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# Indicadores Future-Ready: Está tu organización preparada para el futuro?

**Graeff, Claudio**

Despite global efforts to improve the cost, schedule and benefits realization, major projects consistently fail. In this presentation, we will try present what companies are doing to change the game to delivery complexity projects.

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## Hoja de Vida

- Chemical Engineer with MBA in Business Administration
- 23 years of experience in operations and projects
- Currently Head of Infrastructure Asset Delivery for Latam in KPMG
- Previous experience: Vale, giant mining company, Braskem, the largest petrochemical company in Latam and Odebrecht construction company
- Large experience in project development according FEL methodology
- Hard user of AACE Recommended Practices
- Large experience in planning, cost controls, CapEx preparation, Risk Management, Contract Management and dispute resolutions
- Experience in Infrastructure projects like roads, railways, ports, airports
- Experience in Energy, Steel Mill, Mining (Nickel, Potash and Phosphate projects)
- Director of AACE Brasil in 2018

**ALGO QUE NO SABEN DE MI:** Me gusta surfear y tocar guitarra.

Member of the Board of Directors of Brazilian Association of Agribusiness in 2017/2018



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## Background: The 2017 influence

**Big themes**

- Project complexity outpacing improvement in governance and controls.
- Significant underestimation and investment in the human element and its effect on project delivery.
- An industry lagging in adapting new technologies and embracing innovation.

**The KPMG solution - “Three steps to closing the performance gap”**

1. Innovate through investment in technology
2. Evolve by rationalizing governance and control
3. Integrate by optimizing human performance

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• Rationalize governance and controls

— Assess

— Rationalize

— Rebuild

Evolve

Improve performance

• Optimize human performance

— Change management

— Talent management

— Soft controls

Integrate

• Innovate with technology

— Technology diagnostic

— Quick hits

— Road map and strategy

Invest

Source: Global Construction Survey 2017

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## Results of the Survey

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## Background: Building the Index

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To compile the Future-Ready Index, we looked at survey participants' responses to 12 key questions relating to governance and controls, technology and innovation, and people. Based upon responses to these questions, the Index yields a single score (between 1–100) to represent how effectively an organization embodies the core capabilities necessary to become efficient, diverse and high-performing.

	<b>Governance and controls</b>	The sophistication, maturity and fitness of the governance environment
	<b>Technology and innovation</b>	Ability to use technology and drive performance
	<b>People</b>	The 'fitness' of an organizations human capital

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## Building the Future Ready Index

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To compile the Future-Ready Index, we looked at survey participants' responses to 12 key questions relating to governance and controls, technology and innovation, and people (shown below). Based upon responses to these questions, the Index yields a single score (between 1–100) to represent how effectively an organization embodies the core capabilities necessary to become efficient, diverse and high-performing.

**Governance and controls**




Effective management practices, policies and controls, applied consistently and monitored for effectiveness in terms of project outcomes

Agility to respond and change course in face of evolving conditions and risks, based upon accurate, real-time reporting

A flexible approach to megaprojects, acknowledging their unique capital requirements, eclectic mix of third parties and demands on internal resources

**Technology and innovation**




A robust and comprehensive technology strategy

Investing in new technologies, knowing that all investments carry a risk of failure

A structured approach to innovation reflecting a culture that embraces fresh ideas and new ways of working

