Webinar:
Practical Applications of AI in GRC

ReadiNow
INNOVATE

Time

Approx. 50mins
with time for Q&A

Questions

write your question using the Q&A area in the webinar and we'll answer at the end.

Recording

Recording of this webinar will be made available to all registered participants

ReadiNow
INNOVATE

Part 1

Context and guide to AI Cognitive GRC

Michael Rasmussen
Director GRC 20/20

Part 2

Roadmap for Implementation of AI in GRC

Darren Jacobs
Chief Product Officer, ReadiNow

Part 3 Q&A

ReadiNow
INNOVATE

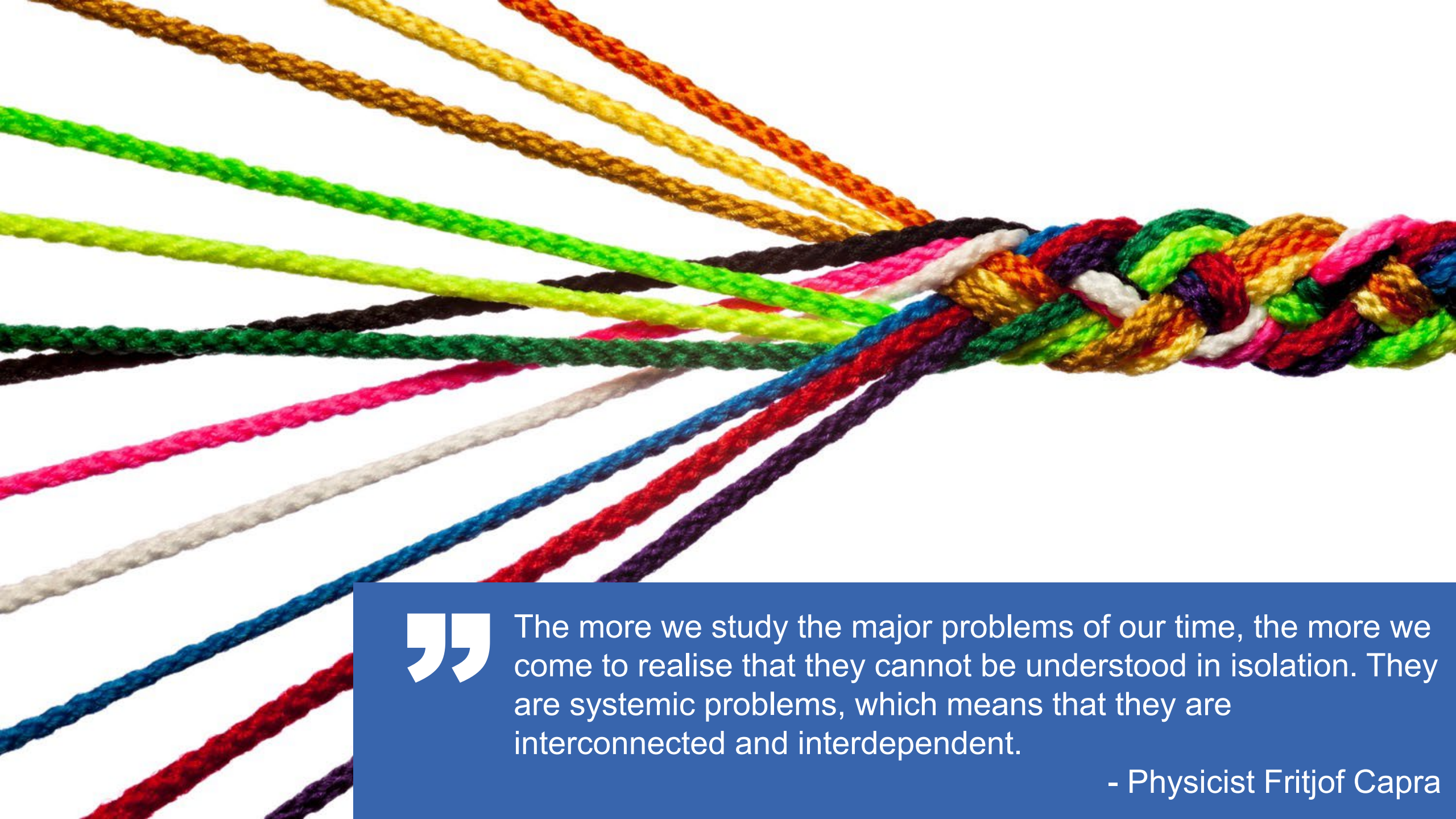
2023-10

Practical Applications of AI in Governance, Risk & Compliance

PRESENTATION

Governance, Risk Management & Compliance Insight

Navigating Chaos



> The more we study the major problems of our time, the more we come to realise that they cannot be understood in isolation. They are systemic problems, which means that they are interconnected and interdependent.
