

# Challenges for the Construction Industry and the role of Construction Law

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Presented by

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# Overview

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I

Challenges facing the construction industry

II

Role of construction law in addressing challenges

# Challenges facing the Construction Industry

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1

Human Resources

2

Regional conflict and sanctions

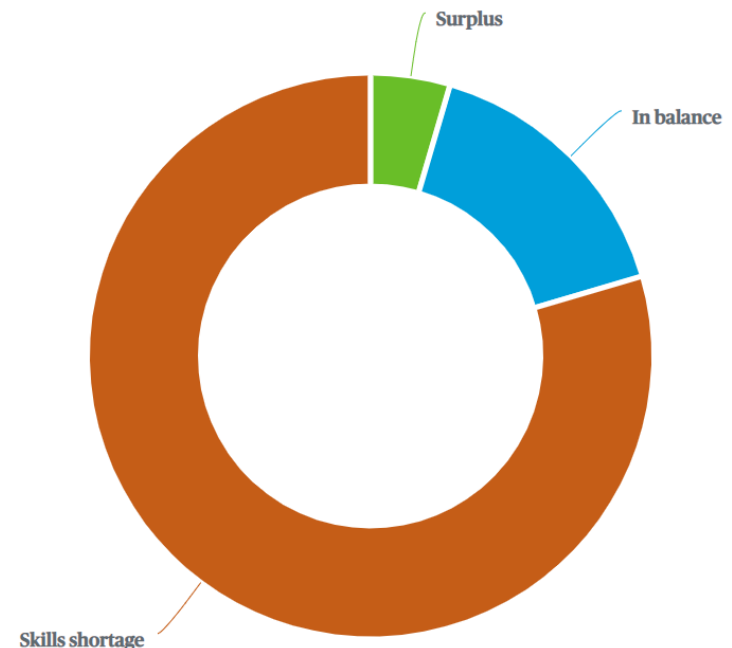
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Supply chain issues

# Challenge 1: Human Resources

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- Industry-wide skills shortage (at project management and labor levels)
- 79.6% of markets experiencing skills shortages, 15.9 in balance, and only 4.5% surplus in construction labor
- Exacerbated by:
  - The 'Great Resignation'
  - Ageing population (median age usually 40-60 years old)
- Why?



Source: Turner & Townsend Global Construction Market Survey 2022

# Challenge 1: Human Resources

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## (1) Lagging Technologically

- Industry failure to implement new technologies to facilitate project management and delivery
- Construction is one of the least digitized industries in the world
  - 2/3 of construction executives don't use advanced data analytics to monitor projects
  - Less than 20% plan to incorporate new technology to manage increasing project-related risk
  - Of 835 construction firms in 12 countries, only 13% are “well on their way” to digitizing operations, with 58% in the “early stages”



Source: Autodesk Workforce Survey 2021 & KPMG Global Construction Survey 2021

# Challenge 1: Human Resources

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## (1) Lagging Technologically

- Drivers include:
  - Employee and management hesitance
  - Cost and scale
  - Lack of knowledge
  
- Creates the perception of an outdated industry – deterring younger people from joining



Source: Autodesk Workforce Survey 2021

# Challenge 1: Human Resources

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## (2) Declining industry appeal

- Younger generation does not view construction as a viable career
  - Appeal as a career option fell to 4.2 out of 10 among 14 to 19 year old's, with only 3% searching for construction opportunities
  - Falling numbers of apprentices across major construction markets
- Perception of the industry as low status, dirty and badly paid, with poor working conditions and job security

# Challenge 1: Human Resources

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## (2) Declining industry appeal

### (a) Work-life balance

- Long hours, low pay and job insecurity common across the industry
- Major contributor to poor mental health and high suicide rates compared to other industries
  - 74.3% of workers' mental health impacted by long working hours
  - 70.8% impacted by job uncertainty
  - 68.7% impacted by tight deadlines
  - 67.5% impacted by financial pressure
  - 64.1% impacted by working away from home

Source: Construction News Mind Matters Survey 2019



# Challenge 1: Human Resources

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## (2) Declining industry appeal

### (b) Lack of diversity

- Across major markets, only ~10% of the construction industry are women
- Key deterrents:
  - Perceived physical nature of the work
  - Remote onsite locations
  - Social dynamic of working in a male-dominated, “macho” setting
  - Lack of available career paths and flexible working arrangements



