

# Overcoming the 10 pitfalls of contracting

How AI can transform the value of contracts

WorldCC research funded by

**ContractPodAi**

 **World Commerce  
& Contracting**

# Contents

- 2 The 10 pitfalls
- 3 Contract value erosion: the story so far
- 4 AI and contracts: is it really happening?
- 5 How AI is helping overcome the 10 pitfalls
- 15 Conclusion
- 16 Contacts

# The 10 pitfalls – top factors that underlie contract value erosion



# Contract value erosion: the story so far

Back in 2014, IACCM (now World Commerce & Contracting) estimated that organizations were losing an average 9.2% of the anticipated value from their contracts. It published a report highlighting ‘The 10 Pitfalls’ – the top factors that underlie contract value erosion.

How was that number reached? Was it accurate? Not surprisingly, the estimate generated a lot of interest and a lot of questions. Its origins lay in crowd-sourcing – asking thousands of professionals for their experience – and then seeking validation through research within specific organizations.

But in the end, 9.2% remained an estimate, impossible to scientifically validate. It was also an average and we knew that there were wide variations. Different industries operate with very different levels of complexity and predictability. Even within an industry, differences in process efficiency, skills and systems lead to highly variable costs and exposures. This variability was captured in a *Harvard Business Review* article in 2018, which declared “Inefficient contracting can cause firms an estimated 5%–40% of value erosion on a given deal depending on circumstances”.

Since 2014, the 10 Pitfalls data has been widely quoted and it gave rise to estimates from leading consultancies that generally supported or supplemented the original findings.

Today, the latest inputs suggest that, if anything, the situation has become worse. Market volatility, geopolitical uncertainty, regulatory requirements are among a myriad of factors that have made the process of contracting even more complicated and its results more unpredictable.

So why has there been so little action? The factors that made accurate analysis so difficult also stand in the way of improvement. In most organizations, contracting is not an integrated process. Responsibility for designing, selecting, drafting, negotiating and implementing contracts is scattered across the workforce. Contract-related data follows suit – it is mostly housed in functional systems which provide no consolidated view of performance. To the extent it exists, tracking operates at a transactional level, providing no consolidated view of performance across the organization’s portfolio of contracts.

Therefore, while the potential prize may be enormous, the uncertainty and fragmentation of contract management placed meaningful reform into the ‘too difficult’ category.

To the extent that organizations have sought improvement, it has generally been in obvious areas of efficiency (for example, implementing contract repositories, automating review and approval, creating standard templates), rather than focusing on effectiveness (for example, the contribution to cost reduction, revenue or margin).

Until now, technology has followed this path, with contract management systems mostly contributing to streamlining activities in the pre-award phase. But while cutting cycle times and reducing front-end workload is beneficial, it is not transformational and generally fails to address the opportunity of tackling value erosion.

So welcome to a new era – the era of Contract Management powered by Artificial Intelligence. At last, we have ways to tackle the pitfalls and reduce value erosion.



**Organization’s 9.2% contract value loss is an average – impossible to scientifically validate and we know there are wide variations.**

# AI and contracts: is it really happening?

As organizations move to digitize their processes, artificial intelligence is gathering pace – and that includes in the field of contracting.

By examining each pitfall, this report illustrates the form that this move to digitization is taking and its potential impact. However, it would be wrong to overstate the pace of change – AI adoption remains the exception rather than the rule. But that is more due to the fragmentation of existing data and processes than it is because of any shortcomings in the value it can provide.

The most recent WorldCC benchmarking data shows a strong link between the adoption of technology and reductions in contract value leakage. However, in most cases, technology is not the only factor and if it is introduced without redefining process and redesigning organization, it will fail.

What are some of the exciting examples of AI implementation? On the right is a summary, based on recent conversations with WorldCC member companies. While many projects have focused on efficiency – in particular, improving the speed of contracting – others are delivering increased effectiveness and value.

## These automated processes include:

**Contract review**, highlighting exceptions to standards and where necessary routing to stakeholders for review.

**Inputs to RFX documents** and also into supplier proposals.

**Playbooks** with pre-approved fall-back terms that support negotiation.

**Risk-scoring and reporting** based on either requested or agreed contract terms, with potential to show effectiveness of negotiators in reducing risk.