>
> - Physicist Fritjof Capra

Evolving Focus of GRC Management

The Official Definition of GRC . . .

> GRC is a capability that enables an organization to:
>
> **G)** reliably achieve objectives
>
> **R)** address uncertainty and
>
> **C)** act with integrity.

SOURCE: OCEG GRC Capability Model

Governance, Risk Management & Compliance in Context

GOVERNANCE

Governance sets direction and strategy for the organization to reliably achieve objectives. Governance sets the context for risk management, without context risk management fails.

RISK MANAGEMENT

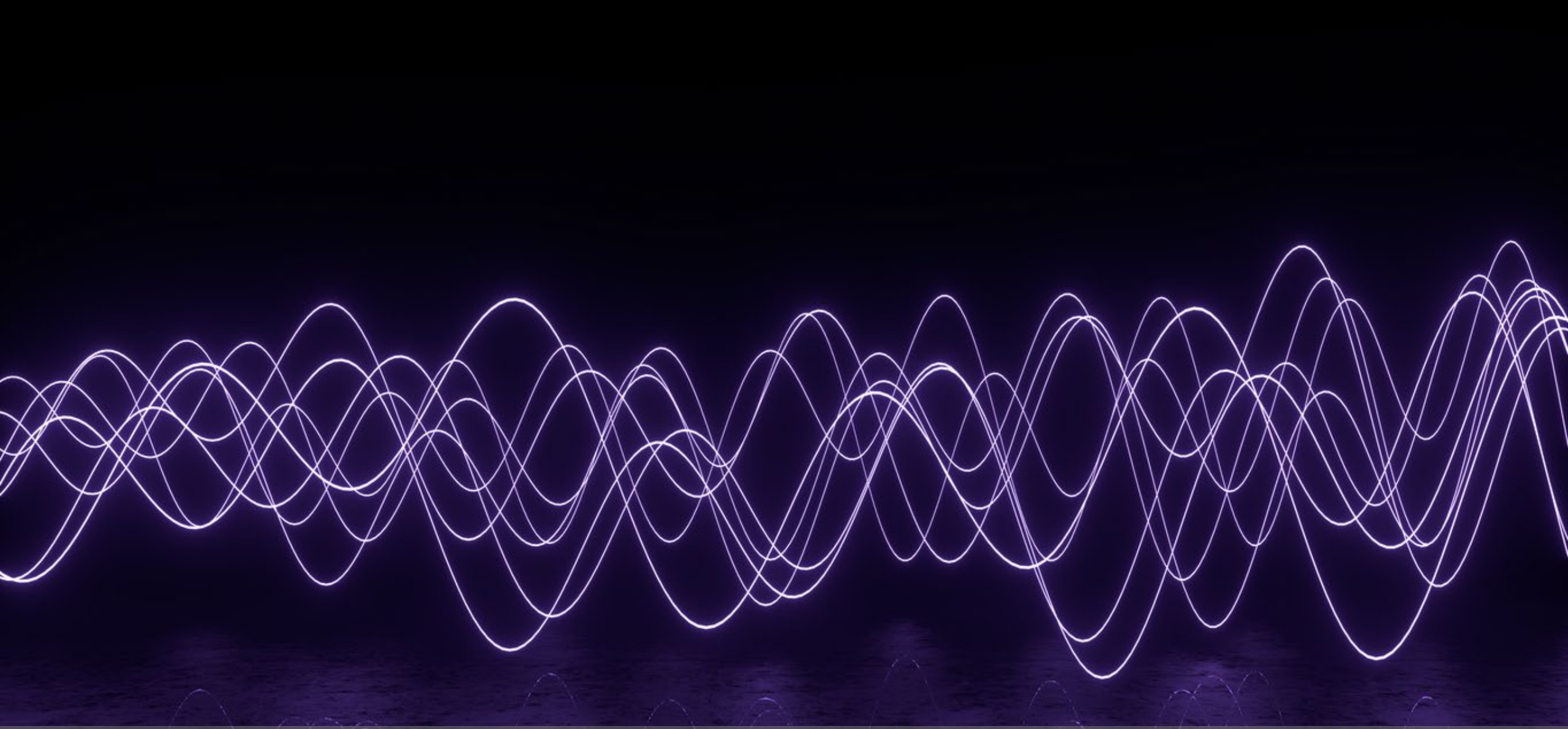
Risk management seeks to manage and understand uncertainty by identification, assessment, and monitoring of risk within context to act on risk through acceptance, avoidance, mitigation, or transfer.

