Contracts for Advanced Services:

A Playbook to Guide from Concept to Completion

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1 Foreword: From the Practitioner Perspective…

When selling advanced services, the conceptual and contractual complexities of such contracts are all too often underestimated. Experience shows that this is especially true when selling into traditional B2B markets.

The developing and longer-term nature of advanced services and the need for collaboration between seller and buyer should be reflected in the contract. For example, the traditional approach of using 'specification and data sheets within specified operating parameters' for service contracts will need to be replaced with contractual structures reflecting the dynamic, evolving nature of advanced service contracts.

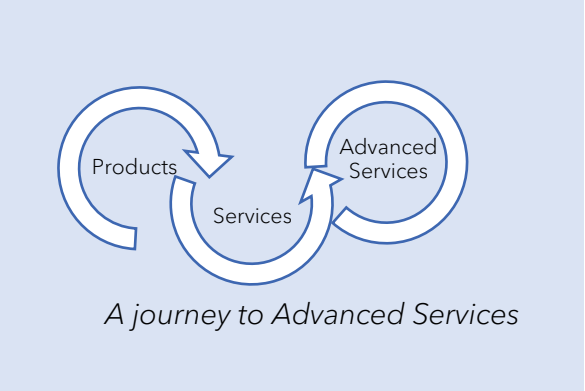
This creates challenges for both sellers and buyers of advanced services: traditional mind-sets must be overcome, high-level advanced services outcomes / measures have to be agreed, flexible / adaptable contractual framework should be developed, and collaborative structures are required in the contracts.

As outlined, when selling advanced services, it is critical to address the evolving nature. Adaptable contracts, often specifically tailored to the buyers' needs, are required, which challenge traditional selling / buying strategies. In addition, advanced services also require adaptation of the sellers' and buyers' behaviors.

- Lars Hennecke larshennecke@aceadvisorservices.com
(June, 2022)

2 Introduction

Manufacturing firms are increasingly moving from product sellers to providing a bundle of products and services. This shift allows the customisation of value propositions for each customer, providing competitive advantage. These new offerings are evolving; progressing on a journey including outcome-based services to Product-as-a-Service, Servitisation, and most recently Advanced Services supported by digital technologies.



A journey to Advanced Services

Using the same core building blocks or modules within the manufacturing firm, the new configurations support different, uniquely-tailored offers to address the demands of different *(and sometimes new)* market segments.

As a commercial engagement, value propositions delivered by advanced services must be supported by long-term contracts to deliver financial outcomes to customers directly or indirectly through increasing equipment operation. While much of the recent focus on Advanced Services has fallen on developing operational capabilities for delivery, or developing the unique value propositions, this handbook focuses on contractual considerations. Legally binding contracts, tailored to the unique value proposition are needed, clearly defining the obligations for parties in the partnership.

From the market today, examples are provided of Advanced Services from GE Power and Rolls-Royce providing support service for operating the machinery their customers purchased. Both provide services on a long-term relationship basis or on a traditional transactional basis.

When provided on a long-term basis, the agreements offer significant risk transfer from customer to supplier. At the time of print, GE Power provides three contractual value propositions that align with the widely accepted models found in research literature:

- Price stability and availability of spares, repairs and field services
- Availability: 'power-by-the-hour' contracts
- Whole facility 'operational and maintenance'

Other firms, Hitachi, Alstom and Siemens, provide similar range of traditional services for trains. Hilti provides another leading example of 'service-as-a-product' through its 'fleet management' and 'tools on demand' offers, where it provides all of the necessary power tools and ancillary equipment for a building project. Hilti's offer focuses on the building site productivity through ensuring that the tools are at site for the project when needed (an availability enhancement). Again, a significant risk transfer is at the core of these offers.

Similar models are offered by CAT (construction equipment), and Xerox (printing services). Other firms, often smaller firms, are moving into providing Advanced Services where services are bundled with products or consumables, with contracts to deliver outcomes.

In this handbook, we aim to highlight the areas of concern, matching these areas to existing knowledge to address that concern. **The handbook aims to facilitate the journey of delivering Advanced Services with a contracting process** that supports creativity in value propositions for the customer.

We draw from engagements with practitioners who currently deliver- or are in the process of developing Advanced Service contracts. Several areas of concern exist about how current contracts and contract-related knowledge are not keeping up with the increasing levels of ability to operationally deliver Advanced Services. During face-to-face sessions with academics and practitioners, many questions and concerns were raised and presented here in the speech bubbles accompanying the text.

How do I learn? How do I establish a long-term relationship… and kind of have the flexibility to add bits and pieces here [to the contract]??

When you do the conceptual sale, you talk about the value proposition and all of that… you raise certain expectations. That expectation needs to be met by your execution team, and writing these expectations into the contract is very, very difficult.

Examples of existing, implemented contracts are used to illustrate specific points of focus for practitioners along the contract development process. The aim is to address the question of what areas of traditional contracts and agreements are insufficient for such services. Services where created value is known to evolve over time, emerging in different forms over the life of the engagement.

Insights from these engagements and materials in the public domain inform this handbook. It provides a practical guide that covers the key stages of:

- the development of both the offer and the contract
- the contracting stage
- the execution/delivery of those contracts
- the long-term governance of the engagement.

This handbook is structured into these four sections following the lifecycle of the contract, illustrated here, and will be described in more detail in this handbook.

The ***'Offer Development'*** Phase contains multiple perspectives, as shown in Figure 1, below. This has been further detailed to provide a separate focus on Buyer, Seller, and Delivery Network readiness levels, as well as a section describing the maturity of the market in which the service is set. This separation comes from observations from the interviews and engagements with practitioners while researching this topic. Each of these is described in later sections.

The handbook then provides detail on the ***'Contracting'*** Phase, where the value for both the buyer and seller of the Advanced Service is identified and made explicit. This section details the process of identifying mutually-agreed metrics, target setting, fee structure, and dispute resolution.

The ***'Delivery/Execution'*** Phase is then illustrated, highlighting the need for operational transparency, data collection and the reassessment of measures, cashflow management, and margin management. Each is discussed from the perspective of the various members of the partnership.

Finally, the ***'Governance'*** Phase spans both the Contracting and Execution/Delivery Phases. In this section, the handbook provides insight on readjustment of metrics during the engagement, emergent value creation in contracts, joint learning from challenges and failure, and key areas of focus at the end of the contracted term of engagement.

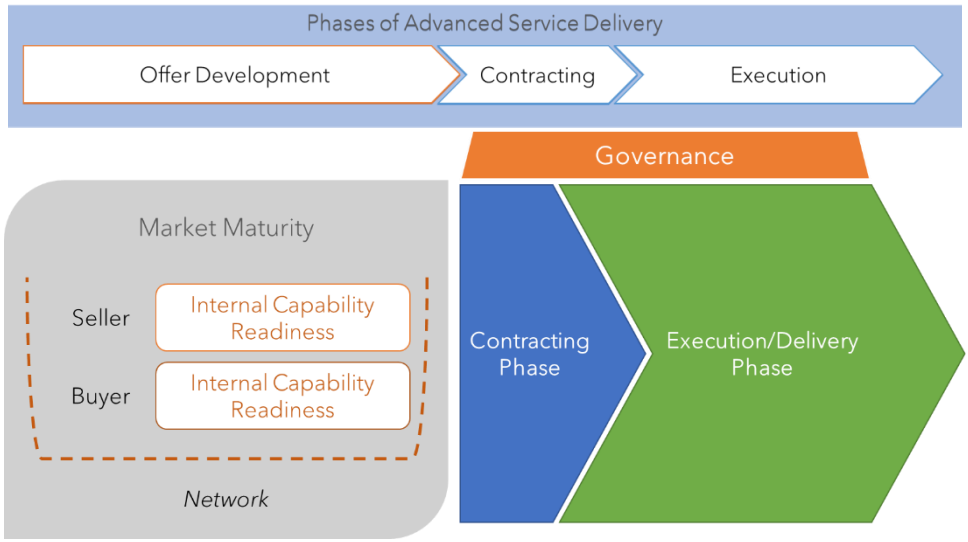


Figure 1 - Important Phases Related to Advanced Service Contracts

2.1.1 Links to Product Lifecyle Perspectives

The lifecycle perspective for advanced service contracts and product lifecycles are intertwined, yet can be quite different. The lifecycle of a service agreement can be considered using the product lifecycle approach (Figure 2) in which the "*beginning of life*" considers the translation of the value proposition into a contract, thus entering the negotiation phase of the service agreement. The "*middle of life*" then deals with delivering the services under the agreement. "*End of life*" deals with the expiry or termination of a contract and/or the potential re-negotiation of any such agreement.

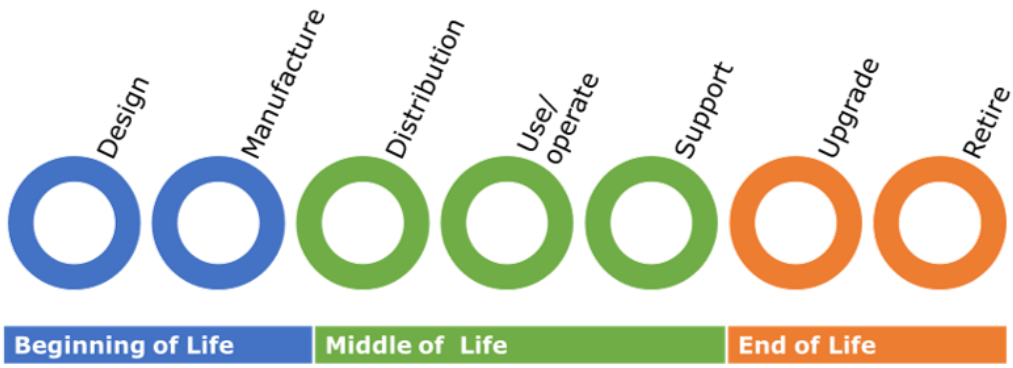


Figure 2 - Product Lifecycle Phases Drawn from Practice

General Electric uses the terms ITO (or inquiry to order) and OTR (order to remittance) to describe the beginning of life and middle of life phases. This creates a separation of the sales process from the delivery (execution/fulfilment) process.

The customer may consider lifecycle from an asset management perspective, where "life" starts following installation or delivery. The seller is more likely to take the perspective of the product lifecycle. The Advanced Service concept requires the selling manufacturer to extend its horizon. During the longer-term engagement, it must gain a greater understanding of the middle-of-life and end-of-life phases.

Advanced Service contracts transfer several types of risk from the customer to the seller. **Ownership risks, performance risks, and technological risks might all move away from the customer**. Technology usage and its contractual implications are discussed further in the next section.

