

Addressing the Contracting Challenges

In the era of the 4th Industrial Revolution



Main Topics

01

THE INDUSTRIAL
REVOLUTIONS

02

UNIQUE FEATURES
OF THE 4IR

03

CONTRACTS'
TRANSFORMATION
AS A MUST

04

CONTRACTS AND
LEGAL CHALLENGES
OF THE 4IR

05

EFFECTS ON THE
WORKFORCE

06

MOTIVATIONS OF
THE INNOVATIVE
CONTRACTING STYLE

07

THE NEW
CONTRACTING
PARADIGM

08

CHARACTERISTICS
OF THE INNOVATIVE
CONTRACTING APPROACH

09

SUMMARY OF
INNOVATIVE
CONTRACTS

10

AN APPLICATION
OF A SMART
CONTRACT

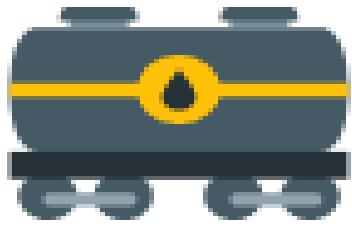
11

FRAMES AND
TOOLS TO
CONSIDER

12

TRANSFORMING
THE LEGAL
DEPARTMENT

The Industrial Revolutions

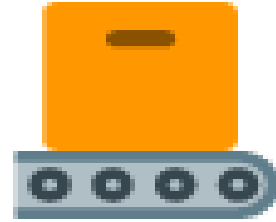


INDUSTRY 1.0

18th century

Steam power

Mechanical production, moving away from cottage industry

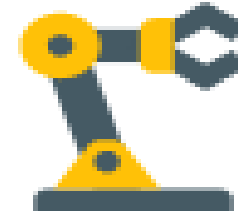


INDUSTRY 2.0

19th century

Electricity

Mass production and assembly line



INDUSTRY 3.0

Mid 20th century

ICTs
Electronics

Automated and networked production



INDUSTRY 4.0

Today

Advanced robotics
3D printing
Internet of Things
Artificial Intelligence
Big data

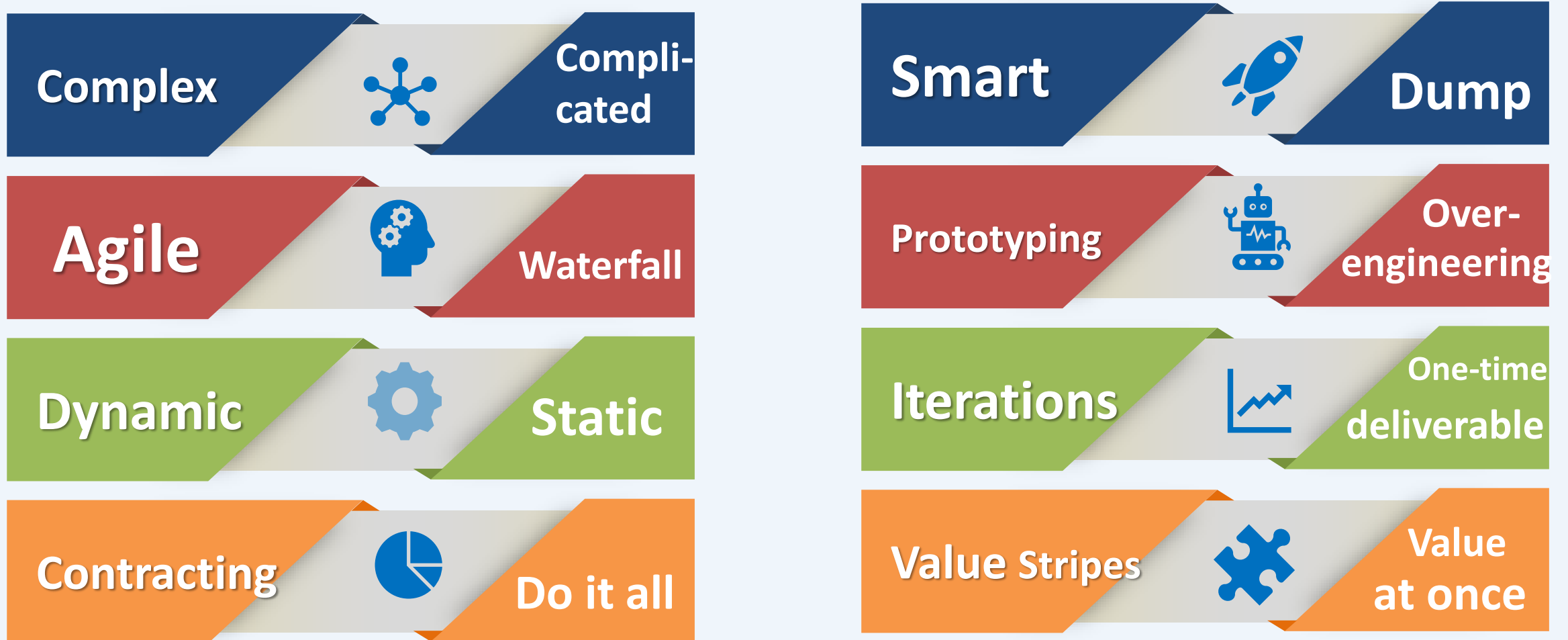
Intelligent, flexible and distributed production