COMPLIANCE

Compliance aims to see that the organization acts with integrity in fulfilling its regulatory, contractual, and self-imposed obligations and values. Compliance follows through on risk treatment plans to assure that risk is being managed within limits and controls are in place and functioning.

Resilience: Ability to Recover from Events and Get Back in the Game

Agility: Navigate and Leverage Your Environment



The Rhythm of GRC: Managing GRC in the Cycles & Patterns of Business

GRC Orchestration: Conducting GRC Management Across the Enterprise

History of GRC Software . . .

Sarbanes-Oxley (SOX)

With SOX instituted as a U.S. federal law in 2002 — creating new and complex mandates for financial reporting — organizations focused much of their efforts on keeping up and less on delivering the broader GRC solution.

Enterprise GRC

With Enterprise or Integrated GRC, multiple departments could now work off a common platform, bringing together the first, second and third line functions. However, solutions still had constraints and required development.

GRC Architecture

As technology grew more sophisticated, GRC platforms began to emerge, but no single platform was able to solve an organization's entire risk management needs and required better integration with other business systems.

Agile GRC

The shift to GRC 4.0 began about five years ago, moving away from legacy systems and toward agile GRC solutions that required highly intuitive, configurable, and engaging systems for front-office to back-office risk functions.

GRC 5.0 and 6.0 build on and extend GRC 4.0

Cognitive GRC

As technology grew more sophisticated, Agile GRC solutions have leveraged cogntivie technologies – artificial intelligence such as machine learning, predictive analytics, robotic process automation, natural language processing to deliver greater levels of efficiency, effectiveness, resilience, and agility in GRC.

Business-Integrated GRC

Business-Integrated GRC is the next generation of GRC technology with a view focused on performance G[P]RC. GRC becomes an integrated part of a business management platform. The idea of a siloed GRC platform goes away to manage GRC as an integrated platform of the business, its objectives, its performance, and then risk, compliance, control, and assurance in this context.

GRC Market Segments: Enterprise GRC Platforms & Architecture

Three GRC Approaches . . .

1. **Centralized GRC Platform – All-In-One**
   - **Does it exist?**
2. **GRC Architecture – Core Hub that Integrates**
   - **Best of Breed where it makes sense**
3. **Non-Integrated Silos**

Enterprise GRC Platforms & Architecture are solutions that deliver a range of cross-department functionality across GRC functional areas into an integrated technology platform environment.

To be an Enterprise GRC Platform minimally requires a single platform architecture that has multi-department (e.g., enterprise-wide) use across the following areas, at a minimum:

- ✓ **Risk & Resilience Management**
  - enterprise & operational risk
- ✓ **Compliance, Ethics & Obligation Management**
  - Document and assess compliance with obligations
- ✓ **Internal Control Management & Monitoring**
  - Document, assess, and monitor internal controls
- ✓ **Issue Reporting & Case Management**
  - Manage and resolve issues, incidents, cases, investigations