**People**

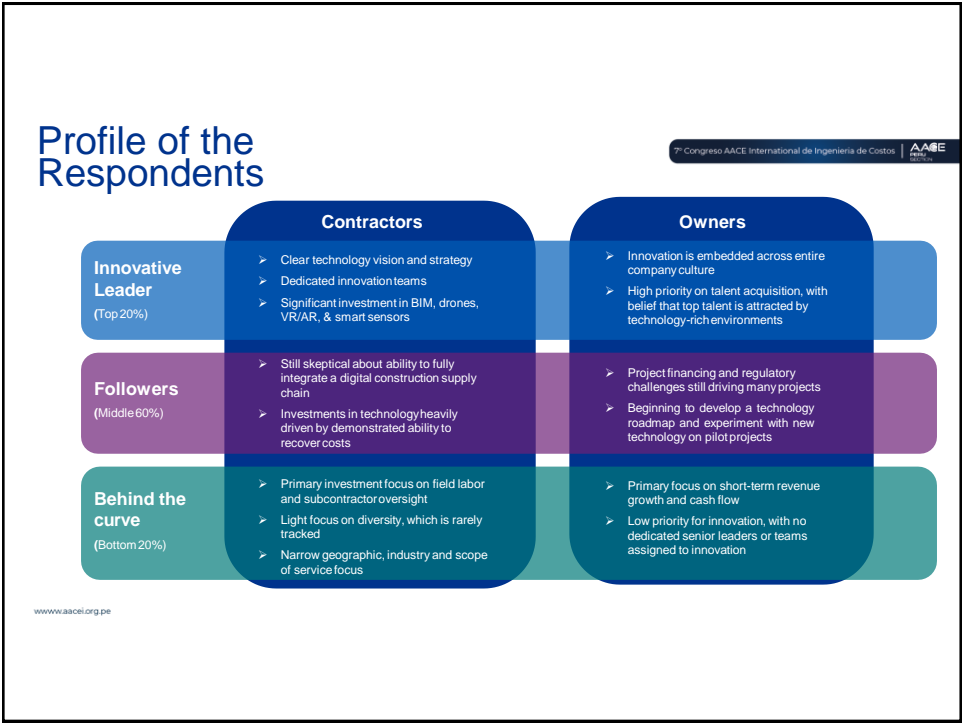
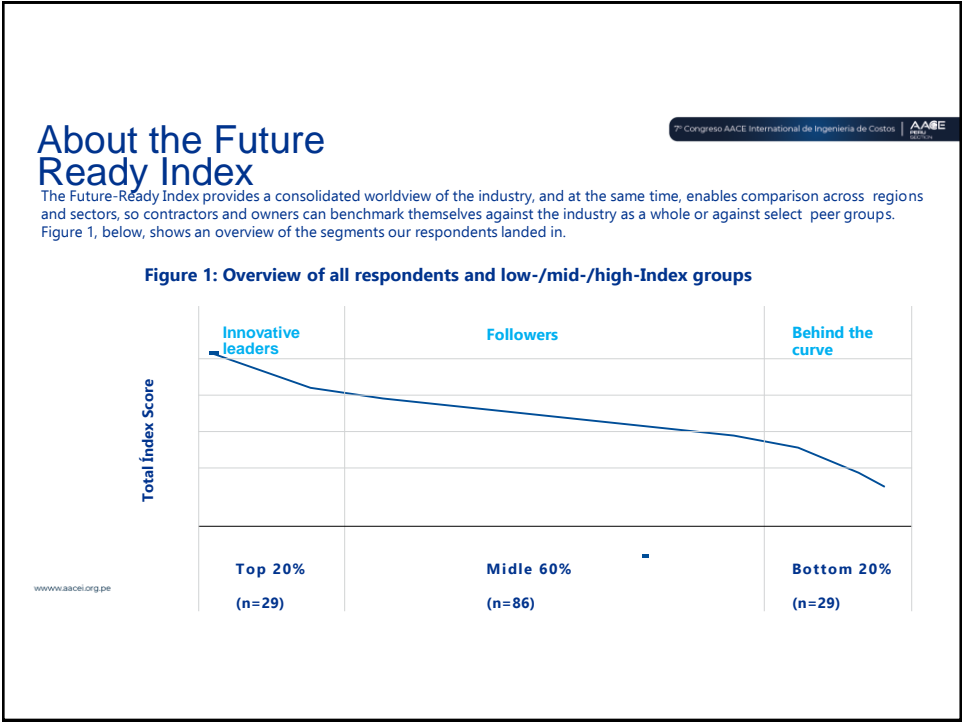