How the 4IR Differs from Previous Industrial Revolutions?

- All three revolutions focused on scalable efficiency (doing things right) and moved towards scalable adaptability (doing the right thing).
- 4IR is the future of technology where objects, machines and various devices (all things) connect with each other in a secure, networked environment.
- 4IR will be different. It will bring significant changes to the way we live, interact and do business.
- 4IR is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres.
- As those lines become blurred, the question of who actually owns what will become more blurred, too.
- The focus of the fourth industrial revolution will increasingly be on scalable adaptability as well as empowering people rather than corporations as was the case with the first three revolutions.



Unique Features of the 4IR

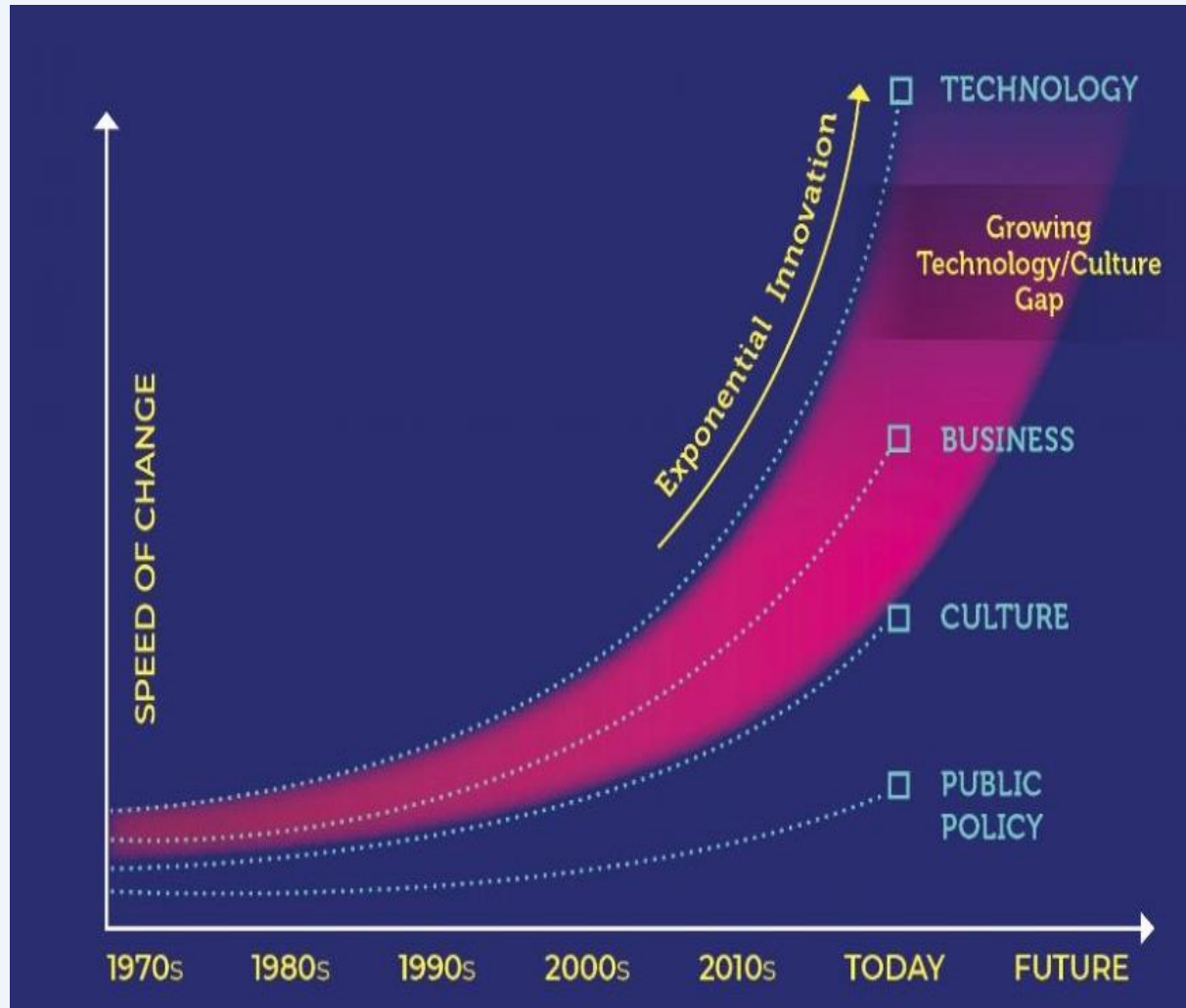


Fast and Responsive



Slow and Rigid

Contracts' Transformation as a Must



- Because technology is innovating at an exponential speed
- A Gap is generated between technology from one side and business, culture and public policies from the other.
- The gap is increasing as illustrated by European foundation graph.
- It will be impossible to depend on the normal behaviors to fill such growing gaps.

Contracts and Legal Challenges



CONTRACTING

- Increased dependency
- Reduced controls over assets
- 4IR are not mature yet
- Collaborated, responsive and agile
- Creative performance management



CONTRACTORS

- Virtual agile economy
- Faithful and Ethical act
- Multilayer contracting