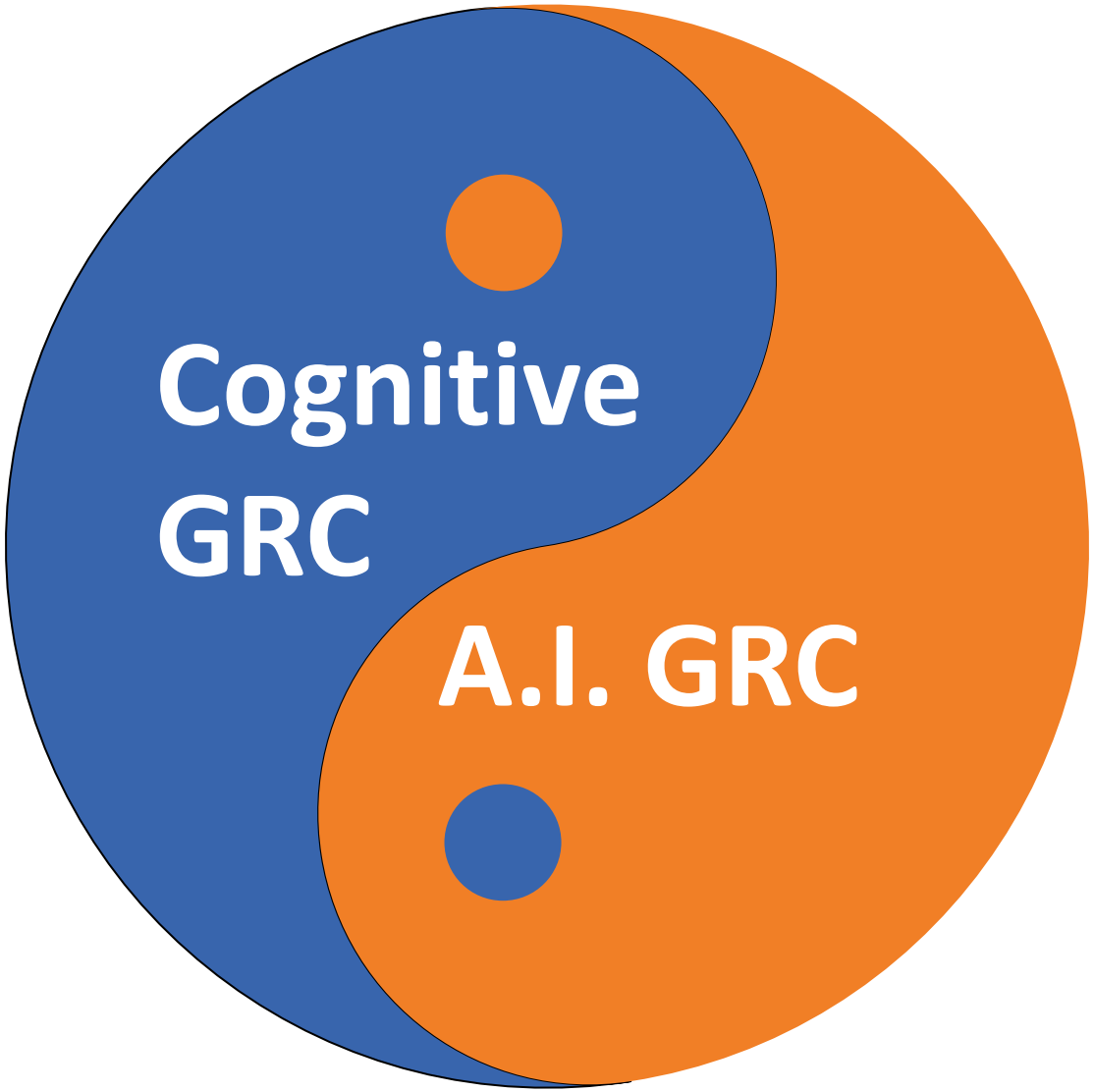
NOTE: most Enterprise GRC Platforms offer a range of additional modules beyond these.

Components of Agile GRC Technology

- Usability
- Cost of Ownership
- Configurability
- Scalability
- Adaptability
- Integration
- Analytics
- A.I. Robotic Process Automation
- Future Proof

Addressing the Risk of A.I. while Leveraging A.I.

Cognitive GRC: the use of A.I. technology to make GRC and third-party risk processes more efficient, effective, resilient, and agile.