**Obligation extraction and monitoring**, also enabling automated support for production of contract summaries.

**Selection of preferred or optimized terms**, based on past success.

**Risk alerts**, drawing from advanced algorithms to support predictive warnings of 'at-risk' contracts.

**Contract scanning** to identify rights or obligations and ensure revenue growth or avoid value erosion; examples include pricing indices, invoice validation and chargeable additions.

**Review of contract portfolios** to identify specific terms or check where rights or obligations apply.

**Data mining** to establish customer or supplier past performance indicators, term preferences, risk profile.

**Contract portfolio analysis** to identify characteristics of successful agreements.

**Extraction of performance and trends** to support management reporting, risk profiling and changes in commercial terms or policies.

**'Self-service' systems** to support business units, engineering teams etc. in identifying correct form or agreement or charging model, the need for review, and production of Statements of Work, Service Level Agreements.

# How AI is helping overcome the 10 pitfalls

## **Pitfall #1** Lack of clarity on scope and goals

### Why does this happen and what effect does it have?

Gathering and analyzing requirements is not easy – and translating those requirements into a clear statement of goals or desired outcomes can be even harder. Technical teams and business unit personnel rarely use consistent language and terminology; they may not be good at separating ‘must have’ from ‘nice to have’, or in appreciating the cost or capability implications. Things like measurement systems also influence the behavior of both customer and supplier personnel, sometimes creating incentives to accept ambiguity or lack of precision.

*Failure to capture requirements and convert them into clear scope and goals may lead to an inappropriate commercial model and is frequently a source of post-award disagreement, claim and dispute.*

The process of capturing requirements and converting these into clearly defined scope and goals often involves multiple stakeholders, both internal and external.

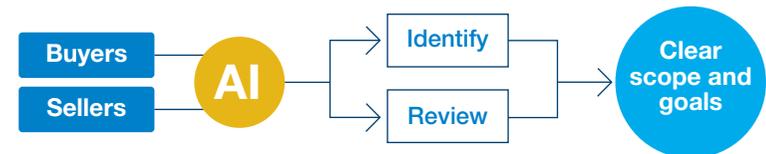
Failure to do this effectively causes multiple problems downstream. For example, it may extend the bidding and negotiation process, creating confusion or the need for rework. It may even lead to use of an inappropriate commercial model and is frequently a source of disagreement and possible claim or dispute in post-award delivery. In many industries, this pitfall is among the most significant causes of contract value erosion for both the buyer and the supplier.

### How is AI helping?

Automation offers defined workflows and the possibility of a disciplined approval process. However, artificial intelligence can lift this process to new levels by providing ready availability of knowledge and past experience.

This may be through identifying similar projects and supporting replication of successful approaches; it could include functionality such as Natural Language Processing to optimize use of language and consistency of terminology; it can also draw on past experience to highlight risks and ensure that appropriate experts are involved in review and approval.

In ways such as this, AI is assisting both buyers and suppliers to tackle the challenges of identifying and reviewing requirements and ensuring clear, appropriate scope and goals.



**AI helps both buyers and suppliers identify and review requirements to ensure clear, appropriate scope and goals.**



## Pitfall #2

### Legal /contract team not involved early enough

#### Why does this happen and what effect does it have?

'Being involved too late' is one of the most common complaints by legal and commercial professionals, with surveys showing around 50% citing this as a frequent issue. It can have a significant impact on the cost and value of contracting, creating delay, rework or sub-optimal contract terms. Often, assumptions or commitments may have been made involving inappropriate contract terms which then either need to be re-negotiated, or perhaps mitigated through more onerous risk provisions. There are many reasons why delayed engagement can occur. It may be due to factors such as poorly defined process, lack of guidance for technical or business unit personnel,

operational workload of legal and commercial teams or deliberate exclusion because of a negative reputation as 'the department of no'.

This pitfall impacts both buyers and suppliers and has to some extent been made worse by the tendency of businesses to operate with standard contract templates. While templates often result in greater efficiency and reduced risk, they may also lead to assumptions that they can be applied across all transactions.