An Advanced Service contract can limit or extend these opportunities for performance improvement:	Support the introduction of new technology into the market by transferring more of the technology risk to the supplier.
	During the middle of life, a supplier can provide operational support and maintenance focused on the equipment, or on the customers processes, and align outcomes.
	The end-of-life can provide sub-system upgrades to improve technical performance of the equipment. These improvements can roll into a new agreement. It also provides opportunities for the manufacturer to retire & replace equipment.

A contract is easier to redesign than physical equipment, and due to new technology or market conditions it may be necessary to start a redesign process before the end of the contract term. Renegotiation carries price risks, as the customer may want to reduce contract price. Nevertheless, renegotiation provides all parties the **opportunity to refresh their collaborative commitments** to each other on a different basis.

"It is a team game because there are a lot of things that suddenly crop up."

2.1.2 Digital and the co-creation of value and knowledge

Digital technology is core to enable value propositions to be delivered in an Advanced Service. However, digital technology also creates new legal and regulatory issues for Advanced Services. Because data analysis is crucial to creating the Advanced Service, contract partners must negotiate ownership, connectivity, and storage of data collected during the engagement. Data ownership and use of the meta-data, or derivatives of the data, often creates complex issues for the advanced service agreement.

"During the sales process, most people focus on… 'all the data is mine', but a minimum is needed for contracts (e.g. for power by the hour)."

To start with, it is often not very clear who "owns" data that is generated. For example, a sensor may be monitoring use (by the customer) of a machine (owned by the manufacturer), raising the question of who can claim ownership that operation data.

Similarly, arrangements between customer and seller regarding the availability of this data are usually under-developed. Where there are concerns about intellectual property and/or security issues, data sharing is known to focus on data that feed metrics for KPIs in those areas. Even still, a lack of trust often exists. Organisations worry about the reliability of data generated by sensors and other digital tools. As a result, customers can be faced with messy or incomplete sets of data.

Contracts that specify frequency and form of data sharing have helped address the problem of incomplete data. Contracts are less effective when it comes to reducing the messiness of data and transforming data into useful information. Here, relational mechanisms are usually more effective in providing confidence to both parties that the other will not misuse this information. This creates an acceptable, shared mutual vulnerability in the relationship that promotes vigilance. Partnering organisations have a shared interest in leveraging the potential value of the data. Hence, they need to consider this as an innovative journey with an emerging and changing value creation, rather than simply a transaction that can be contracted.

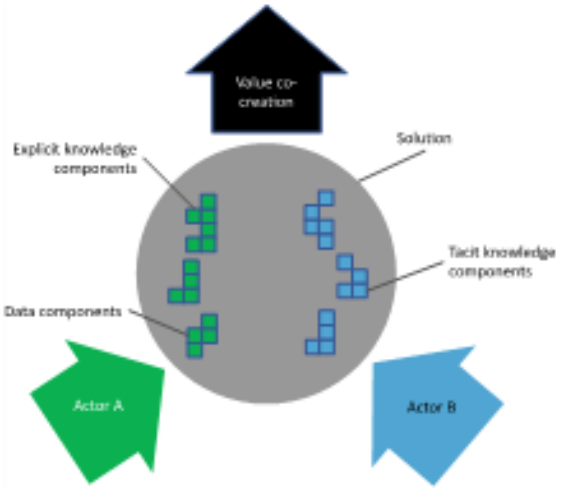


Figure 3 - An illustration of value co-creation in Advanced Services

Connectivity can also provide difficulties, yet without connectivity the value of the services provided would may be significantly degraded. For example, without connectivity a pay-per-print business model cannot work. Billing fails as does the automated replenishment of paper and toner, and remote problem solving becomes impossible.

The storage of data may also be problematic for some agreements. Restrictions on location, capacity, and duration of storage may limit the 'cloud' storage options available. Regulations about 'personal' data may differ between countries or regions (*i.e.,* GDPR within the EEA). Such personal data may be required to deliver the full value proposition.

Throughout this handbook, the dominant assumption is that Suppliers and Buyers are acting *'in good faith'* during the engagement.

Advanced Services show stronger levels of performance when aligned with collaborative partnerships; while showing higher rates of failure when adversarial in nature.

2.2 An introduction to Contracting

The process of Contracting involves systematically and efficiently creating, implementing, and managing contracts for the purposes of maximizing operational and financial performance, and reducing risks. This concerns the creation of contracts, as well as the subsequent implementation and management of the designed contract. Specifying the contract well, that is to say, covering all important elements with a sufficient level of detail is challenging in all contracts. However, the challenge is particularly difficult in more complex settings.

General Contract Types

In practice, contracts may take many forms. Specific examples include:

- lump sum
- fixed price
- fixed price plus incentive fee
- cost-reimbursable contracts
- unit rate
- agreements with price adjustments

For a structured example, see Appendix A

To deliver complex offerings such as Product-Service Systems, Servitization, and digitally enhanced Advanced Services requires the identification of instances in the value chain where value can be co-created. Co-created value emerges from a relationship with enhanced trust and communication in information sharing, often facilitated by digital technologies. This creates a challenge with the fitness of current contracts.

Contracts to deliver services are widely based on traditional models of value-in-exchange. In contrast, new models focus on the value co-created during the engagement, or value-in-use, often enabled by data collected by digital technologies.

However, while advances in digital technologies greatly enhance the variety, frequency, and accuracy of measurement, this does not necessarily mean greater understanding. Organisations often struggle to make sense of all the data that is now at their disposal. There are many examples of data being collected that is unnecessary or irrelevant to key measures.

For digitally enhanced Advanced Services, data identified as relevant to driving optimal performance is captured and analysed by the collaborating organisations to further enhance the value proposition. **As the value proposition evolves, this may result in a poor fit between the data-driven value proposition and the original contract** designed to support the engagement.

How do we renegotiate the performance commitments over time, and how do we [perform] governance of the contract?

This concern has been raised by practitioners, researchers, and by policy-organisations who see the gap growing as new forms of service are developed that rapidly-respond to changes in the engagement. The changing nature of the engagement requires changes in the function of the contract.

The function of the contract is typically considered to be that of **'Safeguarding' the participants**. The contract clearly details the written and legally binding version of the value proposition,

containing obligations for both parties. A well-specified contract stipulates the rights and obligations of both parties, and explicitly states how various future situations will be handled. This approach is generally considered to help to avoid opportunistic behaviour on the side of the seller, 'safeguarding' both sides in case of disagreement.

Contracts must now contain the ability to adapt to the emergence of change. In addition to operational delivery of the value proposition, Advanced Service contracts coordinate effort of buyers and sellers of Advanced Services to adapt together.

3 Developing the Offer & Contract

In delivering service, there is an interdisciplinary, network-spanning challenge for all contracts. The value proposition is written by marketeers and operations specialists, the services are often delivered by engineers and technicians, the contract is written by lawyers, and the engagement is often governed by a firm's risk management processes. Meanwhile, purchasing in the buying firm is tasked with acquiring services and may themselves be poorly prepared to buy advanced services.

To now, Outcome-Based Services and Advanced Services have been linked almost exclusively to large, established organisations. Most previous examples focus on a complex, capital-intensive, engineered product. In services linked to power generation, or aircraft there is a long lifecycle, and the significantly high maintenance levels. Operational failure due to breakdown can lead to very costly consequences for disruption, leaving the customer to face the realisation of a high-impact risk.

"My market is just not ready."

These terms are relative and may yet apply to smaller organisations and networks for projects of reduced complexity and shorter lifecycles. However, experienced practitioners are offering Advanced Services at the SME level, but the approach requires adaptation and skills development to ensure that both buyers and sellers are ready for the new approach (*illustrated in Figure 4*).

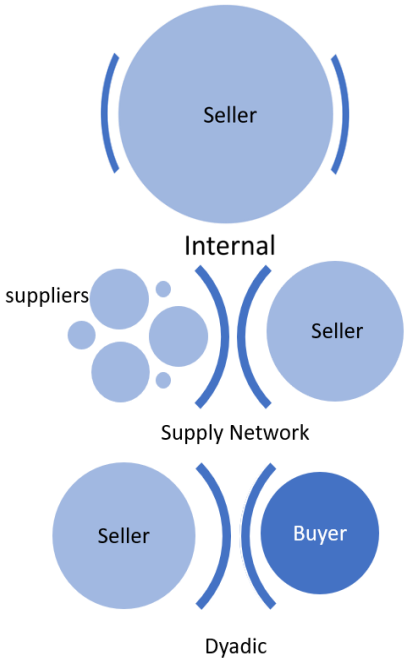


Figure 4 - Readiness Types for delivering Advanced Services (based on Essig et al., 2016)

In the recent past, a heavier emphasis was placed on ensuring the readiness of the seller to be able to deliver Advanced Services. This '*Internal*' readiness ensures the operational ability to deliver the new value proposition. More recently, driven by engagement with businesses attempting to deliver Advanced Services, the importance of readiness across the '*Supply Network*' has emerged.

Operational Network Readiness

The need for *operational* readiness within the network of buyers and suppliers is discussed in the *Network Readiness* section.

The readiness of partnership, or the dyad of the buyer and the seller, can be assessed separately. The '*Dyadic*' readiness is the clear and obvious link to the contract that supports the agreement.

3.1 Financial issues with advanced service contracts

There are financial aspects that need to be considered from both ends of the contract. Advanced Service contracts establish cash flows via the revenue model. But at the same time, they embed risks. **The transformation of the cash flow helps to move costs from a fixed structure, to a variable one** (*i.e.*, Power by the hour). They can also make billing simpler (*i.e.*, Hilti fleet management); important when use of an asset is low and can be 'shared' with others. Figure 5 shows some of the changes Advanced Services can have on a business model; how risk can affect cost structures and revenue streams.

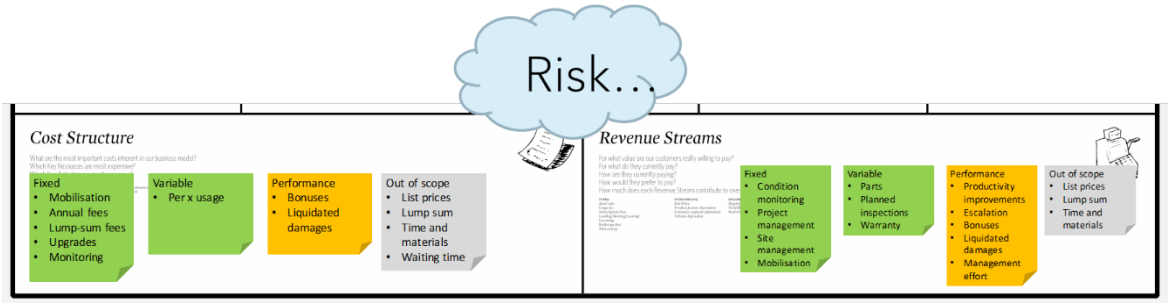


Figure 5 - Advanced Services affects a Business Model

3.1.1 For the customer:

An advanced service contract can create ongoing liabilities on the balance sheet. For example, leasing (a long-term commitment) is treated differently to rental (a short-term commitment). This may lead to the decision to pay more to keep the liability off the balance sheet.