A.I. GRC: the governance of the use of artificial intelligence within the organization and across its relationships to ensure the reliable achievement of objectives, address uncertainty/risk, and act with integrity/compliance.

Creative Risk Thinking: Looking at Risk Structurally and Creatively

Left-Brain

Logical and structured thinking about risk management

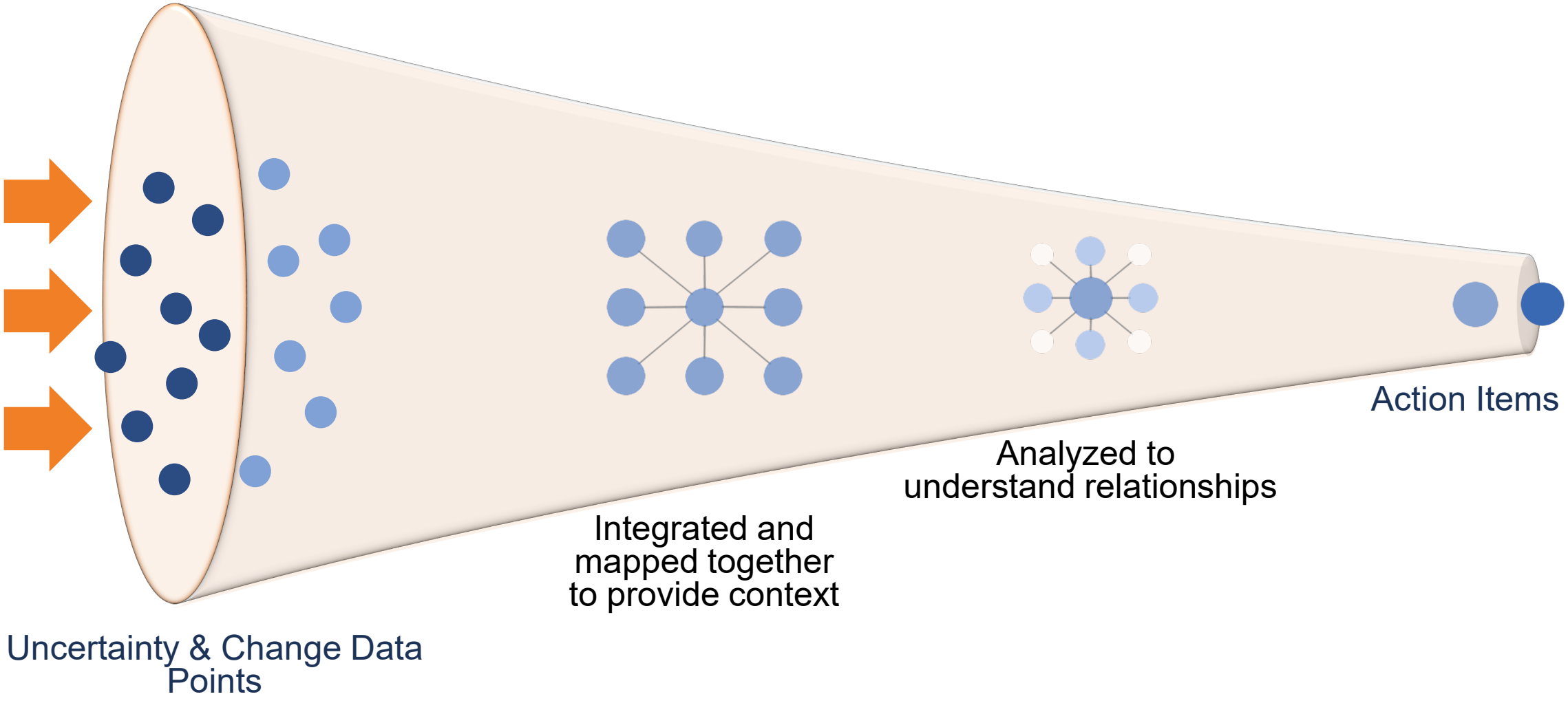
> *It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts.*
>
> Sir Arthur Conan Doyle
> (British Physician and Writer)