- The code of conduct
- Joint act



KNOWLEDGE MANAGEMENT

- Access to Justice
- Shared legal information
- Analytics mining
- Legal chatbots



CHANGE MANAGEMENT

- Change is inevitable
- Re-prioritized phases and adaptive iteration
- Easy and frequent changes



LEGAL PRACTITIONERS

- Absorb the concepts of related technologies
- Direct involvement of the major stakeholders
- Build a client awareness



LEGAL FRAMEWORKS

- LegalTech
- A competitive legislative
- How things are done

4IR Effects on the Business Workforce

- Business and workforce need to be agile to react to rapidly changing technology and ways of doing business.



- Flexible approach to workforce planning with dynamic teams needed for a period of time



- Flexibility to expand and contract as business dictates, and to recruit individuals according to required skill-sets.



- Enterprises need a team that might be drastically different from today skilled team.

- Work force will be composed of flexible internal workforce and contractors.



A new environment of gig economy will be created with a shift from long-term employment.

Transformation is Inevitable in Legal and Contracts

“In short, the role of law is going to be really interesting as the economy dramatically changes over the next couple of decades”.

“UBS economist Paul Donovan”
<https://www.businessinsider.com/fourth-industrial-revolution-great-for-lawyers-2016-3>

“It’s not about technology replacing lawyers. It’s about technology in combination with lawyers. One without the other performs much weaker than when the two are combined.”