Attracting, developing and retaining future leaders and top talent

Performance-based rewards and promotion aligned with strategic objectives

Communicating both strategic vision and project progress

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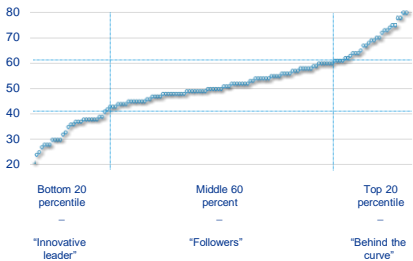


## Background: Using the Index

### A consolidated worldview of the industry

An opportunity for engineering and construction firms to benchmark themselves against the industry as a whole or against a select peer group. The Future-Ready Index also enables comparison across regions and sectors.

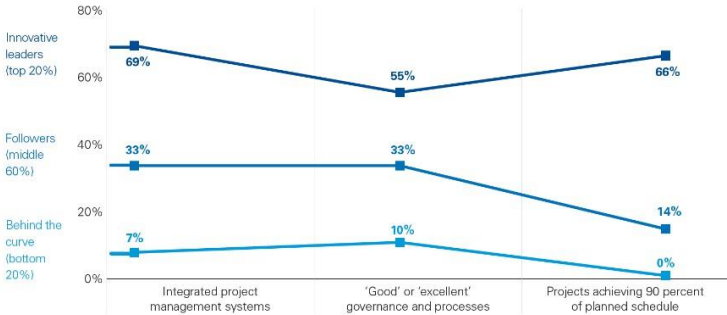
### Overview of all respondents and low/mid/high Index groups