Source: Agapiou, 2002

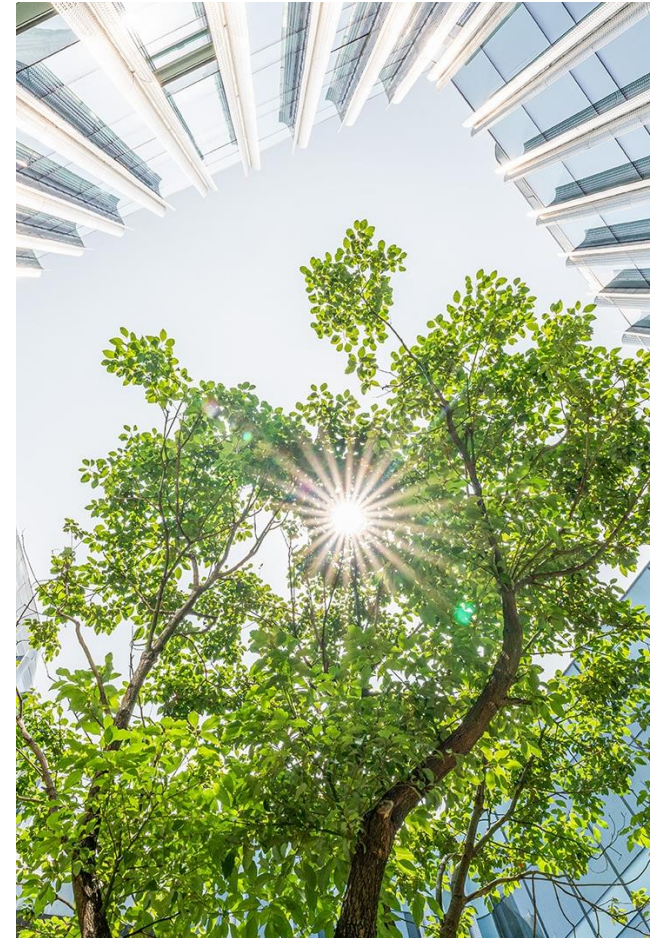
# Challenge 1: Human Resources

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## (2) Declining industry appeal

### (c) Environmental, Social and Governance (ESG) Concerns

- **Environment:** the construction industry generates 30% of total greenhouse gas emissions and consumes 32% of the world's natural resources
- **Social:**
  - Concerns about physical safety, and increasingly, mental health
  - Concerns about the impact of projects on local communities
- **Governance:**
  - Concerns about corruption
  - Concerns about lack of transparency in supply chains and subcontracting (facilitating legal or unethical behaviour)