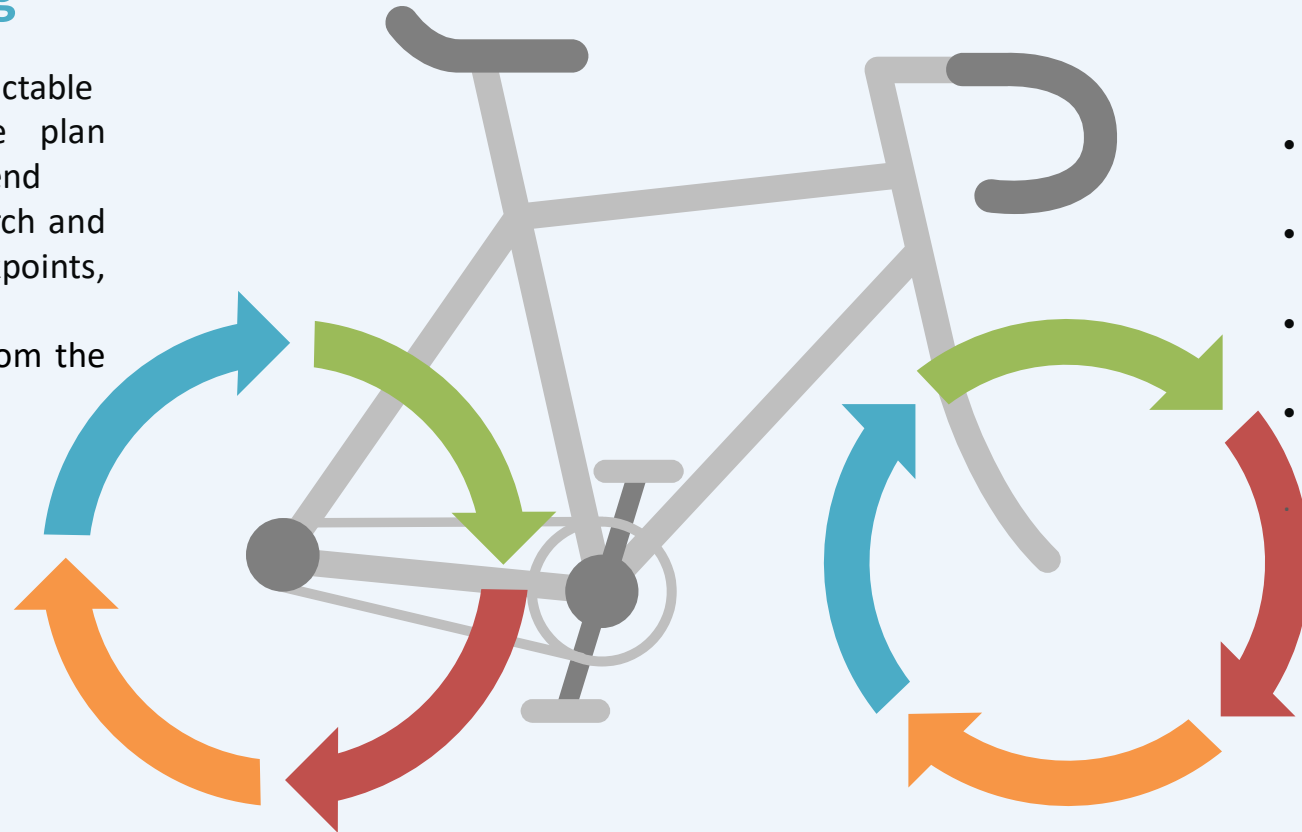
Alma Asay, Chief Innovation
Officer at Integreon
<http://jdtobe.byu.edu/2018/03/20/how-the-fourth-industrial-revolution-is-redefining-the-legal-industry/>



Motivations of the Innovative Contracting Style

The Paradigm Shifting

- 4IR projects are not always predictable
- They don't have the entire plan mapped out from beginning to end
- There is a starting point, research and development midway checkpoints, followed by a solution process.
- The entire target isn't visible from the outset of the project



Agility Motivations

- To follow up the transactions across the entire company
- To exchange data with all other departments
- To track the transaction life cycle along with company representatives
- To control the duration of the transactions and avoid delays.