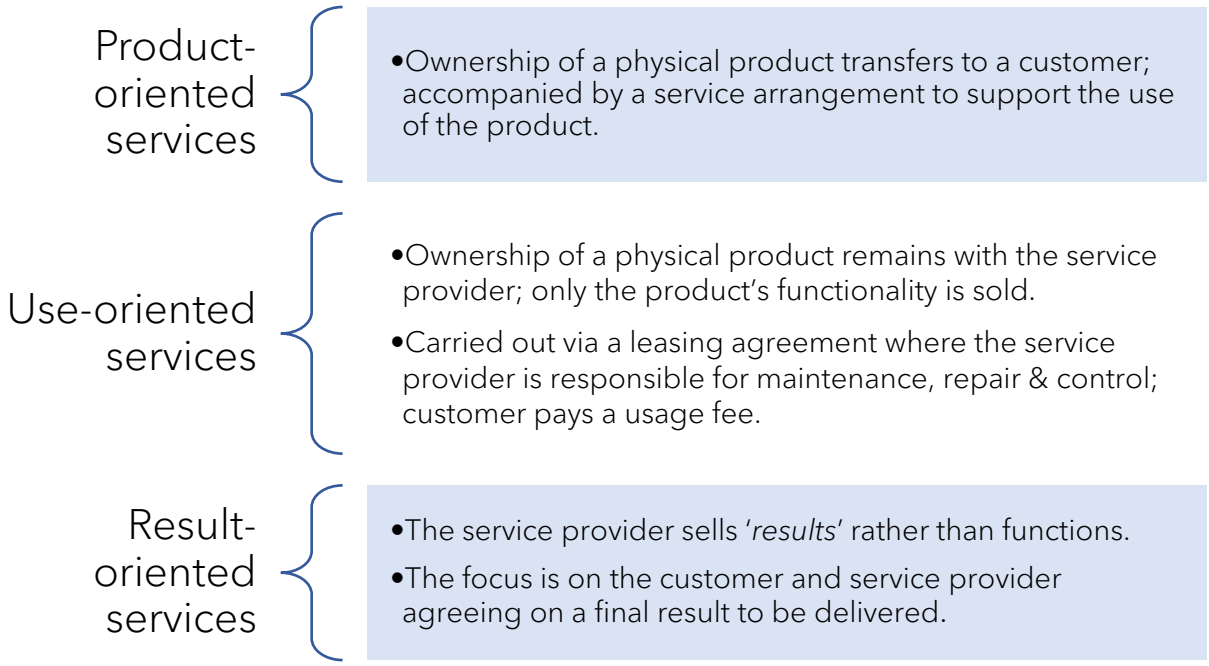
Transforming some costs into a form that aligns with their income can, for many businesses, be highly beneficial. It removes operational risks, while at the same time shifts technical risk to the seller. This approach also enhances predictability in cashflows. For the buyer, these changes may enable different strategic decisions to be taken; many underlying capabilities may be similar yet bundled together differently. This segmentation is important for sellers to understand in order to customise the value proposition.

3.1.2 For sellers:

Accounting approaches will need review and/or adjustments in Advanced Services. Revenues associated with the service will become "Percentage of Completion" (POC) based. This means changes to the firm's cashflow management approaches and revenue recognition processes; a requirement of International Financial Reporting Standards (IFRS). In the end, the seller may choose not to sell the asset. This resembles rental agreements, or 'product-as-a-service' value propositions, where the End-of-Term results in return or transfer of the asset.

3.2 Asset ownership with advanced service contracts

One approach to asset ownership in Advanced Service contracts has a simple three tier approach:



The model overlooks the fact **a mix of these models can exist in a single partnership**. Or that additional actors may take over the asset ownership and lease the equipment to the customer. It is normal for aircraft and the engines to be owned by a financial lessor and leased to the airline. The airline then pays a daily fee for the aircraft. The lessor requires the airline to use a 'competent party' to maintain the engines, ensuring delivery of 'power the hour'.

In contrast, for Hilti the equipment they provide for rental is on the Hilti balance sheet. At CAT, there are examples where dealerships own the assets and offer rental to the customer. Deep technical support is offered directly from CAT, without the dealership's involvement. The structure of ownership in Advanced Services is evolving, requiring further engagement with Accountancy and Finance knowledge bases.

IS YOUR CUSTOMER READY TO BUY ADVANCED SERVICES?

3.3 Buyer – Internal Readiness

The customer side of the partnership carries its own considerations and complexities. One cannot simply assume that customers will just accept a new business model. The buyer needs to understand how it impacts on their business. There is still a journey between '*liking*' the value proposition and then contracting the actual services.

When making the move to Advanced Services, organisations who reflect the characteristics of 'early adopters' can be helpful for a smoother transition. These types of customers are likely to be open to something new that can provide a competitive advantage of some sort. Some early adopters may even be disgruntled with existing service offerings.

The buyer needs to have the capability to understand new model. This may seem obvious, yet if impact or integration with their business model is not understood, it is unlikely to lead to a fruitful

relationship. At this point, testing different options with the customer can help assess their understanding. Collaborative testing of options reinforces the idea that the value proposition is not about 'needs', but rather understanding the firm and their value creation process. Then, agreeing together on where and how the collaboration can begin.

Experience from practitioners shows that once discussions start, the buyer can sketch-out a solution (or a 'Heads of Terms') based on seller ideas and inputs. The buyer then requests a contract with the assumption that the seller has a boilerplate contract for use as the basis of an agreement.

Advanced Service contracts often contain metrics or KPIs that help measure outcomes of the engagement. This is important for alignment of outcomes. In basic terms of exchange, this means that the seller earns additional compensation when the buyer sees higher rates of success. Many contracts for Outcome-Based Services and Advanced Services have a target of five KPIs that are generally sufficient to measure the outcomes and demonstrate success. In some cases, metrics are not needed for financial purposes but may still be necessary for describing value creation. Where there are no direct payments, a report is needed that allows the firm to demonstrate the success of its suppliers and the overall engagement.

3.3.1 Contingency: What if it goes wrong?

Buyers of the Advanced Service should understand the potential impacts of any failure: financial, reputational, supply chain, or otherwise. The **cost-of-service delivery failure can be added to the overall price** when assessing the value proposition. Sellers of Advanced Services often underestimate the impact of failure within a customer's decision-making process.

On both sides, there is frequently optimism, an assumption that it will all work. Experience reveals that this is not the case. Customers have their individual approaches to risk and their tolerance of risk which should be shared and reflected within contract development; ideally, in the early stages of co-production of the value proposition.

With traditional transactional sales, buyers understand that there is limited commitment and that they hold the ability to switch suppliers. With Advanced Services, buyers are in effect outsourcing services. In the event of service delivery failure, they may have to relearn the competencies they outsourced, correct the failures, and switch suppliers. Significant risks and related costs, that should be reflected in the contract areas covering cost-of-service failure.

IS YOUR FIRM READY TO DELIVER ADVANCED SERVICES?

3.4 Seller – Internal Readiness

The readiness of the seller to provide advanced services is critical to the ability to deliver any value propositions to customers. Advanced services represent a step change in the business model and have the ability, if done badly, to undermine the confidence and perception of a sales team within the organisation.

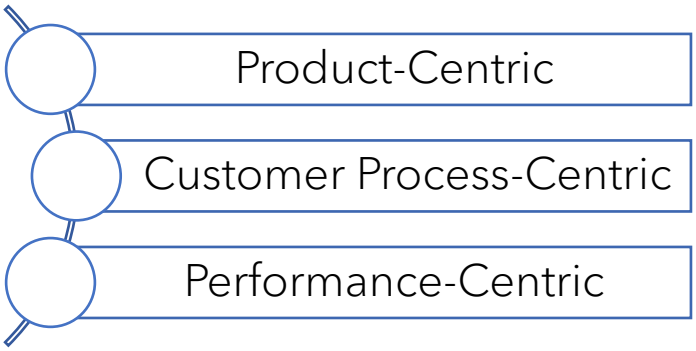


Figure 6 - Types of Value Propositions in B2B Relationships (From Keränen, J., Terho, H., & Saurama, A., 2021)

Sales teams move from a well-known, established routine of selling products that meet customer-specified specifications, to one where solutions are sold based on value-in-use. Figure 6 shows the different value propositions associated with Advanced Services. The offer could adopt a product-centric perspective where focus is on benefits and value created around a machine; a customer process-centric approach where the focus falls on improvements offered; or a performance-centric proposition where the focus is placed on outcomes rather than inputs, and the seller bears the risk for value-creation process that must be performed by the buyer.

Launching an Advanced Service can be made easier with some strategic customer selection. In the previous section, the concept of choosing the right 'early adopter' customer was discussed. From the seller's perspective, this can reduce friction associated with the launch the Advanced Service.

The buyer may well be a new customer uncomfortable with buying the traditional way; an existing customer entering a new market hoping to remove risks; or an existing customer seeking a lower risk from investing in 'new technology'.

Approaching these likely customers with an open value proposition can lead to discussions to identify a common understanding of the shared outcome. This may take several iterations and may not align with traditional approaches to selling products. This stage is more aligned to a business development activity rather than a traditional sales process.

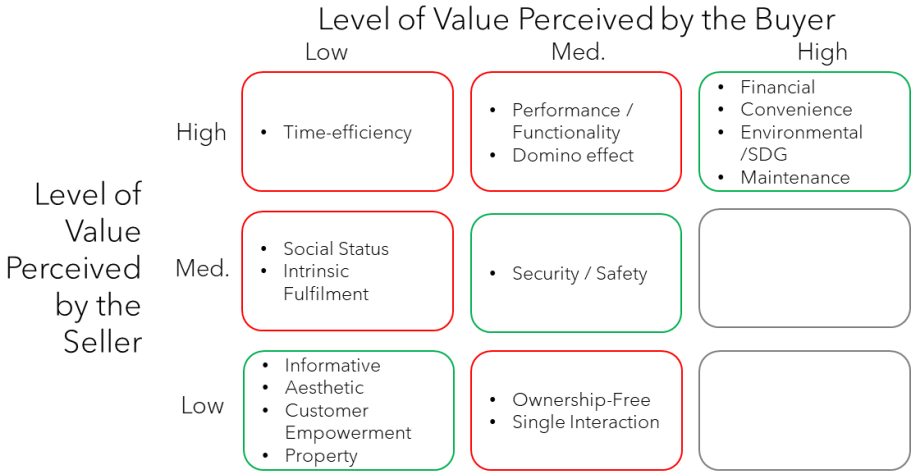


Figure 7 - Relative Value of Factors offered in an Advanced Service

Figure 7 shows how the value of Advanced Service offerings may differ between customer and supplier, and that there is likely to be agreement on only a limited number of values (*i.e.*, the green-bordered boxes). **Sellers of Advanced Services need to carefully contemplate other values and how they might be appreciated by buyers**. The figure suggests that while sellers may put time-efficiency as a core feature of their value proposition; their customers may not be so appreciative of this. In contrast, buyers of Advanced Services seem to value being ownership-free, something which is not generally emphasised by customers.