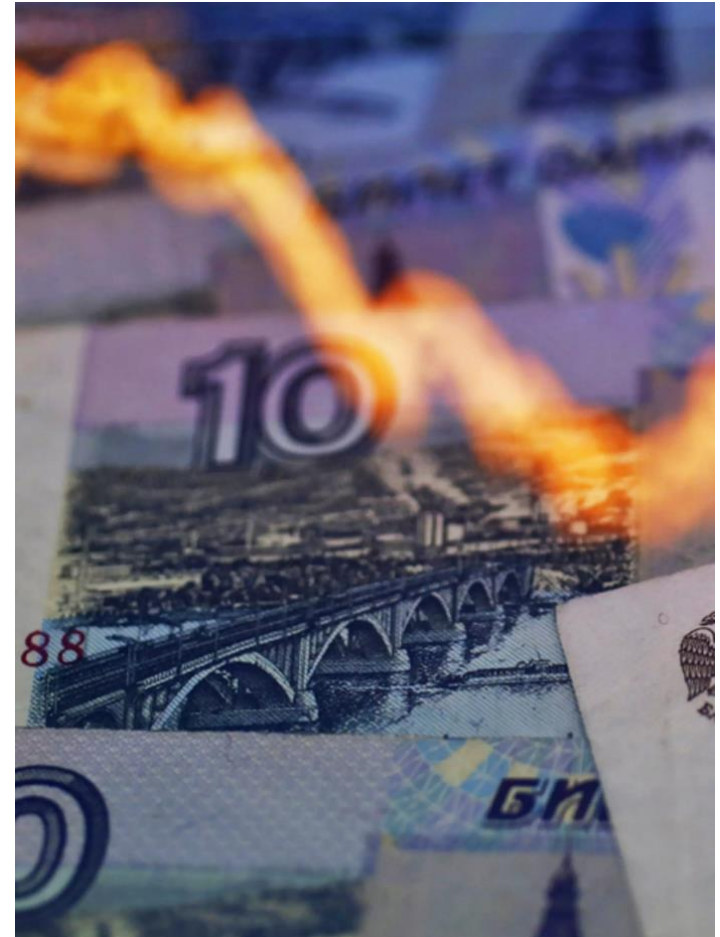


Source: Marsh Future of Construction Report 2021

## Challenge 2: Regional Conflicts and Sanctions

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- Extensive sanctions regimes against:
  - Russia
  - China
  - Iran
  - Myanmar
  - North Korea
  - Belarus
  - etc.
- Typical sanctions:
  - Financial measures
  - Oil and gas
  - Goods and services
  - Targeting individuals
  - Technology transfer

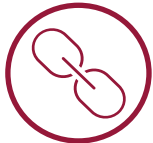


## Challenge 2: Regional Conflicts and Sanctions

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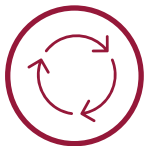
Significant contributor to inflation (alongside events like COVID-19)



Increased costs and shortages (materials and labor) → reducing profit margins



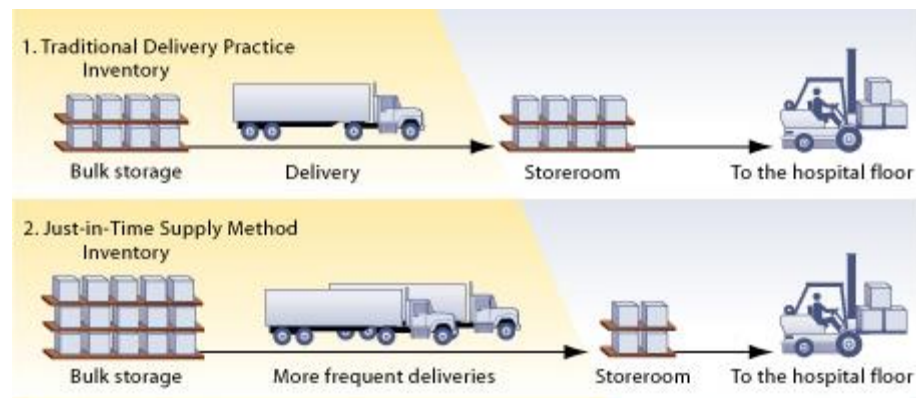
Difficulty planning projects and securing funding due to uncertainty



Smaller contractors forced to absorb costs and risks

## Challenge 3: Supply Chain Issues

- Many economies operate on the basis of a 'just-in-time' (JIT) approach to the design and manufacture of elements of construction projects
- System developed by Toyota that ensures materials and components are delivered to the production site at exactly the right moment to enable immediate use
- Right materials supplied in the right order, in the right amount, at the right time
- Functionality depends critically on each part of the chain fitting as intended