#### How is AI helping?

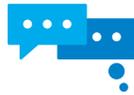
Automation and artificial intelligence have a major role to play in eliminating this pitfall. Some organizations are building intelligent questionnaires into front-end requirement or opportunity management systems, such as CRM, which then trigger warnings or alerts that there may be a need for non-standard terms or for Legal review.

Other approaches are based on the use of AI to support analysis of project or contract portfolios. This could be based around similar types of acquisition or sale, or perhaps on an understanding of industry norms, or even a consolidation of past experience with a particular customer or supplier. This approach may allow the use of standardized language in RFX questions or responses, or permit the use of pre-approved exceptions to contract terms.

*The vision – which for some is fast becoming a reality – is of a self-service environment, where machines operate as virtual lawyers or commercial experts, eliminating the issue of late engagement.*



**50% of legal and commercial professionals cite being involved too late as a frequent issue – creating delay, rework or sub-optimal contract terms.**



## Pitfall #3 Failure to engage stakeholders

### Why does this happen and what effect does it have?

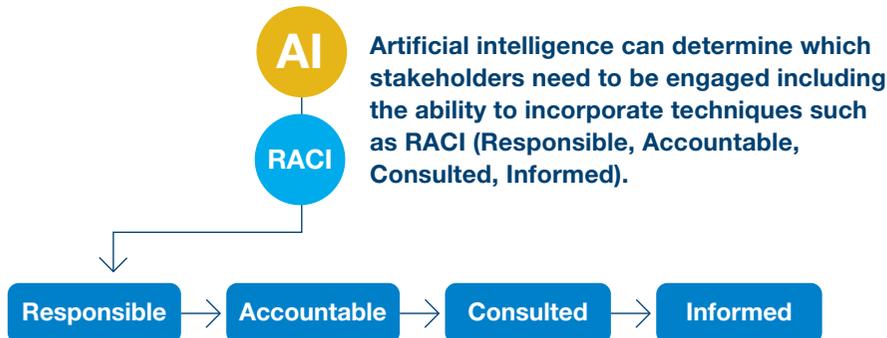
While this pitfall has similarities to Pitfall #2, it often occurs due to the lack of a structured approach to stakeholder engagement. The extent of stakeholder review varies depending on the nature of the transaction or relationship, meaning that judgment is often required to determine who should be included. Sometimes, it may not be clear who has responsibility for gaining necessary sign-off. On other occasions, omission may be due to ignorance or even deliberate, because of time pressures or the fact that failure to engage stakeholders has no repercussions.

As with Pitfall #2, the effects of failure include the potential for delay, rework or significant risk exposures, creating additional costs and potential value erosion.

### How is AI helping?

Automation offers defined workflows and the possibility of a disciplined review and approval process. By embedding artificial intelligence, the system can determine which stakeholders need to be engaged and this includes the ability to incorporate techniques such as RACI (Responsible, Accountable, Consulted, Informed). As with Pitfall #2, advanced systems are increasingly set to support high levels of self-service, especially when linked to functionality such as intelligent clause libraries and playbooks (see Pitfalls #4 and #5).

*It may not be clear who has responsibility for gaining sign-off and omission may be due to ignorance or even be deliberate – because failure to engage stakeholders has no repercussions.*





## Pitfall #4 Protracted negotiations

### Why does this happen and what effect does it have?

Negotiation cycle times are a source of frustration to many business executives. It is not only that negotiation, in their view, takes too long; it is also because predicting an accurate close date is often impossible. Many factors contribute to the time it takes to reach a negotiated agreement, among them the need to build internal stakeholder consensus. Other traditional factors include ‘the battle of the forms’ as buyer and seller seek to impose their standards and the use of templates that contain terms that are inappropriate to the transaction.

It is important to recognize that not every agreement involves negotiation, or that many are resolved quite quickly. The important point is that the high profile, high importance contracts tend to be more complicated and therefore more likely to require extensive negotiation.

It is also worth noting that the *WorldCC Benchmark Report 2021* revealed that over the last two years, there has been a 13% increase in the average cycle time to reach contract signature. Negotiation (internal and external) is a major factor. This increase reverses an almost 20-year trend of reducing cycle times, so it is important to understand the causes.

Certainly, the pandemic has played a role, creating an increase in operational workload and the need for extensive renegotiation of existing agreements. It also forced a change in working practices, almost eliminating face-to-face meetings and requiring a shift to virtual negotiations.