This implies that the value proposition will likely differ from customer to customer, requiring open discussion to avoid assumptions that lead to misunderstanding and misalignment.

At early stages, a benchmark price helps the buyer understand how the service can fit in their environment. The detail contained in examples of revenue models, fee structures, illustrative main performance metrics, and a model of sharing the pain and gains from any such agreement all help provide contextual detail for prospective buyers.

3.4.1 Understanding the Cost Model

When building an Advanced Service, **understanding the underlying cost model is vital**. This is *not* so that the proper margin can be applied, but rather to understand the sequence of individual activities to construct a detailed cashflow for the project. Internal operations data (perhaps from the firm's ERP system) can be compared to the prospective buyer's benchmark costs. The underlying model can be used to control spend and support sales recognition during the engagement.

The cost model must have input from those who understand the individual tasks that generate the costs.

Building the cost model with the input of the employees and partners who understand the individual tasks that generate the costs improves the accuracy of the model. It is very easy to miss a task or cost driver, or to assign costs to the wrong area. Some costs are associated with the operation of equipment and are therefore variable costs, whereas others are fixed. Thus, building out the operational assumptions that drive the variable costs can be important.

During these early stages of engagement, where the value proposition is formed**, creating a cost model of the buyer's costs can make it easier to understand their businesses' value creation process**. Modularizing the model will help identify crucial bundles that the advanced services value proposition will address. The individual modules can be used to model changes in roles and responsibility for particular actions. For example, provision of consumables could be the buyer's or the seller's responsibility, and this agreed shift is reflected in the shared model.

3.4.2 Linking Costs to Readiness

The linking of the cost model with the capability/resource readiness provides an iterative loop. Does the supplier need to hold the capability and the resources to deliver a task, or could the customer or a third party take the responsibility? This is very similar to project working, where roles and responsibilities can be allocated (or reallocated) as necessary, or as preferred. In some cases, the resources are provided by key partners, coupling with the network through collaborative working. In many cases, digital capabilities would need to be developed or outsourced. Seller risk management capabilities is another area where internal understanding and readiness is required. However, the topic of risk is explored in greater detail in the Partnership Readiness section.

3.4.3 Risk Tolerance – Seller

In Advanced Services, the risk profile for the seller will change. Long-term agreements must face new, emergent issues. These all affect **the level of Risk Tolerance of the seller**. Issues such as inflation become risks to which the seller will be exposed. On a transactional basis inflation impacts are limited, whereas with six-year-plus agreements inflation can become an issue of significance.

Risks associated with other areas, such as logistics or commercial project management, may become concerning for the firm due to the multi-year contract exposure. Technical risks (*i.e.,* equipment performance) may also give rise to commercial risks, or 'pain/gain' sharing. A new approach may be needed for the seller that more closely resembles actuarial calculations to better understand any risk decision. Figure 8 provides a generic payoff chart for Pain/gain sharing that can help parties to understand how the sharing of risks can impact revenue.

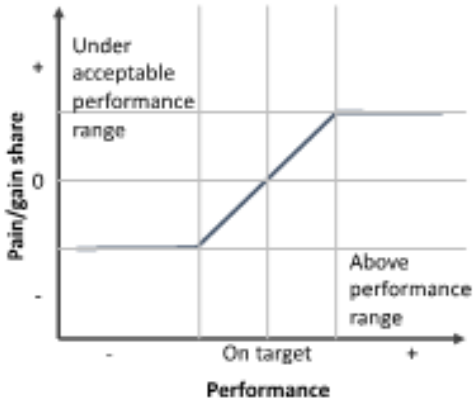


Figure 8 - Payoff Chart for Pain/Gain Sharing

Risk tolerance is an emotional topic. It should be treated with empathy and understanding. **Just because a risk is understood, doesn't necessarily mean that one side is willing to own that risk**. This only begins the stage of negotiating the pain/gain associated with taking on that risk.

Adoption of new risks can affect the seller's willingness to deliver the service. It is a change in the firm's business model. The disruptive model changes the sales process, typically from a transactional model to a consulting-style model. Not all sales managers will be able to make the transition. The new approach requires commercial management of the risks and the delivery. It has impacts in Finance, in how sales are recognised and rewarded. If there is a key product at the core of the offering, it is likely that logistics will need to be enhanced.

For all these reasons, the final sign-off on adopting the change in business model is often with senior management or the board. It requires strategic change. In some cases, it has resulted in the cannibalization some of the traditional business, while opening new channels for the advanced services.

3.5 Network Readiness

Alongside individual skills, the seller of an Advanced Service commonly needs a network of partners and suppliers in the value chain. Readiness of the network of delivery partners is equally important as individual readiness of the seller.

"Risk… it's a team effort."

The network provides additional resources, or provides local content in those cases where the seller's costs are too high or reaction time too long. This is not limited to small firms or start-ups. CAT use a network of franchised dealers to provide local equipment sales and to coordinate services. Conversely, ABB Turbocharging (*now Accelleron*) developed an external service network to allow them to deliver transactional and Advanced Services to their customers.

Alliances with key partners can be helpful, but statistics show that 70% of them fail. Role definition for potential partners should be clear, but **a critical success factor for a partner is the willingness to collaborate**.

"Learn to work with your local partners or agents to provide the first line of support, they understand the local cultures."

Unless both parties share similar values, it is unlikely that they will be able to successfully collaborate no matter how well the resource needs technically align. Research shows that collaboration is built upon people and their ability to work together. Collaboration relationships need to be nurtured to maintain trust. Prior to any sort of formal contract for delivery, the relationship should at least agree and align:

- objectives
- compliance culture
- internal conduct & procedures
- communication style & preferences
- ideas and goals for the collaboration

Other than network partners that provide resources, a broader consideration of the relevant network parties could lead to new actors with new roles being identified. Here, the term eco-system (as opposed to supply network) is appropriate. For example, there may be an opportunity to transfer risks to parties who are specifically competent to manage them and thereby lower costs.

"When objectives are similar and trust is mutual, timely and clear communication will be able to solve any problem"

It also provides the opportunity to use revenue sharing models that also share risks. An example in the manufacturing environment is with CFM, the joint venture between GE Aviation and Safran Aircraft Engines. In the power generation industry, a revenue sharing agreement can be in place to supply the turbine and compressor sections of the turbine. Costs and risks are then placed with the individual partners in a form that is close to a '*back-to-back'* agreement that places part of the risk with others' suppliers.

Good practice from project working is for risks to be allocated on a mutual basis to each partner, and managed though agreed metrics called Collaborative KPIs. **Collaborative KPIs relate to the mutual responsibilities of buyers and sellers for a jointly-desired performance**. This means that where performance targets are not met because the seller missed a specific sub target, the buyer pays less. On the other hand, when it is the buyer that does not deliver, the seller is not punished for a lack of performance. Rather, the buyer incurs the extra cost associated with correcting performance and/or lost sales.

Existing collaboration contracts between two partners may not be applicable for a long-term relationship, or they might be based on a supply- *(of parts or services)*, distribution-, or agency agreement. Where a sub-contractor provides a major contribution to the Advanced Service agreement, it may be necessary to setup a more formal agreement (*i.e.,* a cooperation agreement) clearly defining the allocation of tasks, risks, and the fee structure. This is common in the project domain, yet is often overlooked within the service environment.

In services, it is often necessary to work differently and more intensively with a sub-contractor. For example, procurement may demand lower prices and longer payment terms; whereas for the Advanced Service agreement, this may create additional risk within the supply side. Procurement practitioners and academics acknowledge the need for more attention and effort in drafting the collaboration. At the same time, there is uncertainty as to whether they have sufficient experience to do this properly for Advanced Services. Having to relinquish some Procurement control, combined with general challenges concerning metrics make properly designing the collaboration rather difficult.

3.6 Partnership Readiness

Both new forms of value and risks will emerge during the engagement. This means that contracts developed before meaningful engagement cannot be considered rigid or final. **The ability for the partnership to resolve contractual differences is linked to inter-firm communication to develop trust**. To accommodate changes that emerge during the engagement, provisions for communications and resolution structures can be more effective. Whereas rigid, uncompromising contracts can lead to the loss of trust in the relationship. Historically, increases in complexity in the value proposition were met with increasingly complex, rigid contracts. This approach was observed to lead to a reliance on contract negotiations, with a higher instance of relationship breakdown. Contracts seeking to address complexity through increased communication and risk-sharing tend to reach higher levels of performance.

"Partnership… Bring people along on the journey. Address and respect different mindsets."

Increased success is shown to come when contracted outcomes are aligned with the key success measures of the customer *(and potentially the customer's customers).* Fees structure also aligns with the value creation of the customer, and the consideration of the 'risk/reward' or 'pain/gain' sharing contained in the contract.

3.6.1 Who gets value and who gets risk??

Risk and risk allocation are not often discussed in traditional services, whereas in advanced services it is core to the value proposition. Risks may be understood in terms of delivery/execution risks and commercial risks. The breakout of the two categories is important. Generally, the contract creates the commercial risks, whereas the delivery risks (*or more explicitly the likelihood of failure*) do not change as a result of the commercial terms of a contract.

Often, commercial risks are the consequence of a delivery/execution failure. It is important to understand the risks and the contextual factors that lead to these risks, placing them in full view so that they can be managed. The risk framework of outcome-based contracts might be considered as a useful tool to help better understand delivery/execution risks and commercial risks.