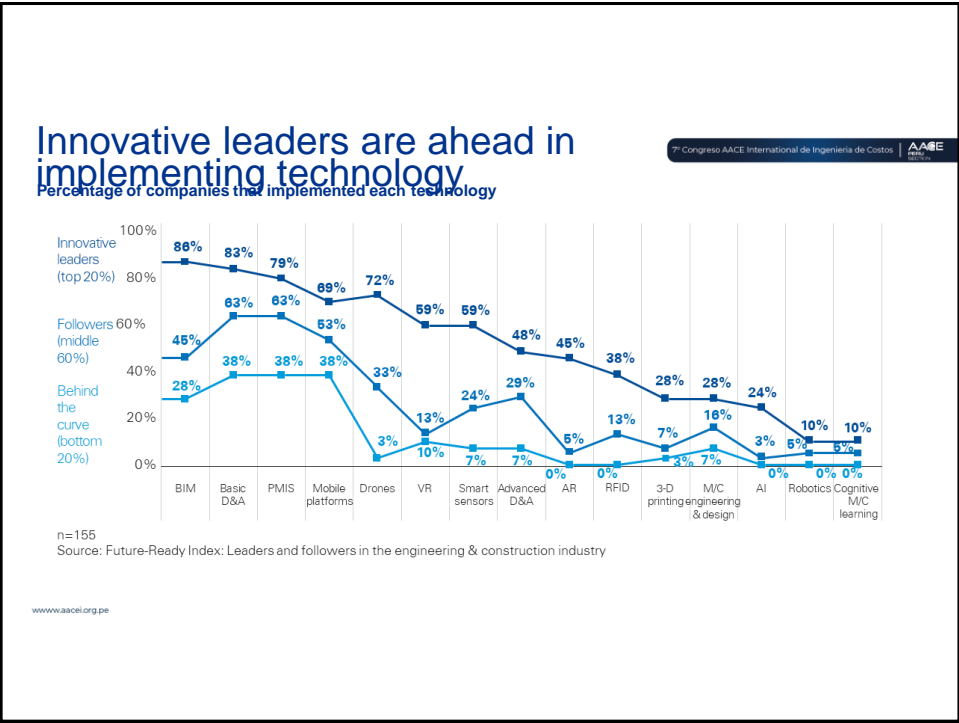
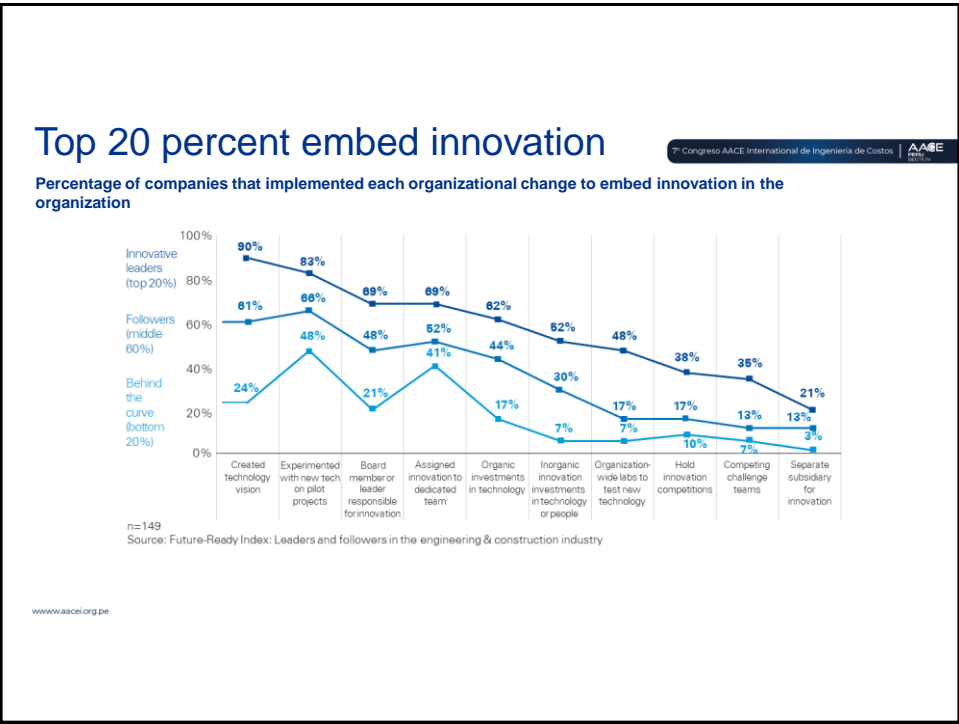
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