The impact of this pitfall is once again increased cost of contracting, but also (and more importantly) delayed business benefits in terms of the possible savings or revenues that the contract will enable.

### How is AI helping?

Artificial intelligence alone will not fix the issue of cycle times, but it can certainly help. The improvements identified in many of the other pitfalls contribute to faster decision-making and offer potential for less contention – for example, simpler and more market-sensitive contracts and terms, plus the availability of intelligent clause libraries. AI is increasingly equipping negotiators with pre-approved fall-back terms that accelerate negotiations by as much as 80%. There are examples where term optionality is being made directly available to customers or suppliers, allowing them to select trade-offs without human intervention. In recent experiments, WorldCC pitched traditional negotiation teams against machine-led teams and discovered that, in simple negotiations, AI-powered machines consistently deliver faster and better results.

*Artificial intelligence is increasingly equipping negotiators with pre-approved fall-back terms that accelerate negotiations by up to 80%.*

Time to contract signature  **+13%**

**WorldCC's *Benchmark Report 2021* revealed that negotiations have become more protracted and this has led to a 13% increase in the time taken to reach contract signature.**

## Pitfall #5 Negotiations focus on the wrong terms and risks

### Why does this happen and what effect does it have?

Classical financial and legal theory encourage risk transfer as their preferred approach to risk management. This has been supplemented by the previously mentioned trend to fixed forms of contract template, against which compliance rates are measured. Together, these two factors explain why an overwhelming majority of contract negotiators often feel they are in a non-negotiation – a situation where the counter-party is in fact a barrier to negotiated change.

It is certainly true that this approach offers greater overall efficiency and, in many cases, it reduces risk. The problem is that risk transfer is not the same as risk management and it can either blind the parties to an understanding of the true risks, or result in risk being carried by a party unable to bear it. Often, the parties do not fully understand each other's business or industry and therefore fail to consider their respective business needs or the wider opportunities that their relationship can offer.

While this pitfall does not apply to every contract, it is most severe in the agreements and relationships that have the greatest risk and potential value. It is also important to recognize that the severity varies by industry. In a field such as retail or consumer goods, where contracts and relationships may be highly standardized, the impact is very different from industries such as construction or defense, where there will be high levels of customization.

### How is AI helping?

Artificial intelligence is starting to make a major difference in the intelligence applied to contracts. As previously mentioned, it supports the use of front-end questionnaires that identify the type of commercial model best suited to the transaction. This is augmented by clause libraries rather than fixed templates, resulting in a tailored contract built on approved standards. Negotiators therefore start with a framework that reduces debate over redundant or inappropriate terms. AI brings further benefits when it also offers guidance on potential fall-back negotiating positions.

Perhaps the most exciting developments are those related to portfolio analysis. Leading organizations are using analytics to further streamline contract negotiation and increase contract value. Examples of this include:

- Identifying industry norms and standards, so that the terms that are proposed sit within the regulatory framework of each industry;
- Identifying customer or supplier norms, by analyzing previous agreements to avoiding repetitive negotiations;
- Tracking market trends or changes in terms to support proactive update of clause libraries.

*Artificial intelligence is helping organizations to better analyze and segment the type of contract and risk allocations that make sense in a particular transaction or agreement.*



**This pitfall is most severe in sectors where customized contracts and relationships result in greater risk and potential value.**





## Pitfall #6

### Contracts lack flexibility, insufficient focus on governance

#### Why does this happen and what effect does it have?

The pandemic and subsequent market turbulence have highlighted the limited mechanisms within most contracts to manage change. In the past, flexibility has often been seen as risky, rather than being a way to manage risk. As a result, unexpected or unpredictable events are often handled informally. This may lead to missed opportunities for revenue or margin growth, or for cost reductions. Perhaps the greatest governance weakness exposed by the pandemic has been the inability in most organizations to track interdependence between contracts and how change or failure in one will impact others.

#### How is AI helping?

Artificial intelligence is having two impacts on this pitfall. One is through downstream analysis of contract performance. When this data is consolidated, it helps organizations to understand recurring issues and to identify where there is a need for strengthened governance procedures within the contract, such as increased formality in how changes are agreed or disagreements resolved. The second impact is an appreciation of the need for more disciplined data exchange, not only between the contracting parties, but also with interdependent contracts. Through tagging these 'ecosystems' of agreements, AI is monitoring changes or disruptions to generate alerts or prompt actions.