Risk Motivations

- Risk and exposure,
- Flexibility to allow for change, and
- Clarity regarding obligations, deliverables, and expectations
- Challenging business dynamics
- Collaborative thinking

Value Motivation

- Opportunity contracts aims to ensure that money is spent on requirements effectively, even if they were not recognized at the beginning.
- This will avoid wasting time and money in developing requirements that are not ultimately needed.
- From a legal point of view, such contracting can protect a client from threats that are not known at the contracting period

Stakeholders Shifting

- Five rules of the road
- Know your traveling partners well,
- protect your passengers,
- keep everyone on course,
- chart the itinerary together and
- plan for arrival.

Features of the New Contracting Paradigm

Starting at the Provider Terms

- Implemented on the provider's terms
- Large providers who dictate their rules
- Special considerations related to the acquired solutions

Flexible Scope

- Cannot define an exact project scope.
- Degree of scope specificity and change may vary

Multi-Layered Structure

- contract for few iterations to begin with
- The enterprise does not have to make up the entire vision
- Clients with an option to quit on predefined iteration

Creative Contract Termination

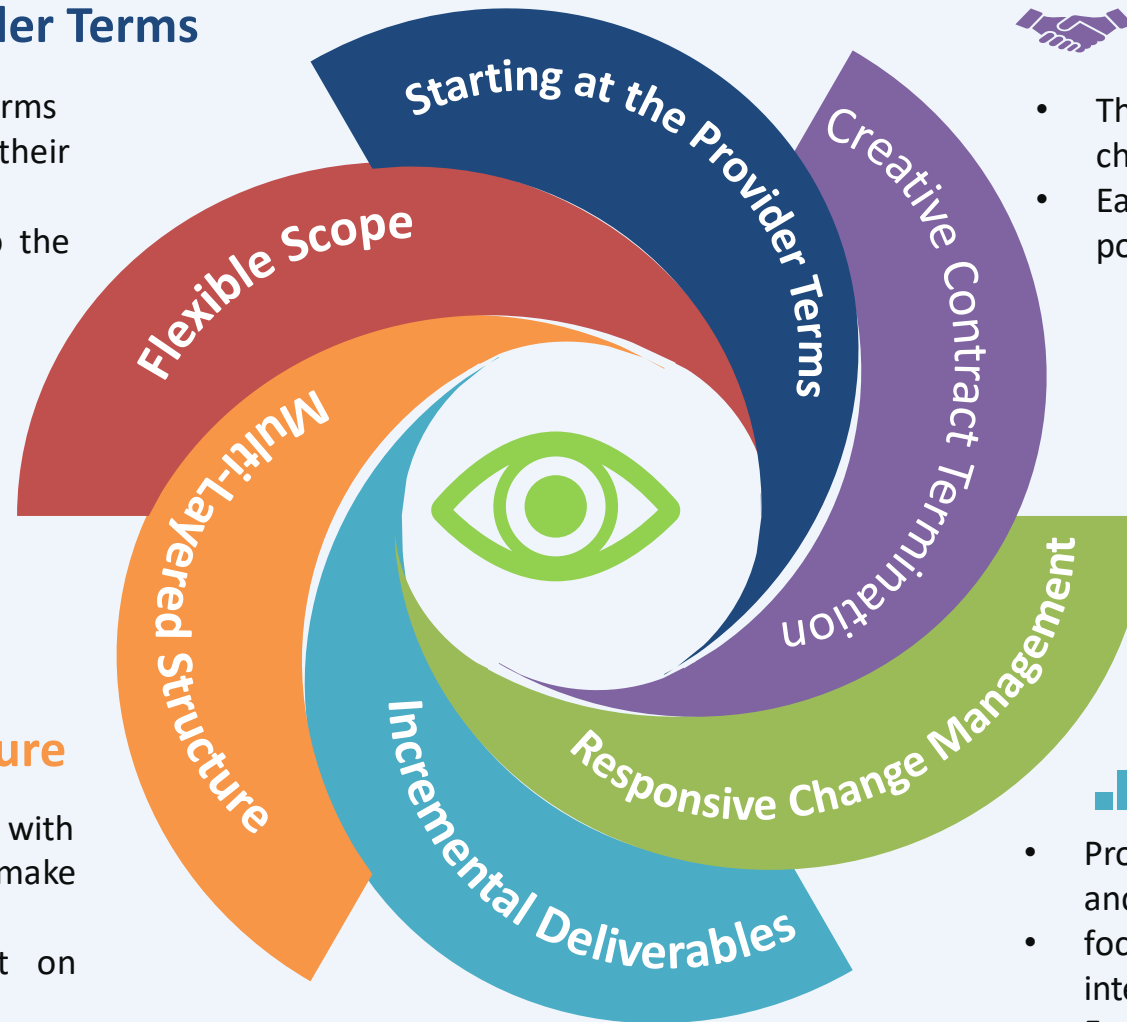
- The concept of termination is linked with change control
- Early termination may be viewed as a positive, desirable event