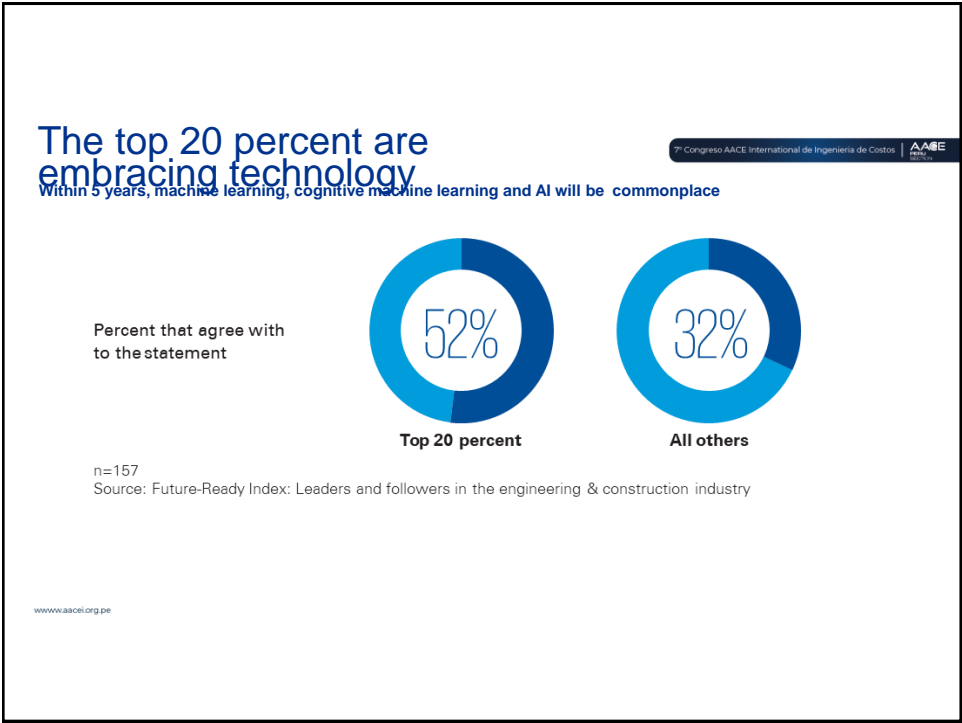
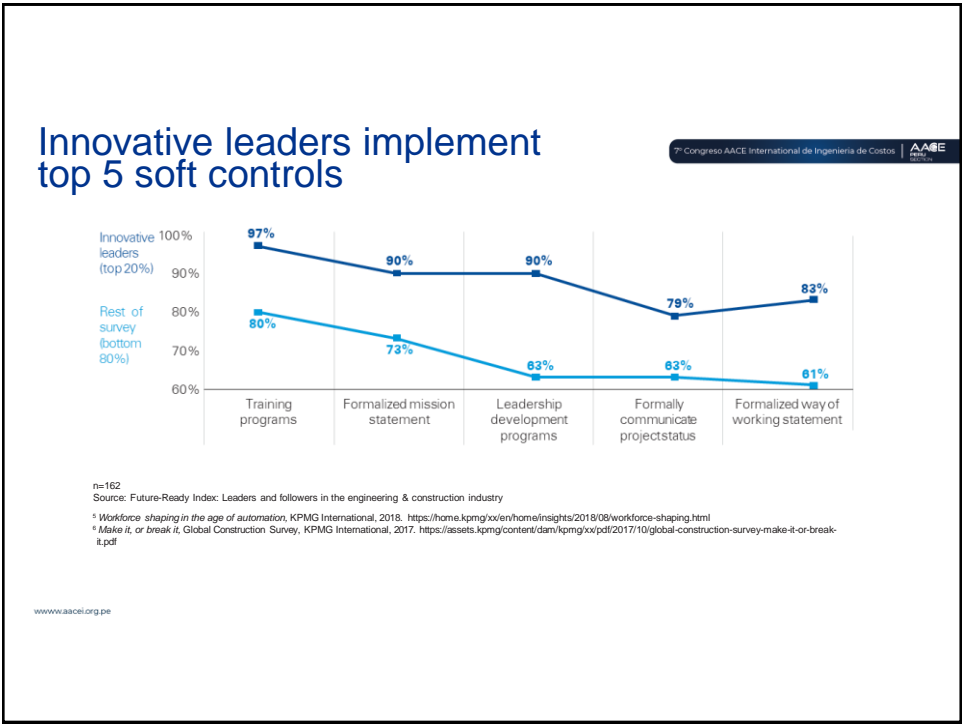
## Innovative leaders are ahead in governance and controls