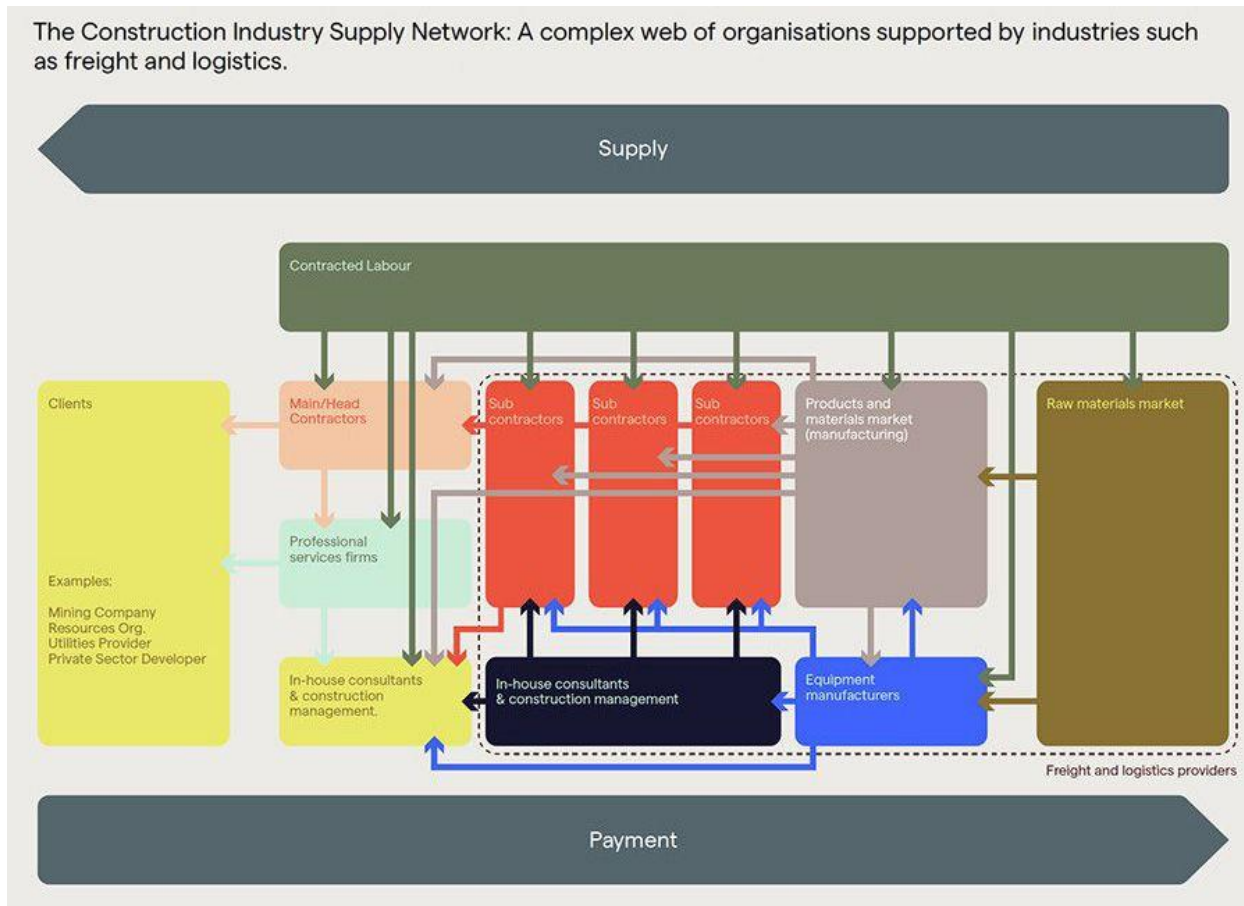


Source: Laudon and Laudon 2020



# Challenge 3: Supply Chain Issues

- **Problem:** the construction supply chain is usually very complex



Source: Consultancy 2022

## Challenge 3: Supply Chain Issues

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- Rising prices and material shortages prolonging schedules and increasing costs
- Increased competition lowering slim profit margins
- Inappropriate risk allocation leading to large numbers of construction insolvencies



Source: Supply Chain Management Review 2020

## Challenge 3: Supply Chain Issues

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- A survey of practitioners shows a poor awareness of supply chains and potential risks
  - Only 11% were fully confident in their organisation's ability to name every party in the supply chain
  - 56% believed their organization to have unknowingly engaged a supplier red-flagged by another area of the organization.
  - Only 13% always monitored risk profiles of parties not contacted directly
- Pressing need to develop supply chain awareness and resilience



Source: Consultancy 2022



# Dealing with international and national challenges

## Place of construction law in responding to international and national challenges

1

Collaborative contracting

2

Contribution lawyers can make to the development of law

# Collaborative contracting

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## **Traditional model of contracting**

- Allocation of specific responsibilities and risks
- Priorities personal economic interests
- Results in an adversarial approach and the pursuit of individualist goals

## **Collaborative approaches to contracting**

- Allows for project-based objectives to be reflected and promoted in the terms of the contract

# Collaborative procurement

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Early contractor involvement

- Progressive tendering
- Providing feedback on issues such as design, scheduling and risk allocation

Can lead to the innovative co-creation of solutions



# Features of collaborative contracting

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## Common features of collaborative contracts



Express contractual obligations to act honestly, cooperatively and in good faith



Painshare/gainshare arrangements'



No blame" regimes where parties waive their right to sue other participants



Early warning and risk management mechanisms for collaborative problem-solving and decision-making