Responsive Change Management

- Change is largely inherently addressed within the overall philosophy .
- Responsiveness changes the mindset of client enterprises

Incremental Deliverables

- Promote incremental delivery of services and features
- focus on cooperation to manage integration and reinforce learning
- Focus on artifacts that are valuable



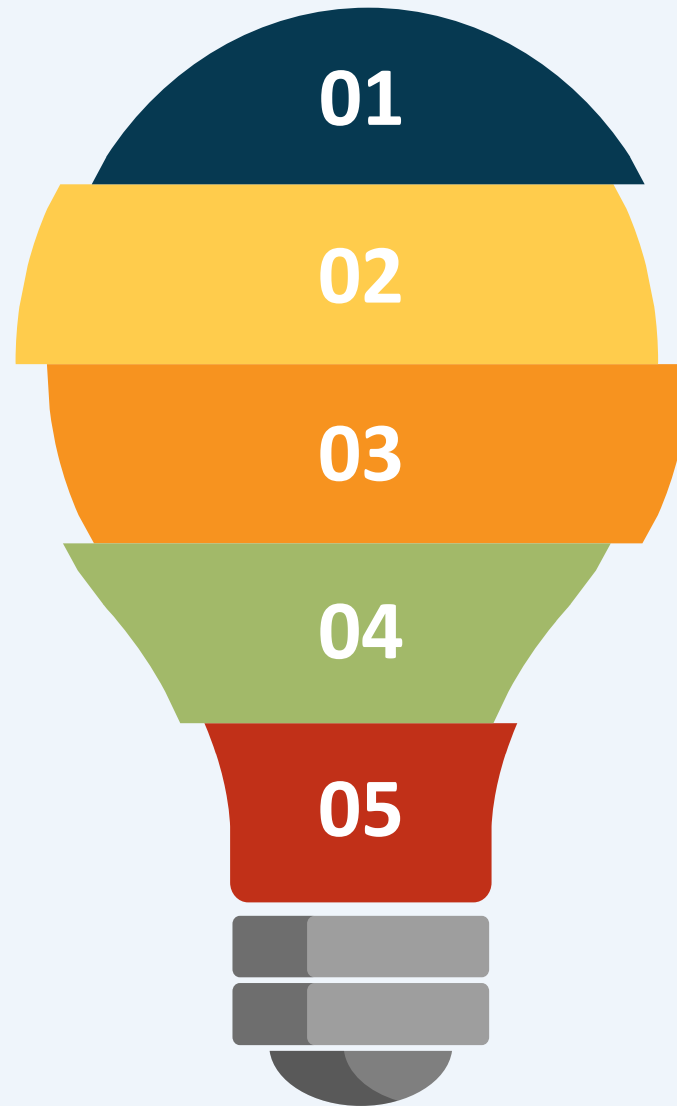
Characteristics of the Innovative Contracting Approach