*AI is having two impacts: helping organizations to understand recurring issues; an appreciation of the need for more disciplined data exchange.*



**In the past flexibility has been seen as increasing risk but in fact it can be a way to manage risk.**

## **Pitfall #7** Contracts difficult to use or understand

### Why does this happen and what effect does it have?

Almost 90% of business users find contracts 'difficult or impossible to understand'. Recent research has revealed the pervasive nature of contracts, with an average 25% of the workforce somehow involved in their management or performance.

The challenge with understanding arises because contracts are typically not designed to support users. Most are written and structured in accordance with norms that have been adopted over centuries by lawyers, with possible litigation in mind.

This is a source of massive inefficiency because it renders contracts of very limited practical use in business communication. The wealth of critical data contained within an agreement is hard to access and interpret, leading to potential misunderstanding, misinterpretation and disagreement.

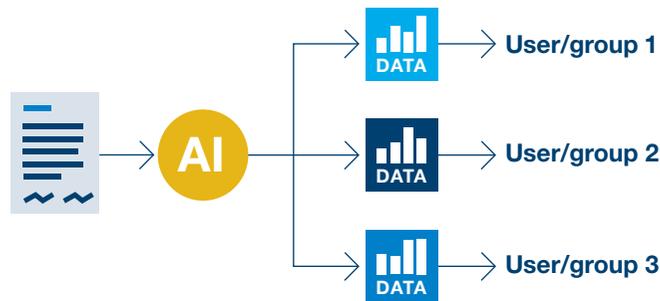
### How is AI helping?

Artificial intelligence allows systems to be trained to identify and extract metadata from within agreements. This 'obligation extraction' is rapidly gaining adoption and provides a major improvement to efficiency and risk. Data can be mapped to relevant user groups or individuals and then directly communicated to them in a form that ensures understanding.

*"You get complete visibility and control over your contracts. You know what contracts are in development, the content and risks associated with those contracts, and where they are in the lifecycle. The system gives you more authority and the ability to have a bigger impact on the business overall."*

Head of Legal, oil transportation and storage firm (Europe)

AI allows contract data to be directly communicated to relevant user groups or individuals.





## Pitfall #8

### Poor handover from deal team to implementation team

#### Why does this happen and what effect does it have?

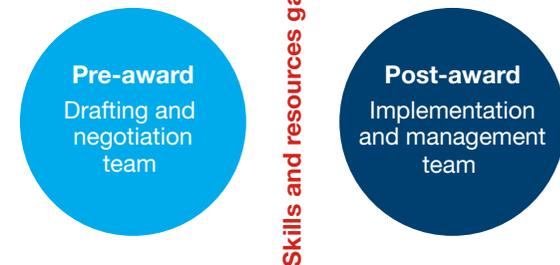
Contracts involve multiple transitions and stakeholder engagements. The shift from the pre-award drafting and negotiation team to the post-award implementation and management team is a critical phase in value realization. The nature of pre-award and post-award skills and resources is typically different and means there is limited overlap of personnel. As a result, the implementation team often has limited insight or understanding to the conversations or background that underlie the agreement. Adding to this, as explained in Pitfall #7, the contract itself is often hard to understand.

Organizations frequently have resources charged with producing a contract interpretation and summary for dissemination to affected personnel. However, this takes time to produce and often raises concerns over accuracy. The effects of this include delays in implementation and, as noted in the previous pitfall, a likelihood of misunderstanding or disagreement between the parties.

#### How is AI helping?

The obligation extraction noted on the previous page is the most immediate way that AI is assisting. There have been concerns about the accuracy of machine-based, versus human-based, analysis, but the data suggests that machines offer significantly better performance (98% versus 92%). The immediacy of an AI analysis is also a major benefit.