Right-Brain

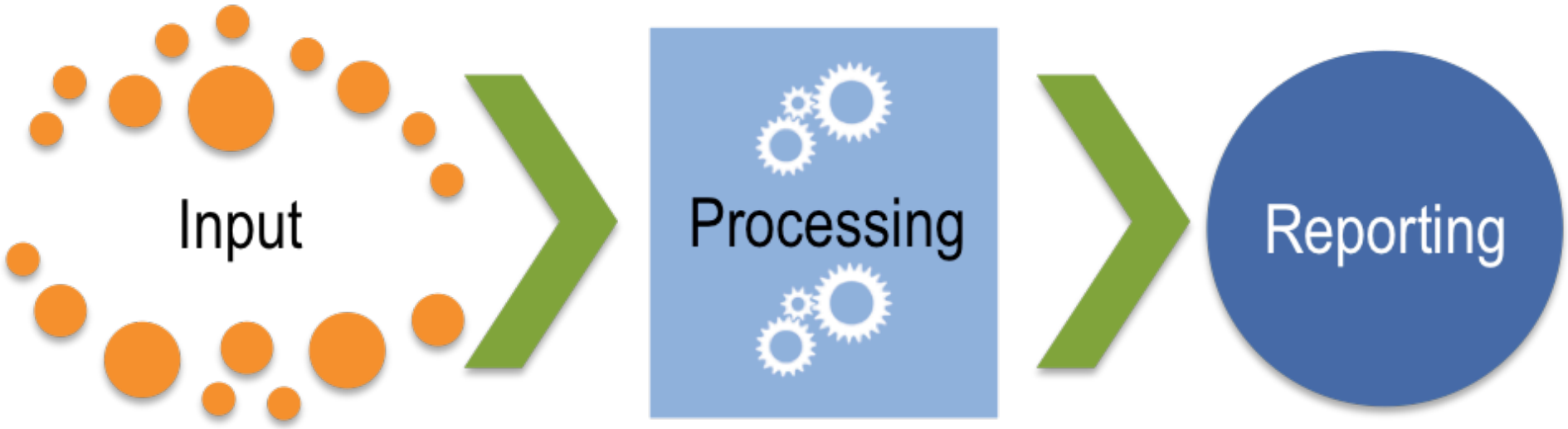
Creative and imaginative thinking about risk management

> *You can use all the quantitative data you can get, but you still have to distrust it and use your own intelligence and judgment.*
>
> Alvin Toffler
> (American Author and Futurist)

Cognitive GRC: 360° Contextual Awareness of GRC Using A.I.