2 Maximum Business Value

Enhance risk governance and re-invent the rules and obligations

4 Navigation clarity

To increase navigation clarity through the chaos, complex features and multi-layer contracting



Responsive and Agile Mindsets 1

To support the ever-changing business requirements

Operational Flexibility 3

Manage various providers and orchestrate service delivery

Smart Features 5

To correlate with stakeholders' continuously evolving requirements

Summary of Frictionless Contracts

Smart Contracts

- Computer program
- Using block-chain
- It is embedded
- Rule-based operation
- It is irrevocable
- No third parties are required

A smart-contract is a computer program that enables the facilitation, execution and enforcement of a set of rules for negotiating the terms of a contract. It automates the validity of the contract and self-executes agreed terms and conditions, using block-chain technology.

Agile Contracting

- Based on Project Vision
- List expected features
- Estimate of business value
- Estimate the required efforts
- Priority management
- Easy or free change

The Agile contract will be based on the Project Vision and should include:
The list of features to be developed
Estimate of business value
Estimate of the effort required
The priority for each of the items
The Agile change management procedures

Innovative Contracts

- Operation & delivery capturing
- Mirroring real-world
- Indicative scope with checkpoints
- Joint decision
- Risk sharing
- Exit points planning

Adopting a different approach that support understanding and capturing the operational and delivery processes.
Mirroring real-world successful projections and smoothing the contract effectiveness.

An Application of a Smart Contract

1



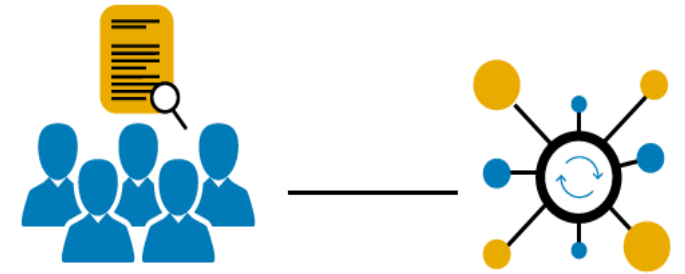
An option contract between parties is written as code into the blockchain. The individuals involved are anonymous, but the contract is the public ledger.

2



A triggering event like an expiration date and strike price is hit and the contract executes itself according to the coded terms.

3



Regulators can use the blockchain to understand the activity in the market while maintaining the privacy of individual actors' positions.

Source: Deloitte University Press, DUPress.com

Frames and Tools to Consider

CONTRACT LIFECYCLE MANAGEMENT (CLM)

Every contract has a lifecycle, from drafting to utilization to expiration

CLM, streamlines management of each contract, making it easier for companies to deal with tens to thousands of vital contracts that affect their business and could expose them to risk. Managing one contract may be simple enough, but as contract portfolios grow, managing every stage of every contract becomes extremely difficult and ultimately, truly impossible to do well.

LEGAL-TECH.

Legal technology traditionally referred to the application of technology and software to help organizations and law firms with practice management, document storage, billing, accounting and electronic discovery.

It also connect people with lawyers more efficiently through online marketplaces and lawyer-matching websites

ROBOT LEGAL ADVICE

IBM Watson as a Robot Legal advice. The demand for machines to explain and justify answers in terms humans can understand will grow with our desire to leverage computers in the process of human decision making, especially in areas where the reasons matter.

RELATED AGREEMENTS

Such context of agreements provide guidance for how contract law will apply to smart contracts.

All agreements need to be incorporated, either by full text or by reference.