*AI-based contract interpretation and summary for dissemination to affected personnel is 98% accurate. This compares to 92% accuracy for human-based analysis.*



## Pitfall #9 Limited use of contract technology

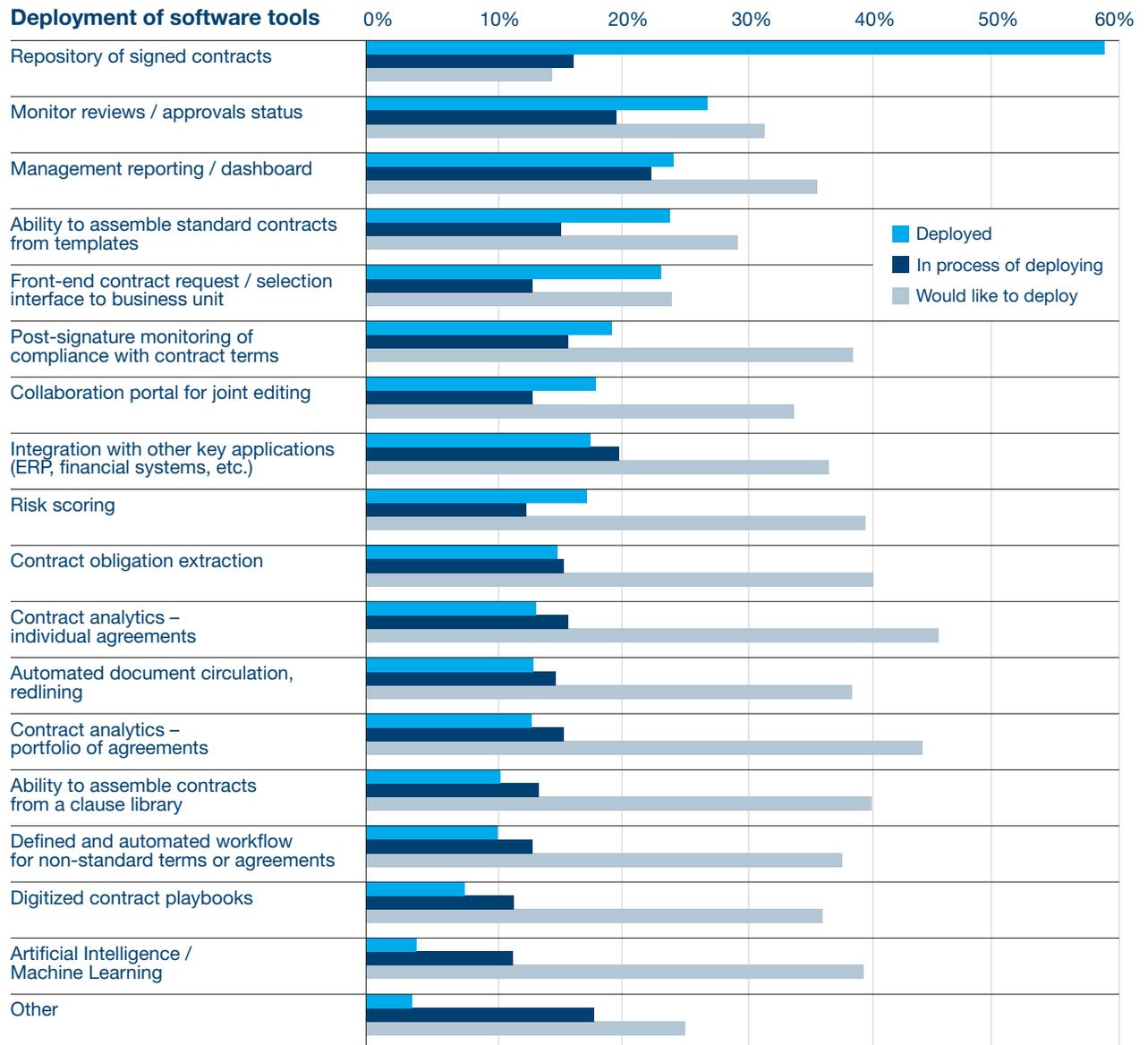
### Why does this happen and what effect does it have?

The production and use of contracts is highly fragmented, involving multiple stakeholders. Business systems have mostly evolved at a functional level and this has resulted in contract-related data being entered and stored in multiple locations. The contracting lifecycle does not operate as an integrated process and lacks a single point of ownership and accountability.