Components of an A.I. Model

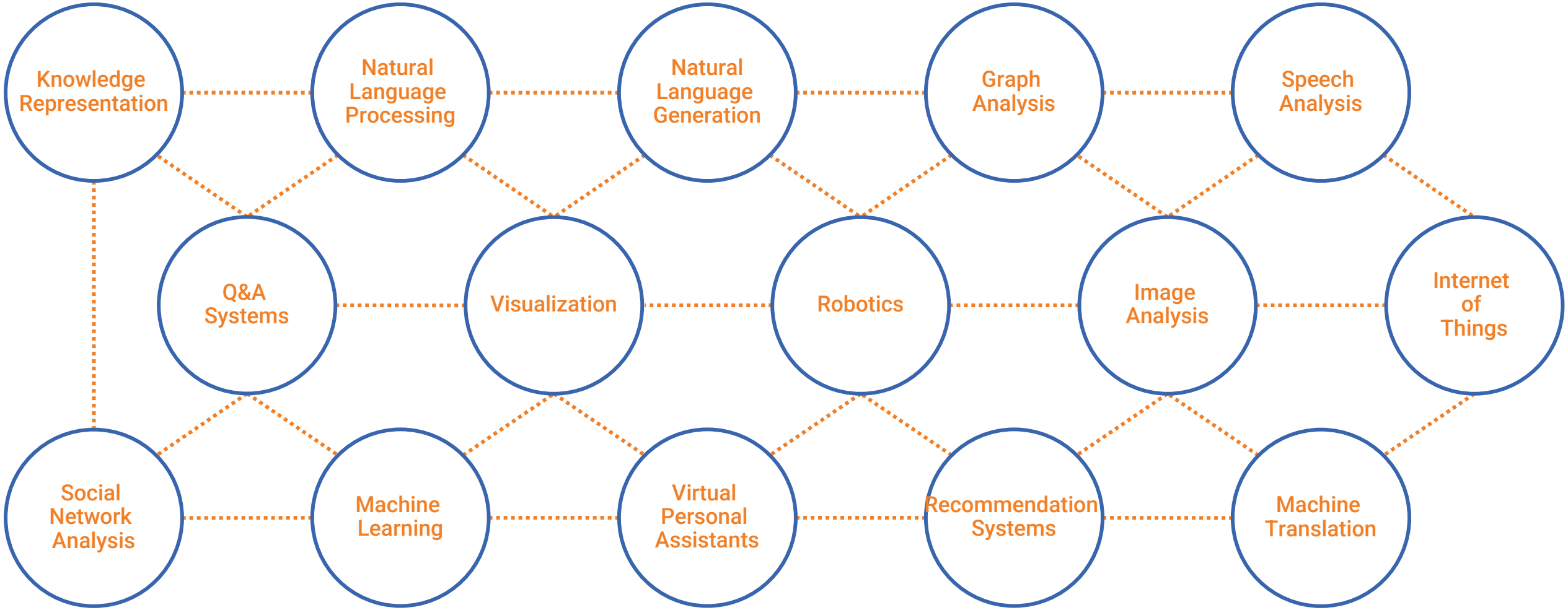


The Core Components that Make a Model

There are three core components to a model:

1. **Input Component.** Delivers assumptions and data to a model.
2. **Processing Component.** Transforms inputs into estimates.
3. **Reporting Component.** Translates the estimates into useful business information.

Artificial Intelligence Capabilities for Cognitive GRC



A.I. for Cognitive GRC Use Cases

Semantic Data Analytics

Enables GRC data that is not causally related to be linked.

Operational Intelligence

Improves GRC operational processes and decisions through data analysis.

Cognitive Computing

Enables independent data discovery and processing by linking AI to information sources internally and externally.

Bots

Computer programs that work independently and perform repeated tasks either automatically or with minimal human intervention for GRC.

Social Analytics

Explores and analyzes data from blogs and social media websites and derives business decisions from them, such as negative news and reputation/brand.

Data Lakes

Store raw data that can be accessed when needed and used in big data analytics to create a competitive advantage.

A.I. for Cognitive GRC Use Cases

Machine / Deep Learning

Machine Learning / Deep Learning is a subset of AI that allows systems to learn from data without explicit programming.

Use Cases

- ✓ Machine Learning can analyze historical data to predict future risks, aiding in proactive risk management.
- ✓ Machine Learning algorithms can scrutinize past financial transactions to forecast and prevent fraud.
- ✓ Deliver expert risk management insights based on experience and frame to industry guidelines
- ✓ Enhance the efficiency of data sourcing while significantly reducing the time required to collect comprehensive data

A.I. for Cognitive GRC Use Cases

Natural Language Processing

Natural Language Processing enables machines to read, understand, and interpret human language.

Use Cases

- ✓ Simplifies the interpretation and analysis of content and documentation
- ✓ Save hundreds of hours automatically mapping compliance requirements to identify compliance overlap and gaps
- ✓ Compare answers to expected ones and identify discrepancies
- ✓ Document (e.g., policy, contract, control, regulation, standard) comparison & analysis
- ✓ Real-time translation services

A.I. for Cognitive GRC Use Cases

Predictive Analytics

Predictive Analytics and Expert Systems are computer systems that mimic the decision-making abilities of a human expert. These systems aid in making informed decisions by providing insights based on accumulated knowledge and data.