Delivery risk can therefore be considered as the combination of uncertainty:

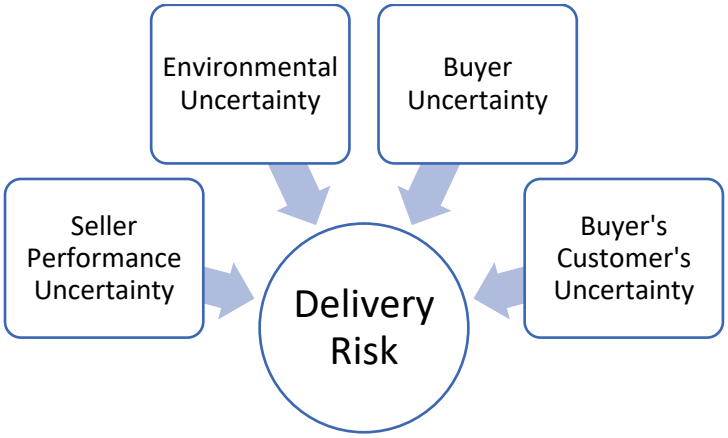


Figure 9 - Understanding Risk as a Function of Uncertainty

The value proposition, combined with the characteristics of the revenue model, creates a risk transfer from the buyer to the seller. For example, '*pay-per-print*' embeds the technology risk associated with the technology directly with the seller. The amount of risk transferred is usually reflected in the risk premium for seller: the more risk, the higher the premium. The amount of risk, and hence the level of the premium, also depends on the extent to which sellers can easily control and manage the risks imposed on them in the agreement.

In such agreements, it becomes **important to adequately check the seller's risk management capabilities as well as their willingness to bear risk**. This can be achieved by opting for Best Value Procurement practices, such as asking the seller for a Risk Assessment, Value-Added plan. The Value-Added part of the plan allows the seller to show where they will add value and in what ways, as a further demonstration of seller capabilities.

Through such a plan, the seller reveals known risks and mitigation plans are raised. Risks that cannot be addressed are identified; even the best risk management capabilities will not suffice to mitigate risks beyond a seller's control. While force majeure (i.e. environmental uncertainty) is typically considered in contracting situations, the uncertainty that comes with buyer or even customer-of-the-buyer involvement in service production and consumption is often and easily neglected.

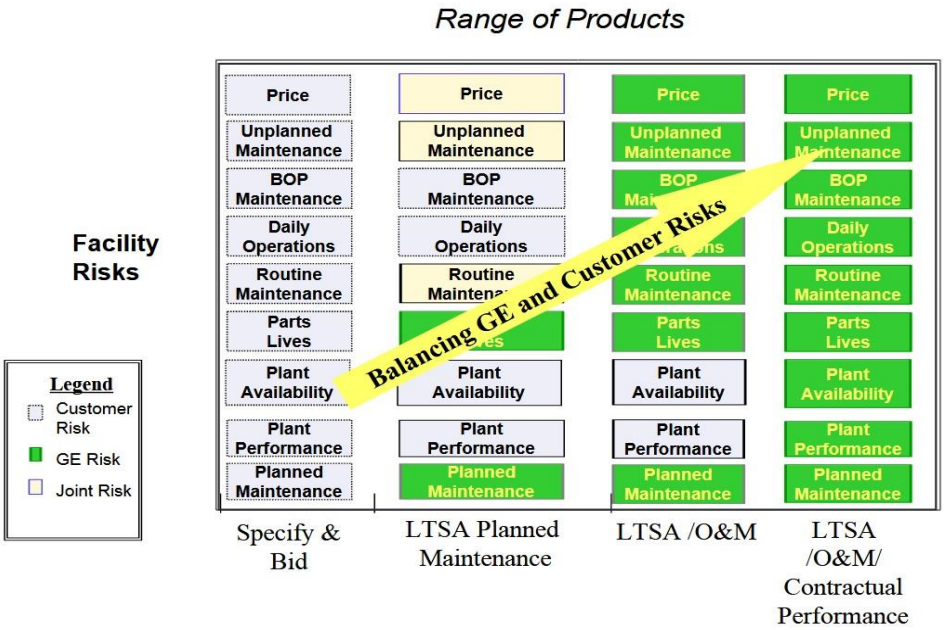


Figure 10 - Example from GE Power of risk transfer based on four different value propositions

This is counterintuitive because in service delivery; both buyers and sellers play a role in creating value through the engagement. This also means that both contribute to risk. For example, when the buyer does not meet their obligation to ensure temperature requirements for a room that hosts production equipment for temperature-sensitive products; a common scenario in food production. This situation is discussed later in the section: *Complexity reflected in Contracts*.

Consider **Error! Reference source not found.**, which describes graphically the risk transfer from the customer to supplier during the move from a traditional transitional relationship to advanced

services[1]. The figure also illustrates the modular nature of the business model that underlies the value proposition

3.7 Market – Maturity & Organisation Size

Cases of Advanced Services in practice have focused primarily on large, established organisations. The current guidance and wisdom based on empirical evidence draws from the likes of Rolls Royce, GE, and CAT where cash flow figures are well above £1 billion annually. This **raises the question about the appropriateness of the guidance and how it applies to small- to medium-sized businesses** (SME).

Similarly, these cases were also in industrial markets that are considered very mature, where the companies in those markets are very aware of the details in areas such as internal cost structures and margins of suppliers. In established markets where financial values are very high and concentrated in a few main organisations, production processes are very well understood. This understanding supports current innovation and/or cooperation across organisational boundaries. Again, these characteristics are not always reflective of the description of SMEs.

In current, ongoing engagements with SMEs in both the construction-services and food-production industries, exploring Advanced Service implementation revealed the need for much more preliminary development work. Development work was needed in several areas before the possibility of an Advanced Service could even be considered. Processes associated with delivery systems required a first-ever modelling to better understand customer- and supplier-interfaces. The network of suppliers, more fractured and with shorter-term commitments, required development of trust and a different approach to risk distribution and mitigation. Most of the participants had no experience of this approach to cooperation and collaboration.

The lack of empirical evidence, of applied cases of Advanced Services in SMEs, ultimately means that much of what is described in this playbook requires further application and observation. The impact of this for SMEs is, the path to implementing Advanced Services is likely to require a period of internal and external development before reaching an acceptable readiness level.

4 Contracting Phase

"Price needs to be 'about right', everything else is negotiable."

The Contracting phase is the sales/purchase process, and there are many differences with Advanced Services as compared to a traditional sales/purchase process. Advanced Services may address a new market segment and create a parallel organisational channel. In this new approach, the organisational faces around the table will change and the discussion will have to clearly focus on value creation for the buyer.

The outset of the contracting phase is focused on creating an understanding between the counterparties. This happens through aligning outcomes, expectations, and negotiations on any areas of concern. These agreements are all then reflected in the contract. With Advanced Services, the detail in what is typically called the 'small print' becomes the core of the offer. It is the written form of the value proposition, and when it is not well-constructed, trust is likely to suffer. Ultimately, this can cause a breakdown in the relationship.

[1] Table originally appears in Stoll, H. G. (2001). Creating owner's competitive advantage through contractual services. *GER-4208, GE Power Systems*.

The Contracting phase has a number of different stages with many different functions involved. An empirical example from the Oil & Gas industry reflects involvement from twelve separate departments, across five steps.

The first two steps in the process are remarkably similar to those for transactional sales and need no explanation here.

The development of a proposal starts with the parties coming to a collective agreement on expectations and outcomes. Creating joint understanding at this stage results in a better contract for all parties.

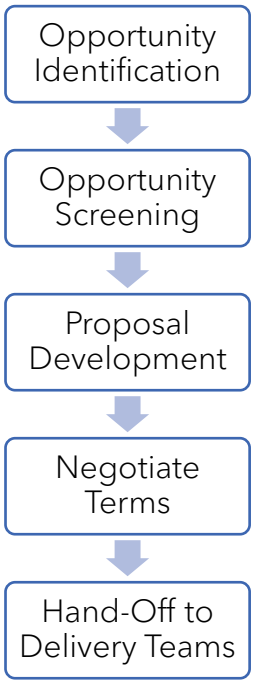


Figure 11 - Example Steps in the Contracting Phase

Once there is agreement on the general principle of the contract, the seller creates a model contract that includes the pain/gain sharing aspects. This helps later in confirming the contract margin and the project cashflow. It also provides fees to the buyer based on the operational assumptions. There is an art to creating a value-based fee structure, as it contains aspects of per-use fees and fixed fees. **Advanced Services have the potential to change input-based fees into outcome-based fees**. This can be a source of significant value for the buyer in terms of cash flow transformation; it may align their costs with their revenues.

The Heads of Terms, cash flow, and the operational assumptions allow the contract to be drafted. Typically, this is done by the seller (typically based on a comparable boiler-plate template agreement) and issued to the buyer. At the same time, the collaborating parties create a negotiation mandate. The mandate is important for understanding what is negotiable and what is not. These negotiations are mostly intended for learning and for adjusting the contract, if-and-when necessary.

ADVANCED SERVICES IN OIL & GAS

The development of a proposal alone for an Advanced Service in the Oil & Gas industry requires the engagement of multiple departments:

- Sales
- Finance
- Commercial Operations
- Risk Management
- Pricing
- Engineering
- Sourcing/ Procurement
- Production
- Quality Assurance
- Finance
- Contract Management
- Environment, Health & Safety

4.1 Negotiations

Negotiations should not start at page one of any agreement. They need to open with a discussion of the purpose of the service agreement. This allows gaps in the shared understanding to be identified early, preventing misunderstandings during negotiations.

These talks are typically led by a commercial manager, the counterparty to the procurement function of the customer, and supported by others. Experienced practitioners recommend

negotiations involve three people from each team. This approach ensures integration of different perspectives. In practice, more people are often involved, especially when 'Best Value Procurement' practices are followed. This approach requires the involvement of the teams on both sides that will actually engage in the project together.

No matter the diversity and number of people involved, the end game is to establish and agree upon an Advanced Service agreement. Closing the deal and handing the contract over to the execution/delivery phase is the goal. But not 'at any cost'! **Both sides would be wise to remember at this point, the negotiations are the *start* of a relationship.**

The following subsections provides both sides of the partnership an approach to ensure alignment of the contract with the value proposition. Some of the following can also apply to traditional transactional sales.

4.1.1 Outcomes, purpose and motivation

Prior to the real start of the negotiations, the motivation for the potential partners for entering into an agreement needs to be understood. Once this is made explicit, the focus can then move on to the purpose behind the outcomes required from the partnership. This sets out the beginnings of the relationship and anchors the negotiations on a clear purpose. This activity can begin as an exploratory exercise, resulting in a 'Head of Terms' that will be translated into the final agreement during the negotiations.

4.1.2 Focus metrics on pains/gains

Once the expectations of the buyer are made clear and explicit, the focus can then fall on the potential pains and gains that might emerge from the new approach. This adds contextual details to the outcomes and can result in a stronger partnership through working together to qualify and make explicit the possible risks and rewards. This rich picture will then inform the pain- and gain-sharing mechanisms in the agreement.

During this phase, the role and task allocation between the parties usually becomes apparent. This then affects the final scope of the agreement, developing an improved commitment to collaboration.