The graph below shows how the players are dealing with Governance, Controls, Technology and Innovation.



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Example of Technology in Projects: Risk

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What is the biggest challenge facing major projects?  
Despite global efforts to improve the cost, schedule and benefits realization these major projects consistently fail.  
In *Climbing the curve* and *Make it or break it*, a total of 300 senior executives from both private and public organizations, across all major sectors, were interviewed on project delivery and how their organizations were performing:

53% of organizations suffered one or more underperforming projects in the previous year

25% of projects came within 10% of their original deadline in the past 3 years

91% of public sector respondents experienced project failures

50% of owners organizations and 60% of contractors admitted that poor project performance significantly impact their company

71% of natural resources companies suffered one or more underperforming projects in the previous year

70% of respondents admitted their company does not have integrated systems or processes for project reporting meaning project managers and executives lack the capacity to see and control work

31% of all respondents projects completed within 10% of budget in the past 3 years

86% of respondents said that the "human element" significantly influenced project delivery but only 40% have formalized "soft" controls as part of their delivery work

Climbing the Curve

Make it or Break it

GCS 2015 Climbing the Curve

GCS 2016 Building a technology advantage

GCS 2017 Make it or Break it

GCS 2018 Future-Ready Index

Both controls—ensuring *themselves* are clear about their roles, but free to raise issues or concerns, are confident that they will be listened to, and, ultimately, embody the right values—are, arguably, equally important project success.

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# What contributes to failure?

Major project failure is rarely the result of unforeseeable 'black swan' events. Projects fail for predictable reasons.

There are many contributing factors of major project failure:

NO SOCIAL LICENSE  
LACK OF ALIGNMENT  
SCOPE CREEP  
NO LIFE-CYCLE VIEW  
NO SOFT CONTROLS  
REGULATORY BURDENS  
NO EXECUTIVE LINE OF SIGHT  
NO MANAGEMENT OF CHANGE  
SLOW DECISION MAKING  
LACK OF TRUST

WEAK ESTIMATING  
POOR CONTRACTING STRATEGY  
WRONG TECHNOLOGY SYSTEMS  
LACK OF PLANNING  
LACK OF INFORMATION  
NO PROCESSES  
POOR RISK TRANSFER  
WEAK RELATIONSHIP MANAGEMENT  
COMMUNICATION BREAKDOWNS  
MANAGEMENT CHANGEOVER

LOWER REPORTING ACCURACY  
MAGNIFY ECONOMIC RISKS  
LACK OF EXPERIENCE  
LACK OF CULTURE  
POOR CONTRACTOR PERFORMANCE

**UNIDENTIFIED RISKS**

As a project leader you have read the literature and are aware that major projects are failing at an alarming rate, but what is the solution?

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**GCS 2015**  
Climbing the Curve

Madurez y Confianza en la información del proyecto.

**GCS 2016**  
Building a technology advantage

Uso de la tecnología e innovación en los Proyectos de Construcción.

**GCS 2017**  
Make it or Break it

Re-imaginando Personas, Gobernanza y Tecnología.

**GCS 2018**  
Future-Ready Index

Quiénes son los líderes y seguidores en la Industria.

# What is the solution?

The solution to major project failure is two-fold:

**Understanding** that causes of failure come from both **technical** and **non-technical** elements.

- Consistently, the focus is placed on technical elements of project design and delivery, but non-technical aspects including decision frameworks, relationship management and culture can have tremendous impact on large scale capital projects.
- Technical and non-technical elements that breakdown during projects are – if and where there is awareness and a management plan.

