation from the customer, and the customer cannot directly assess which of the contractors meets the defined criteria and to what degree.
- It may be also difficult to clearly assign successful contribution to the project to a specific contractor. Often, it may be unclear, which contractor it was, who put the project on a fast track and helped save costs.
- A contractor may have the feeling that the award fee does not reflect the dimension of the contribution, while in the company's perception, the fee paid to another for another contractor may seem exaggerated. Giving all contractors a sense of fairness is often difficult.
- The performance of contractors is often dependent on provisions and enabling services to be delivered by the customer. It may be difficult to understand whether dissatisfaction with the work of the contractor has its origins on the side of this company or is caused by insufficient support from the customer.

## Conclusion

While project supply networks are becoming more ubiquitous and complex, project managers are not sufficiently prepared to structure and manage them to the benefit of the project and its customer organization. Distrust among the parties involved under contract can lead to massive performance problems and in a worst-case scenario end at court. Poor communications and cooperation among the members in PSNs can also wreak havoc and drive a project into disaster.

Project managers in charge for complex PSNs need new tools and techniques to manage complexity, dynamics, and opaqueness in their projects. These techniques should support a *mission success first* paradigm, which places *completing over competing*. An example is the rolling award fee, which gives contractors immediate feedback on their performance, motivation to go the extra mile for the customer and the project, and gives them also the monetary resources needed to do extraordinary work for the customer.

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## About the Author



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