4.1.3 Identify metrics that measure project performance

In one form or another, contract performance must be measured. As mentioned previously, a set of three-to-five metrics are standard practice for pain- and gain-sharing measures. This is a '**Goldilocks Zone' of metrics: too many can lead to loss of management focus, too few and the wider picture is lost.**

A more balanced set of activity indicators supporting learning are valuable; creating a mix of internally- and externally-facing metrics comprised of both hard numbers and soft factors. The soft factors can provide early warning on levels of satisfaction.

There will always be concerns that commercial data is being shared with the customer. This can be mitigated through well-crafted presentations of the data. Experienced managers have seen that more value can be obtained from joint discussions about the data, rather than hiding it. Finding the metrics that show your customer's success may sound trivial. And yet, these metrics can be very helpful to confirm value creation, confirm the contribution to their business, and support future collaborations.

> *'data can provide value in identifying the best time to act…but there is also value in knowing when to <u>not</u> do something'*

4.1.4 Agree initial targets for metrics

There is a particular challenge associated with agreeing metrics. It is better to use existing data to support the setting of the metrics, particularly the metrics that are used to share the gain/pain. Some metrics are contractually binding while others might be used for guidance only.

Agreeing initial targets is important, and yet arguably, might be better agreed after a year of operation. What is important for initial target setting is that targets should be realistic. Acceptance of 'overly aggressive' targets to win the contract can be detrimental to the relationship and to the team delivering the services.

4.1.5 Understand the payoff in metrics

Not all metrics are independent. There can often be relationships between different metrics. A payoff chart of the different metrics may help both the buyer and the seller understand the payoffs, learning from their joint performance. Collaborative key performance indicators (cKPI) are performance measures used by collaborating partners. cKPIs are jointly developed and reflect the common interests identified for the partnership.

Experienced practitioners tend to limit metrics to approximately three project-centric metrics with gain- and pain-sharing (*the specifics of the metric will be unique to each project*). This number is likely to be sufficient to measure ongoing performance and the ability to support the customers value creation process. Too many is noted to lead to poor focus within the businesses.

4.1.6 Fee structure

Fees can be as simple as '*per hour of operation*' or '*per unit produced*', or even be a hybrid mixed with some degree of performance commitment and its pain/gain sharing. Other options could be '*target price (or cost)*' with a bonus for cost savings, fixed fees per month, variable fees based on use, and adder fees prior to major work coupled with performance commitments based on metrics.

In order to cover non-contracted services, a list price or an option to price with each transaction can be beneficial for all parties. The fees should be modelled to provide the contract revenues as compared with the costs. Monthly fixed fees can be problematic for some customers. Some may consider the use of a minima operation per month, equating to the minimal monthly fee.

Long-term agreements benefit from the use of an escalation formular, allowing for a price adjustment each year via an adaptation function. A '*cap and collar*' approach can be useful but can leave a risk exposure. Practitioners often base a formular on a published index relevant to both parties.

Currency risk is outside the control of both parties. It should therefore be reflected in the fee structure, again in an adaptation function. Again, a '*cap and collar*' approach may be helpful in allowing partners to call for renegotiation when the rate varies by a predetermined set amount. Where possible, limit the long-term exposure. A hedge has been shown to help, but it is only valid for a set time against a set volume. Another approach is to provide split currencies within the fee structure based on the cost basis.

4.1.7 Operational assumptions / roles and responsibilities / historic data

Revenue from the Advanced Service contract is based (at least in part) on the outcomes from delivery. Data from the delivery is needed to support the development of the financial model. The operational assumptions underpin the outcomes and the risk of the seller. Any changes to the operational assumptions needed to achieve the new outcomes must be discussed, and the contract adapted to accommodate the changes. For instance, it may be necessary to put a floor on the operation assumptions or to change the fees.

Roles and responsibilities are required in an Advanced Service due to the integrated nature of the work. It is a long-term collaboration where parties often co-deliver part of the service. Safety issues are no exception. Site owner are obliged to ensure that the site of delivery is safe. Depending on the scope this can be quite short or run into many pages of text.

4.1.8 Dispute resolution, termination and renegotiations

Not everything will always work well over the long-term. Friction can develop between individuals, or performance may just be poor. In these cases, the contract's dispute resolution section falls into use. Experience reveals that dispute resolution, initially, should be conducted with senior managers from the partners. Should initial resolution fail to reach a resolution, an arbitration (or court) route is required.

Termination for convenience should always be included an Advanced Service agreement. A standard approach allows either party to call for termination, with the enforcement of an exit fee. The floor for the exit fee should be sufficient to cover all costs that have been committed, plus a margin. In many cases, resolution requires 10-25% of the outstanding fees, shown as a table rather than as a percentage.

Renegotiation falls into the governance aspects. **It is good practice for to have an open possibility for renegotiation of an agreement**. All parties must be in agreement for a renegotiation to even begin.

4.1.9 Complexity reflected in Contracts

In contracting the delivery of complex services, it is often the case that contracts attempt to restrict complexity or create a contract which forces delivery into known contractual structures. Recent research shows that a more effective approach removes potential barriers to new offerings through **reducing rigid contract structures in favour of partnership and trust-building frameworks**. This has the effect of changing from a traditionally rigid contract with strict definitions of roles and responsibilities, to contracts that value coordinated adaptation activities between buyers and sellers of Advanced Services.

For example, extremely hot conditions may make it difficult to maintain a stable room temperature for a packaging line. This will result in the temperature continuously moving outside a certain tolerance zone. An adaptation contract will specify how such a situation should be dealt with on

both sides, and even the conditions in which the contract should be adjusted. The coordination contract is particularly helpful in innovative settings like Advanced Services. It explicitly considers the contract to be dynamic rather than static, thereby making exceptions and deviations opportunities for learning and improvement rather than punishment through invoking penalties.

5 Delivery Phase: Executing the Contract

After the contract is drawn up and signed, the Contract Execution phase begins. The term '*execution*' refers to the implementation and subsequent management of the contract, as well as ongoing relationship management during the engagement.

> *Consider your first advanced service contract a prototype, you have to learn from it, you cannot afford many such prototypes…*

Another example drawn from the Oil & Gas industry is presented in Figure 12, illustrating the delivery process for Advanced Services.

The shift to the Execution phase is likely to mean a changeover in personnel. The changeover often brings disruption for all parties, and it may be that there are conflicts between the personnel that were, until that point, hidden. Such conflicts may lead to limited changes to the contract to ensure successful execution.

In this phase, '*implementation*' means 'doing the work' as agreed in the contract. '*Contract management*' encompasses activities related to contract monitoring, enforcing, coordination and cooperation during the engagement.

Contract monitoring, also known as compliance monitoring, establishes the extent of compliance to contractual agreements. This activity also gathers seller performance information through mechanisms such as audits or customer satisfaction surveys, to provide supplier feedback.

Compliance monitoring offers more opportunities for enforcement actions than performance monitoring. Enforcement requires a buyer's response to contract violations and may include warnings or invoking penalties. More generally, contract management aims to coordinate the actions of customer and supplier during the engagement, ensuring the intended contracted outcome.

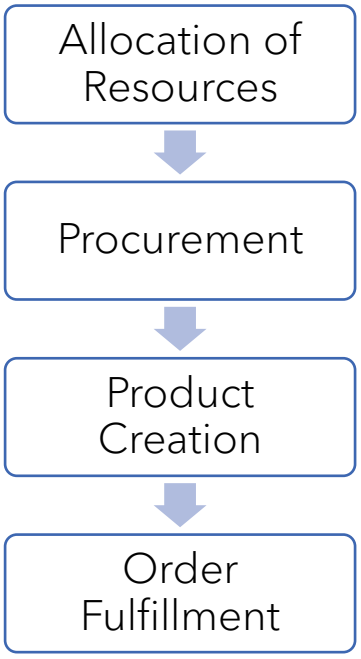


Figure 12 - Example of the Stage of the Execution/Delivery Phase of an Advanced Service

5.1.1 Effect of Contract Design on Execution

The design of contracts has been observed to impact use in the Execution Phase. For example, the type of specification (*i.e.*, behaviour- vs outcome-based specifications) makes a significant determination on what is monitored and evaluated within the contract. In this case, the design of the contract shapes key metrics for the engagement.

The focus of evaluation is clearly reflected in the KPIs used by the buyer to determine the extent to which contract execution is in line with the agreement, as well as with supplier performance. It is important to note here that not all contract violations stem from opportunism – misunderstandings are a common cause.

Some organisations may implement a 'social contract'. These approaches are based on expectations regarding behaviours and ongoing interactions for decision-making. Relationships between customers and suppliers are partly governed by 'relational' aspects such as trust and social norms, laid out in the social contract. This means that the supplier relationship can be managed both formally (*i.e.*, compliance and performance monitoring) and more informally (*i.e.*, through relational mechanisms).

Whether it is contractual or relational governance that is most effective in driving performance (*or a combination of both*), it is important to note that any contract involves a formal agreement and a relationship. Experience shows that contract implementation requires a careful balance in combining contractual and relational governance mechanisms.

The following subsections provide an approach to help ensure a successful contract execution. Some of the aspects here are also helpful for traditional transactional sales.

> **Governance Phase**
>
> More detail on Governance is provided in Section 6, below.

5.2 Being open and transparent with the performance

A successful relationship is built on trust, and recent research proves that Advanced Services require a higher level of trust in the relationship. This requires commercial project management to report status and metrics; sharing regularly with key personnel. Both good and poor performance should be presented. When poor performance falls below expectations, this should trigger improvement activity. Standardised methods of performance reporting limits potential for misunderstanding, which, in turn, helps to build trust. During a long-term relationship there will be periods when performance is below expectations. Experienced researchers and practitioners agree that **the best way to deal with the challenge of poor performance is to be open**, working together.

5.3 Realign operational metrics within the contract every year

When a seller can fully hit targets every year, it suggests that the targets are not sufficiently challenging. To overcome this risk, re-assess the targets and adapt them within a governance framework. This may mean making the payoffs in the metrics tougher. Equally, if the buyer's market changes, the metrics may no longer be appropriate. Again, **adaptation may prevent the possibility of a full contract renegotiation** (*facilitated by the inclusion of adaptation clauses in the contract*).

When agreeing to change performance metrics, agreement is required via a governance process. Here, the coordination and adaptation functions of contracts may offer help. These functions support organisations in specifying the change processes (*e.g.*, benchmarking performance and adjusting targets) to be followed, and under what kind of conditions (*e.g.*, when performance is off

more than 5% for six consecutive months). Another option could be to temporarily place the contract on hold while the situation (e.g., performance, environmental dynamics) is normalised. At which point, the contract can be put back in effect.

Acknowledging that such changes may be necessary during the Execution Phase, is an important step towards aligning the contract with the Advanced Service proposition.