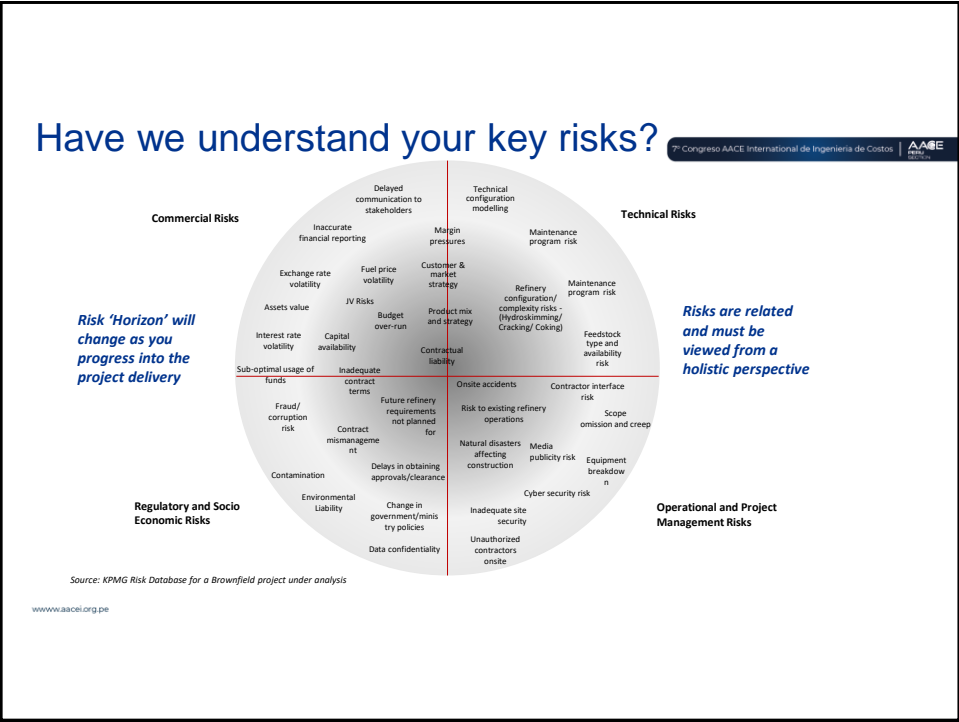
**Managing** and integrating technical and non-technical elements.

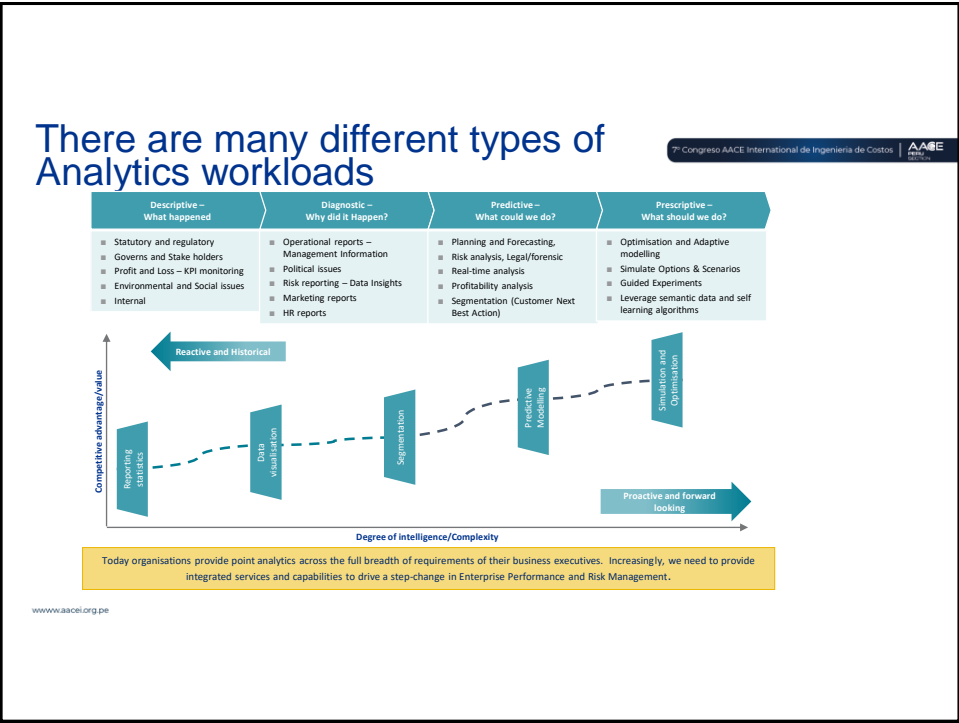
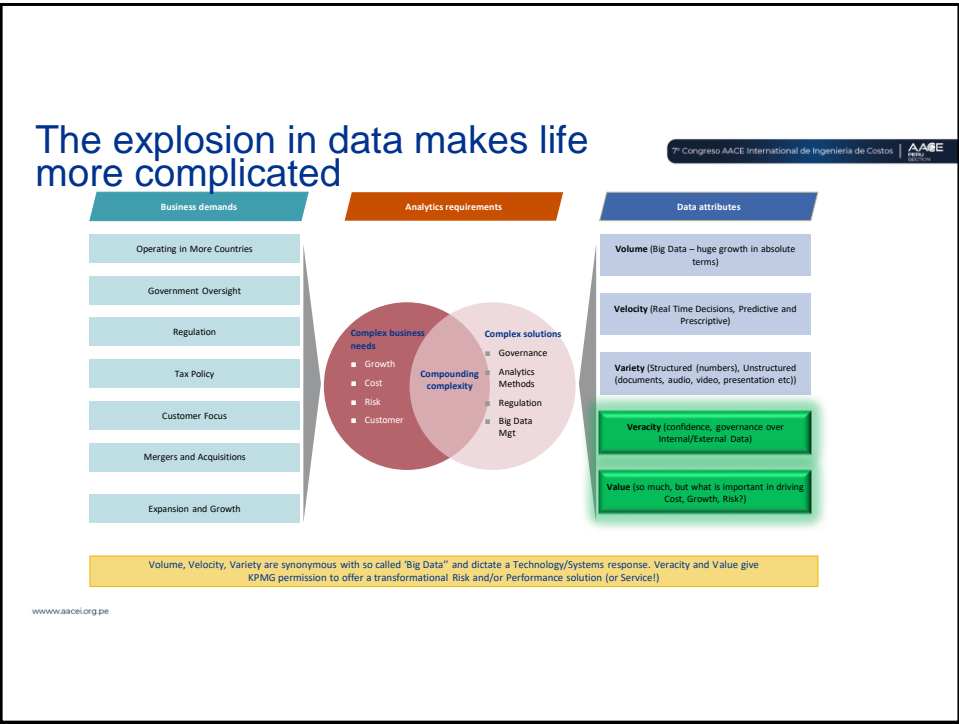
- Using the proper framework can help proactively manage aspects of project failure, particularly those that arise consistently.