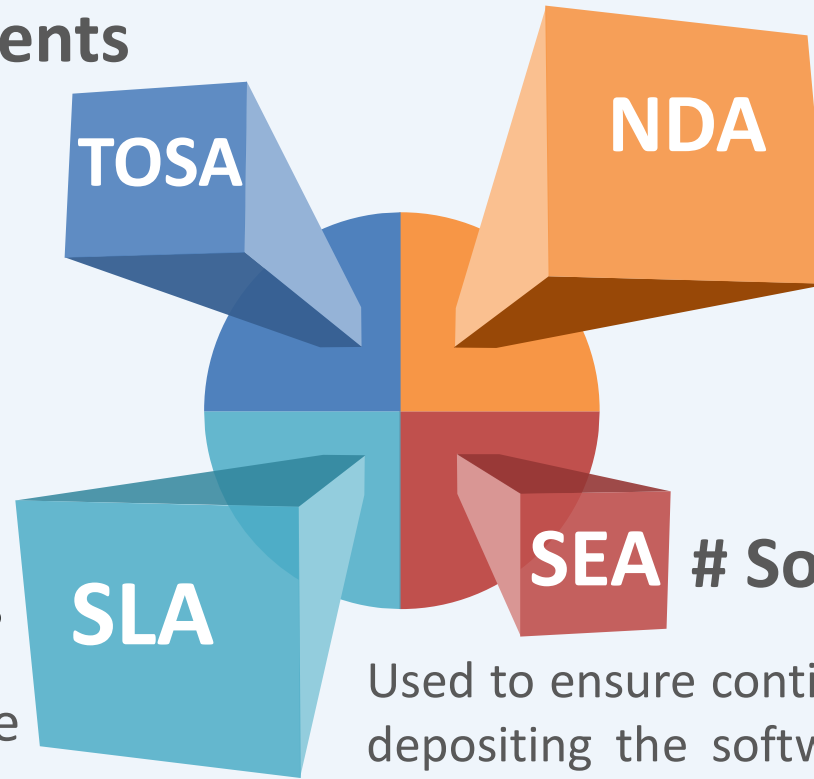
Sample Agreements associated with 4IR Contracts

Terms of Service Agreements

Enforce common acceptable use of standards across all users to effectively maintain how their environment is utilized

Non-Disclosure Agreements

Describes the acceptable personnel behavior of the service providers' staff when dealing with client data.



Service Level Agreements

An important component under the umbrella of the overall contracts. SLAs define acceptable service levels to be provided by the service providers in measurable terms.

Software Escrow Agreements

Used to ensure continued use of critical business systems by depositing the software source code with a neutral third-party escrow agent.

- SEAs mitigate the risks that are inherent when an organization relies on third party technology vendors.
- The software source code is released to the licensee if the licensor vanishes out or fails to maintain and update the software as specified in the license agreement.



Transforming the Legal Department

01- LEARN THE TECHNOLOGY AND BUSINESS MODEL



08 -UNDERSTAND YOUR ECOSYSTEM



02 -LOOK OUTWARD: SOLVE YOUR CUSTOMER'S PROBLEMS



07-UTILIZE THE CULTURAL AND CREATIVE CHANGES TO THRIVE IN THE DIGITAL AGE



Adapt or die, Innovate or perish!
09 -Cope with the challenges of new technologies

03 - LOOK INWARD: ASK THE RIGHT QUESTIONS ABOUT COMPLIANCE



06 CONSIDER THE SOCIAL IMPACT OF DIGITAL INNOVATION — AND MAKE A DIFFERENCE



04 -ENGAGE WITH INFLUENCERS



05 - UNDERSTAND THE DATA CURRENCIES





“The law is not an immutable code carved in stone. It too is being disrupted by the technological revolution. But its principles are classical, and until the language of the legal system is entirely written in computer code, law will remain a kind of non-fiction literature”.

Narayan Toolan
Legal futurist



The Important Fingerprint



Contract lifecycle management (CLM)

Every contract has a lifecycle, from drafting to utilization to expiration
CLM is managing contracts or agreements and relationship between entities by properly

LegalTech

Legal technology is being used with increasing frequency to improve speed and efficiency in the legal process.

Smart contracts

A computer program that enables the facilitation, execution and enforcement of a set of rules for negotiating the terms of a contract.

Agile contracting

Where the supplier and the customer together define their common assumptions in terms of the business value, implementation risks, expenses (effort) and costs.

Innovative Contracts

Adopting different approaches to support understanding and capturing the operational and delivery processes while mirroring real-world successful projections, sharing risk and providing check and exit points



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