5.4 Reassess data collected for commercial sensitivity

Data may gain or lose commercial sensitivity over the duration of the contract. The assessment and reassessment of its sensitivity can facilitate the maintenance and further building of trust between the parties. The use of data, meta-data and derived/inferred data should be made explicit, and any sensitivities made transparent. For example, running hours per month may be an important figure for billing, yet the customer may consider this data within a financial year to be highly commercially sensitive. Discussing these concerns can prevent trust-undermining disagreements during the engagement.

Personal data also presents a set of challenges to Advanced Services. The General Data Protection Regulation (GDPR) focuses on the use and application of personal data, affecting the way organisations collect, store, and use personal data. **The use of personal data is not forbidden, yet needs diligent management** to ensure compliance with the regulation.

5.5 Management of violations

During the term of the contract, it is likely that there will be violations of the contract. While many may be accidental, some are likely to be 'material' to the contract. When a violation is material and deliberate by a party, best practice dictates a rapid written response. Some violations may require activation of dispute clauses via the posting of a formal notice. There may also be the need to place a notice for a 'compensation event'; where additional costs were incurred by such a breach.

No matter the degree of severity, **a contract violation should be logged and used as a point of learning and trust-building for the partnership**. This approach provides a pragmatic way of collaboration but is not possible unless the adjustment mechanism is written into the agreement. Adjustment mechanisms provide flexibility in the face of contract violations that could not be predicted in the contract design phase.

5.6 Cashflow management

A contract with a duration for several years can be viewed as a project with its own profit and loss. On this basis, cash flow management must be undertaken by both the seller and the buyer. The seller can support the buyer with understanding their annual costs by providing visibility of expected operations, and vice-versa. Visibility helps both parties plan, boosting the chance of success for the Advanced Service delivery.

For the seller, the ability to plan and manage cash flow supports efficiency in the operation, helping the seller improve productivity. Within a rolling 12–18-month period, there should be a monthly planning; outside of the rolling period, the time between planning sessions can be longer.

A point of caution. International Financial Reporting Standards (IFRS) 2017 requires sales recognition of the contract based on costs, plus the expected margin. However, 'sales' is different

from the invoiced value. This is rather technical but is still important as a firm moves from traditional to Advanced Services. This is especially true in those cases where asset ownership stays with the seller.

5.7 Margin management

In the end, the Advanced Service collaboration agreement delivers the ability to capture value. Profit margins are created by the combination of value the buyer gains via the value proposition, and the portion of the value captured by the seller. We have seen that pricing of advanced services should be done based on value. Yet with the contract cash flow, there are costs, revenues, and risks that result in a margin.

When pricing, it is always necessary to have a target margins, costs, revenues and risks that result in the end with a margin. The margin should be regularly confirmed against the planned margin during the engagement. This is required for sales recognition**. Confirming and reconfirming margins also provides opportunities for learning** as points of under- and over-achievement against targets.

This may mean the seller shifts to Percent of Completion (POC) of the project when managing margins, especially for Advanced Service agreements with a duration of more than 12 months. This changes the traditional approach to financial reporting for product-centric firms, and can initially be a challenge for sellers. New processes to support new methods of reporting might have to be designed and implemented.

Further, support for the controlling function within Advanced Services may be required. It is all too easy to increase costs to further increases sales. However, this is well-known to create phantom performance of the contract, highlighting the importance of non-financial metrics.

6 Engagement Governance

Governance is often forgotten or overlooked with contracting, yet it is a contributor to the long-term successful outcome for all parties. **Effective governance creates a win-win for participants** in the Advanced Service by helping to maximise value co-creation in the long term. Governance has an internal focus for each organisation but can also govern inter-firm relationships.

Take the example where multiple Advanced Service agreements are in place between the parties concurrently. Good governance would require a considered view of the whole set of engagements by the management teams, rather than each considered individually.

Governance design, therefore, doesn't simply occur once during contract design. Governance is highly tailored for each individual contracting situation. It requires ongoing attention during contract execution, as both mechanisms may, or may be required to dynamically evolve.

6.1 Learning to learn from the blame game

The drafting, interpretation, and application of contracts can support cooperation and flexibility in relationships or push them into escalation of blame and distancing actions. In some cases, contracts need to be terminated before the actual contract period has expired. Deviations from what was agreed upon in the contract may trigger difficult discussions without simple resolution. Contract

disagreements are a leading source for litigation across industries, accounting for as much as 70% of legal disputes.

Discussions usually focus on determining who is responsible for a contractual deviation, and the associated costs of that deviation. Cost deviations are also more likely to result in legal disputes, rather than content-based discussions. Arbitration (*or even litigation*) becomes more likely, rather than a private dispute resolution procedure such as negotiation or mediation. On the one hand, binding outcomes provided by legal procedures may be clear and therefore helpful to parties. On the other hand, such procedures do not aid in solving the problems at hand, but rather put additional strain on the collaboration and the relationship.

6.2 Value co-creation with Advanced Service contracts

A common characteristic in transactional relationships, *master-servant* relationships are not aligned to Advanced Service contracts. This is because the participating parties grow interdependent, co-creating value throughout the delivery process.

Adaptation and learning in the relationship can be highly productive, creating support for developing the experience and delivery processes. An important distinction exists between *inter*-contract learning (*i.e.*, organisations learning from one contract to another) and *intra*-contract learning (i.e., dynamically improving a contract during execution). Intra-contract learning is wrongly perceived as problematic; many public organisations believe they are legally not allowed to make contract adjustments during the engagement. This is not the case. A governance process can provide a framework for intra-contract management and is typically actioned by senior management of both the buyer and seller.

Another aspect of value co-creation (described earlier in Figure 3) links to the process of building knowledge over time. The IPR aspects of this are complex and must be defined in the start of the contract. This approach confirms that all parties can create new intellectual property during the delivery of the Advanced Service.

The integration of the relevant data into this process complicates matters. Drawing on the popular Knowledge Management process (Figure 13), data is the generally the building block of the new knowledge.

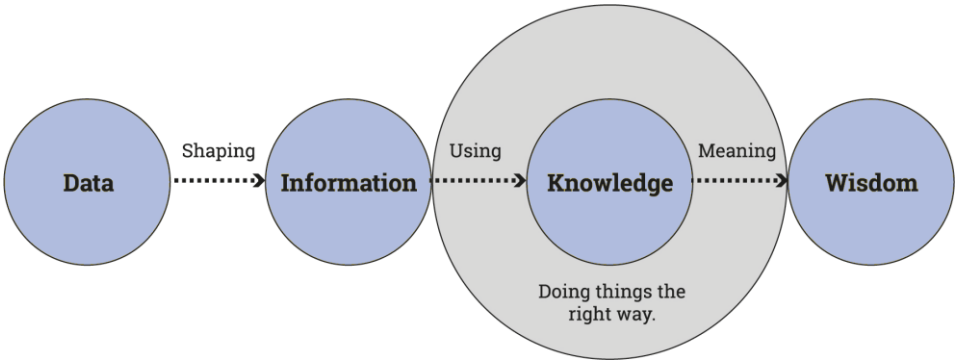


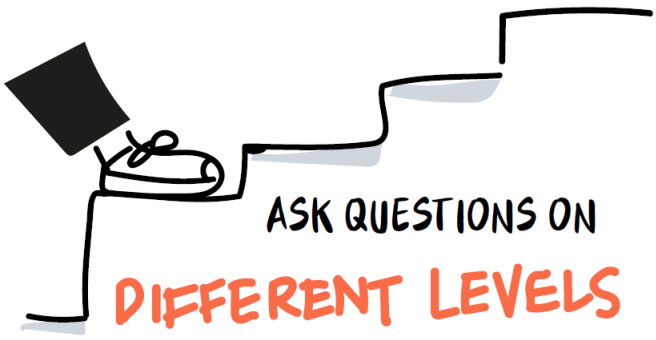
Figure 13 - Turning Data into Wisdom

Therefore, ownership of the data must be negotiated. The new knowledge may support improved delivery, creating the emergence of a new benefit for both buyers and sellers. This makes the identification of the beneficiaries and the parties supporting the value co-creation hard to clearly define. However, 'reward' of some form should be provided to support and reinforce the long-term relationship. Existing legal frameworks are weak on these issues. For example, European Union directives continue to focus on the traditional 'supplier/customer' relationships and do not sufficiently deal with the complexities associated with Advanced Services.

The United Kingdom, post-Brexit, is currently consulting practitioners and academics to gain insight on how to best shape new policy for technology-driven business models (like Advanced Services). For these reasons, defining IPR within the agreement can help prevent breakdown of relationships.

More organisations are now opting to use the path of problem-solving and learning-oriented approaches to deviations, hoping to avoid disputes. Or at least prevent them from becoming so severe that they cannot be overcome. Guidance for addressing (certain types of) deviations may already be provided for in the contract. In previous sections, it was said that not every eventuality can be captured within the contract. Attempts to build ever-increasingly more complex contracts has the effect of creating distance in relationships, as opposed to shared problem-solving approaches.

Shared problem solving combined with open knowledge sharing can lead to more flexible contract application, improving re-design of active contracts and design of future contracts. In contrast, the "blame game" discussed earlier usually results in a loss of communication and organisations disconnecting, dodging responsibility, and focusing on damage control.



6.3 Ensure alignment across partners to manage the metrics

Sound understanding of Change Management is needed during the agreement while buyers and sellers learn from the delivery of the contracted service. As business outcomes change, or as the performance of the services improve, metrics must be reviewed and updated. This is similar to an annual personal appraisal in some respects and needs sound joint governance processes. The approach also confirms the importance of the parties' reviewing performance of the contract in terms of both hard and soft metrics as a positive 'admin' task that needs to be done quarterly.

The process to agree new targets for existing metrics or to change metrics is not an annual ad hoc, hard renegotiation. Like a Change Management process, **change should be initiated by one of the parties using existing metrics to illustrate any problems**, then proposing different targets or new metrics. The new metrics then face consideration and approval by the senior management on both sides; joint agreement is needed to make a change.

6.4 Contract end of term

Contracts expire at the end of the term. It is a trigger-event to be dealt with proactively rather than passively allowed to happen. Here, active contract management prevents contracts from expiring or being automatically renewed without much consideration. The end of term is an event where a new

contract may be required in the same form (*i.e.*, straight rebuy), adapted (*i.e.*, modified rebuy), or the parties may agree to separate from the relationship. All are possible.

At the end of term, many issues will need closing out. For example, assets may need to be returned to one of the parties. **To simplify the end of term issues, some contracts contain a 'transfer' clause at the end of term** to address these issues. The assets that need to be transferred are often equipment, spares, and data. Some contracts also include a clause for personnel. Condition of the assets transfer is also often defined, which can lead to disputes. The need for collaboration at the end of term is why this is framed within the *Governance* part of the handbook.