These factors have typically constrained the adoption and use of contract management technology. This is reflected in the chart (right), which shows the results of the *WorldCC Benchmark Survey 2021*. Out of almost 800 respondents, some 60% have implemented a contract repository, but adoption of other functionality is at best erratic.

The absence of automation lies at the heart of the overall pitfalls and value erosion. However, the successful adoption of an integrated system depends on developing a coherent lifecycle process and ensuring necessary standards – for example, taxonomy – and understanding and managing dataflows.

Without a fully automated lifecycle, elements of AI can still deliver impact – for example, creating an intelligent clause library to streamline contract production and ensure that the right terms are used – but this will not enable holistic deployment or optimize value retention.



## **Pitfall #10** Poor post-award processes and governance

### Why does this happen and what effect does it have?

Post-award contract management has long been the abandoned step-child of the contracting lifecycle. The glory has been in the winning of contracts, not in their performance. Post-award activity has been viewed as administrative and is frequently undertaken by untrained personnel, with limited authority and very little investment in systems. As previously highlighted, the contract itself is often drafted with a high degree of rigidity, designed to limit or prevent subsequent change.

The lack of integrated data flows highlighted in Pitfall #9 means that there is limited oversight of performance, leading to reactive problem solving and increased levels of disagreement and potential dispute. As highlighted in the introduction to this paper, the result is high (and avoidable) levels of value erosion.

*AI systems create an ability to aggregate data and undertake in-depth analysis so that we can better understand the cause and effect between the pre-award and post-award phases.*

### How is AI helping?

The post-award phase is the critical time for learning. Modern systems create an ability to aggregate data and undertake in-depth portfolio analysis so that we can better understand cause and effect. It is this which can revolutionize the purpose and value of contracting, turning it into an invaluable source of business, management and performance data. Artificial intelligence is proving fundamental to these activities of extraction and analysis, then also to the implementation and oversight of 'good practice'. It is converting contracts from purely a repository for the knowledge of expert stakeholders into a source of knowledge and know-how in their own right.

As outlined in the introduction, when it comes to achieving greater effectiveness and value from contracts, post-award analysis is key. It is here that we can observe the effects of pre-award decisions and undertake analysis of cause. 'Commercial intelligence' arises from an ability to examine portfolios of agreements, to observe the things that go well and those that cause losses or incur costs – for example, the frequency of disagreements on scope, or errors in invoicing, or contention on delivery or acceptance.



**The glory has long been in the winning of contracts, but not in their performance.**

# Conclusion

Artificial intelligence in contracting is no longer something for the future. It is here. It is now. The role it plays is in part to increase efficiency and reduce cost, but increasingly this transactional view is being replaced by an appreciation of the ways that it can drive value enhancement across a wide portfolio of contracts and relationships.

Achieving these improvements requires a disciplined approach, first of all focused on having sufficient volumes of contracts or data from which reliable information can be extracted. Analysis is then required to support machine learning and build intelligence.

There are challenges to be overcome, not least an acceptance that eliminating the pitfalls requires a degree of internal consensus and collaboration that has thus far eluded most organizations. Success requires a high quality contract repository, supported by agreed standards in metadata and taxonomy. It also requires a recognition that contracts being complicated does not make simplification and streamlining impossible – it makes it an imperative.



**AI's role is in part to increase efficiency and reduce cost, but increasingly this view is being replaced by an appreciation that it can drive value enhancement.**

### World Commerce & Contracting

World Commerce & Contracting is a not-for-profit association dedicated to helping its global members achieve high-performing and trusted trading relationships. With 70,000 members from over 20,000 companies across 180 countries worldwide, the association welcomes everyone with an interest in better contracting: business leaders, practitioners, experts and newcomers. It is independent, provocative and disciplined, existing for its members, the contracting community and society at large.

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### ContractPodAi

Well-established as the leader in end-to-end contract lifecycle management, ContractPodAi harnesses the unrivaled AI power of IBM Watson and Microsoft Azure for leading corporations around the world. Now, the platform's robust, intuitive, and easy-to-use capabilities have been extended to handle the entire, end-to-end legal lifecycle – any use-case, any document type, any scenario.

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#### About this report

This report is based on a consolidation of WorldCC research and member interviews. It reflects inputs from many hundreds of organizations that are working to understand and address the opportunities that modern technology has brought to the discipline of contract management.