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### Considerations - Every Company can move on to technology at same time?

Project Management Maturity

Data Register Maturity

Process Improvement

Able to move to Data Analytics

Process Implementation

Register Improvement

Process Maturity

- The implementation of the use of technology has to be step-by-step
- The company have to have the project management methodology implemented
- At least consider PMI, AACE, ect... methodology, procedures and practices
- The governance procedures are so important as a other disciplines
- People are the key
- Data security

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### Strategic Road map

Y1

Q1

Q2

Q3

Q4

Y2

Q1

Q2

Pessoas

Track diverdity metrics

Implement leadership development programs

Improve long-term career growth opportunities

Processos

Specific forma approach for mega/giga/extremely complex projects

Tecnologia

Create a technolgoey vision, road map or strategic plan

Assine innovation to a dedicated team

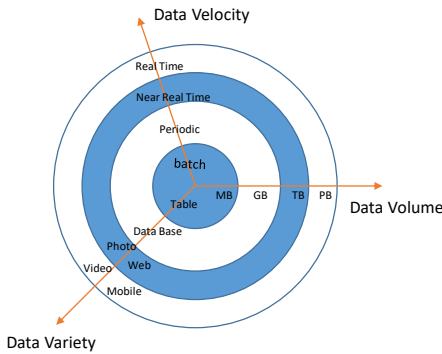
Apoint a senior leader responsible for innovation/technology

Experiment with new technology on pilot projects

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## Conclusions

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- Project Management is a decision making process
- The decisions are making with information not with data
- Half information means half decision
- Many new ways to control projects, but how are we treating the data that come from the project?
- Be careful to not get lost in the data volume
- The profile of the professional are changing: less data treatment, more data analysis
- Methodology is fundamental
- People are the key

Questions  
comments?

(Please use microphone)

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