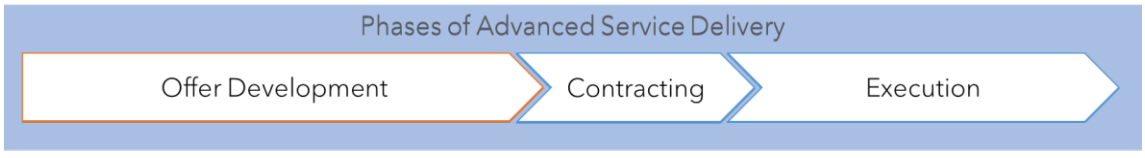
7 Closing

This playbook draws focus to the need for more attention to Contracts for Advanced Services. Contracts are not just the "small print", nor should they be simply regarded as dotting the *'i's* and crossing the *'t's*. The development of robust contracts can help drive innovation during the transition from basic services to Advanced Services; see Figure 14. Given the general immaturity in

Figure 14 - Agreement development in the move to Advanced Services

the market, it is important that a form of contract exists to act as the basis for any agreement. The contract allows all parties entering an agreement to understand their risk positions and preferences. Importantly, it can form the foundation for the relationship, acting as the legal agreement that reflects the value offer or value proposition.

Each of the phases of Offer Development, Contracting, and Governance was discussed in order to raise known issues, and to provide guidance from both practitioners and researchers to help overcome those issues.



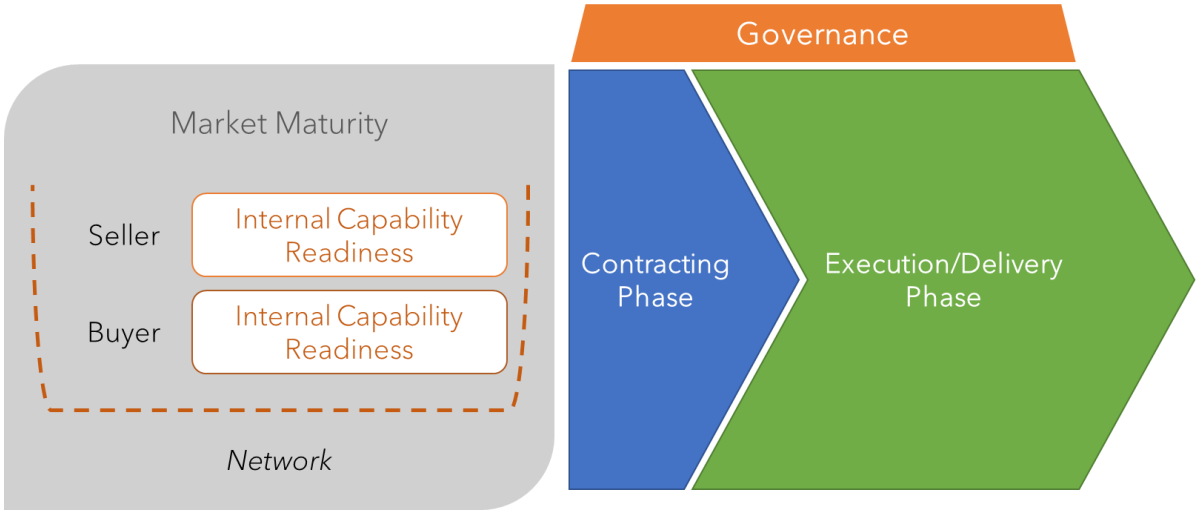


Figure 15 - Important Phases Related to Advanced Service Contracts

The following page provides a set of key points from each of the areas of focus within those phases. The state of maturity in the market shows influence on the overall readiness of both the buyer and the seller. In more mature markets where large, established organisations dominate, the overall development of individual organisations shortens the negotiation stages of contracts. There is less need to identify risk and understand its associated cost.

Sellers of Advanced Services are advised to clearly understand the underlying cost model. Without that understanding the contract cannot accurately reflect an agreed price. Understanding costs relies on the seller's own understanding of their capability and the supplier relationships required to deliver such a service. This leads to readiness at the network level. A clear understanding of costs and capabilities can then inform the development of the contract which assigns risks and rewards contained in the value proposition.

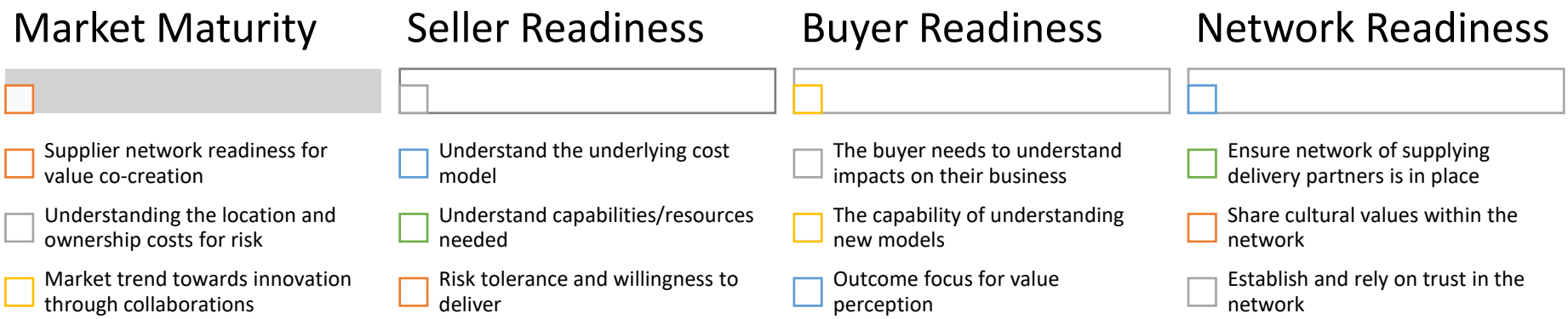
For buyers of Advanced Services, the contracting process must consider the known impacts to the business, while also remaining flexible to accommodate impacts that emerge from the engagement. This may mean more transparency in performance data and metrics than they are used to in contract negotiation. Experience of researchers and practitioners shows that buyers often need time and assistance to be able to understand the new model and the value proposition. Some engagements use a separate, short-term contract to support a fact-finding engagement for the buyer and the seller to identify need and potential approach. This short engagement shapes the outcome on which the contract will deliver.

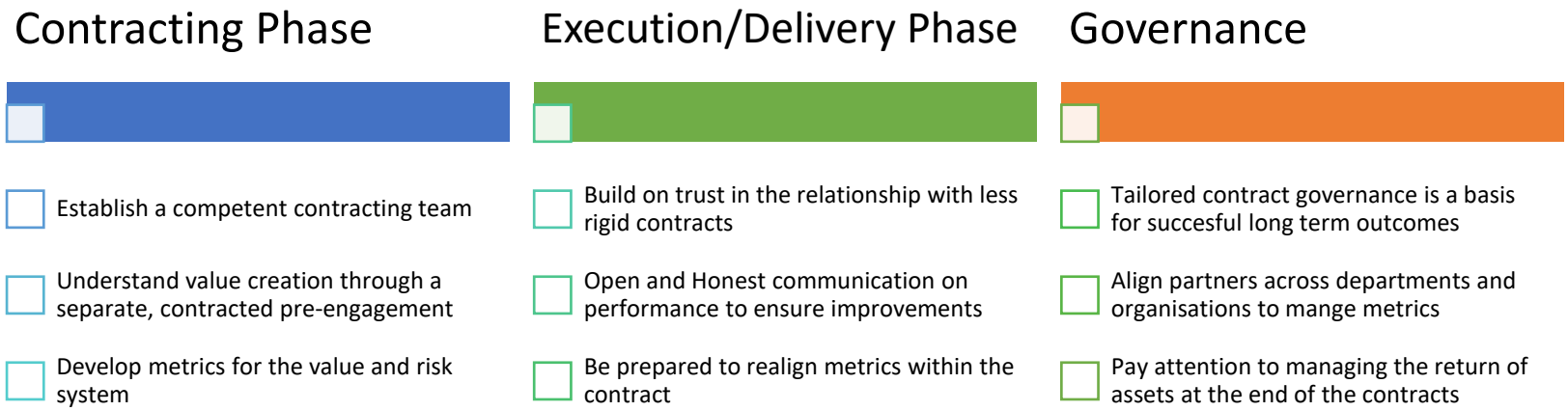
For the partner network, establishing a level of trust is known to be crucial. It is also established that trust can be facilitated by a well-constructed contract, by detailing ways to work together through uncertainty. During the execution phase, trust can be undermined by rigid contracts that assign punitive measures instead of cooperative approaches to addressing problems.

Performance metrics must be relevant to the parties. Often, the metrics need to adapt over time to reflect the actual performance. Metrics should describe inputs and outputs that constitute the performance and capture the soft aspects of the relationship. The top three-to-five output metrics should describe pain/gain sharing, and be used to create the payoff charts. Technical aspects of performance, normally captured in many service level agreements, should be captured along with the net promoter score (NPS).

Suppliers should be internally reporting their margins and costs, although these should not be shared with the buyer. Monthly or quarterly discussions between buyers and sellers should be held to assess the metrics. These discussions can help identify areas for performance improvement, and provide an open forum to discuss how to improve the metrics-in-use (remembering that they are only proxies for value creation). Reports that describe performance can benefit from the inclusion of stories that provide illustration of what is considered 'good performance'. This can help reinforce and embed positive behaviour.

7.1 Checklists…





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Appendix A – Example Structure of an Advanced Service Contract

A typical contract itself may be a few pages in length to several hundred, depending on the types of services. One example of an advance service contract archived on the Securities and Exchange Commission (SEC) website in the United States of America runs to over 115 pages and contains 24 clauses and 15 exhibits.

Link:
https://www.sec.gov/Archives/edgar/data/1806220/000114036120019395/nt10010929x7_ex10-15.htm

The main articles within the agreement are:

- Article 1: definitions
- Article 2: work scope
- Article 3: owner responsibilities
- Article 4: term and termination
- Article 5: payments
- Article 6: title and delivery
- Article 7: insurance
- Article 8: warranty
- Article 9: limitations of liability
- Article 10: dispute resolution
- Article 11: confidentiality
- Article 12: health, safety and security
- Article 13: supplemental payment terms
- Article 14: assignment
- Article 15: site conditions and hazardous materials
- Article 16: indemnification
- Article 17: intellectual property
- Article 18: changes and modifications
- Article 19: excusable events
- Article 20: notices
- Article 21: change in law
- Article 22: taxes and duties
- Article 23: no nuclear use
- Article 24: general clauses