# Forms of collaborative contracting

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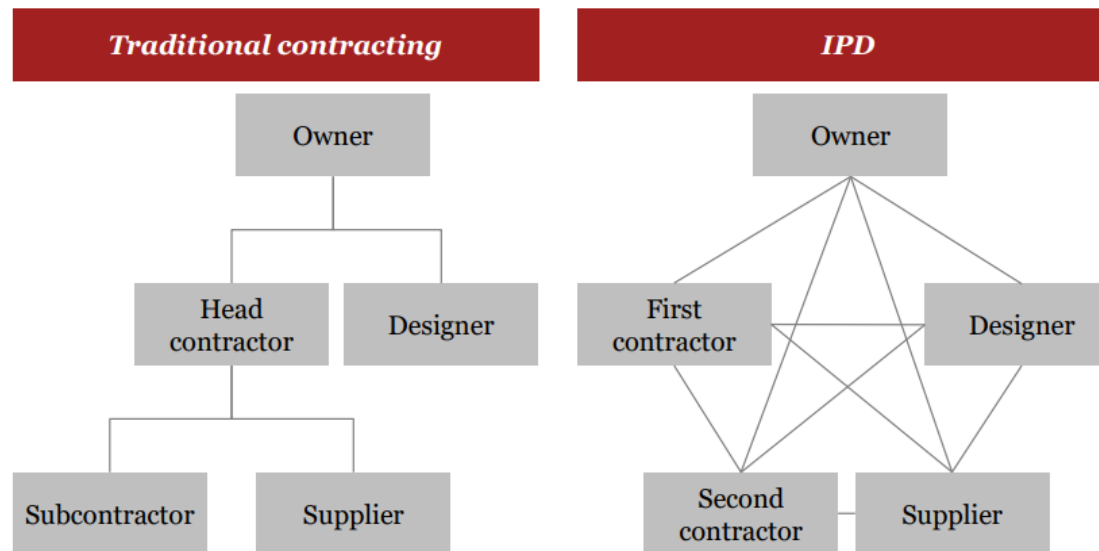


Source: PwC Collaborative Contracting Report, 2018

# Forms of collaborative contracting models

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- Partnering contracts
- Alliance contracts or integrated project delivery
- Managing contractor



Source: PwC Collaborative Contracting Report, 2018

# Addressing challenges in construction projects

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The use of collaborative contracting can:



Reduce the disputes which arise



Improve cost and schedule performance



Encourage communication and opportunities for innovation to address issues such as ESG.

# Factors limiting use of collaborative contracting

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- Lack of experience and established delivery frameworks
- ECI may require uncertain and long periods of preconstruction work without guaranteed contracts
- Lack of confidence in participants' commitment to the process of collaboration and investment of resources



# Contribution of lawyers to the development of construction law

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*Contribution to developments in contract forms and law, together with issue resolution during project delivery, is impeded by adversarial approaches*

- Currently lawyers focus on advancing the interest of the side which employs them
- Conduct such as being binary in the approach to allocation of risks and being overly biased towards their client can harm the overall success of a project
- When it comes to project issue resolution, the lawyers often do not help

# Adopting a ‘best for project outcomes’ approach

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- Paramount focus is on the completion of the project itself
- Rather than any parties’ particular economic interests
- Lawyers can encourage cooperation and seek to align goals and incentives
  - Overly onerous contractual terms may be unhelpful and unnecessary
  - Lawyers should avoid overly complex and long contracts
  - The flow chart contract
  - The project lawyer

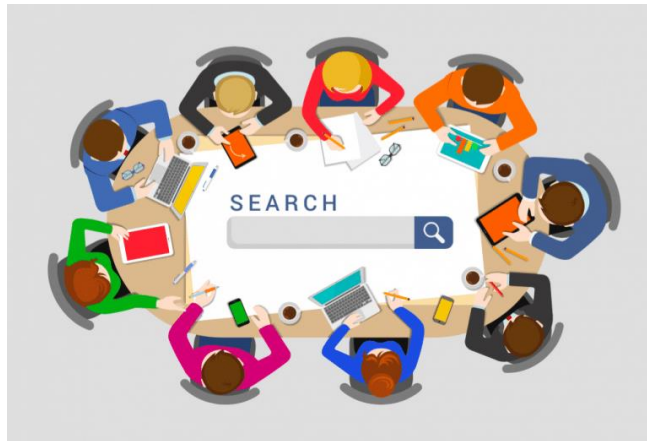
# Future outlook

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Innovation



Digitization



Self-reflection

Collaboration



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