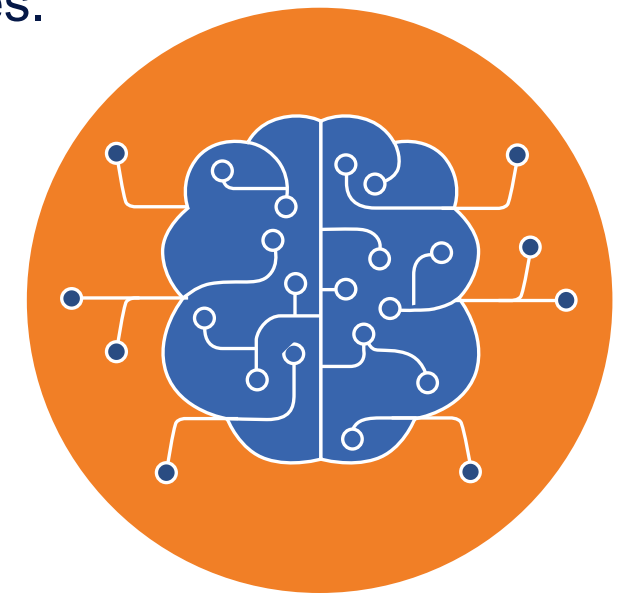
Use Cases

- ✓ Quickly identify business units and processes with missing and inadequate controls and discrepancies
- ✓ Search policies and documents by understanding the searcher's intent
- ✓ Deliver expert risk management insights based on experience and frame to industry guidelines

A.I. for Cognitive GRC Use Cases

Neural Networks

These are algorithms modeled after the human brain, designed to recognize patterns. Neural networks are instrumental in detecting anomalies and patterns in vast datasets, helping identify potential risks or compliance breaches.



Use Cases

- ✓ Topic modeling to identify and surface data relationships
- ✓ Improve data discovery via data enrichment
- ✓ Automatically classify content according to taxonomy

A.I. for Cognitive GRC Use Cases

Robotics Process Automation

Robotic Process Automation is the use of software robots to automate highly repetitive and routine tasks.

Use Cases

- ✓ Robotic Process Automation can automate compliance reporting, data collection, and risk monitoring processes, reducing human error, and improving efficiency.
- ✓ Simplify processes and more efficiently resolve questions, gain insight, and act

A.I. for Cognitive GRC Use Cases

Generative A.I.

Generative AI can create new data like the data it was trained on.

Use Cases

- ✓ Generative AI can produce synthetic financial transactions to test the efficacy of fraud detection systems without compromising real customer data.
- ✓ This can generate policies or control documentation, answer GRC questions, create risk scenarios, or generate data sets for stress testing and compliance training models.
- ✓ Employee advisor on GRC to ask questions and get immediate answers
- ✓ Automated assessment population/filling out

Benefits of Cognitive GRC

We tested the impact of Machine Learning on Risk Assessment

The impact of ML on unbiased Risk Identification and Assessment was exponential

	15 minutes	30 minutes	60 minutes	4.5 hours	8 weeks
HUMAN	• Identified 5 companies • Downloaded 10 documents	• Reviewed 2 documents • Identified 9 unique risk factors	• Reviewed 5 documents • Identified 14 unique risk factors	• Created a model of 14 risk factors and business implications	• Researched and develop 4 scenarios
ML ENABLED	• Identified 52 companies • Downloaded 884 documents	• Reviewed 884 documents • Identified 34,512 risk factors		• Created a model with 573 risk factors and business implications. • Created scenarios at a rate of 1 every 5 seconds.	

Responsible Use of A.I.

- ✓ ***Ensure A.I. systems comply with evolving laws and regulations*** helps prevent legal issues, financial penalties, and damage to reputation.
- ✓ ***Manage uncertainty and risk*** when A.I. can have unintended consequences, including biased decisions or privacy breaches. Effective risk management helps identify and mitigate these risks.
- ✓ ***Meet ethical standards,*** ensuring A.I. is used fairly and doesn't perpetuate harmful biases.
- ✓ ***Deliver trust and transparency*** where A.I. GRC practices help organizations demonstrate that their A.I. systems are trustworthy and transparent, essential for customer and stakeholder confidence.
- ✓ ***Provide strategic business alignment*** where strong A.I. GRC ensures that A.I. usage aligns with an organization's broader strategic goals and doesn't deviate into potentially harmful or unproductive areas.
- ✓ ***Enable agility*** as the A.I. landscape is rapidly changing, A.I. GRC practices help organizations be ready for potential future regulatory changes.

Some Benefits of Artificial Intelligence

VISIBILITY
enhances audit accuracy

RELIABILITY
supports strategy

EFFICIENCY
reduces manual tasks

COVERAGE
addresses all aspects of the business

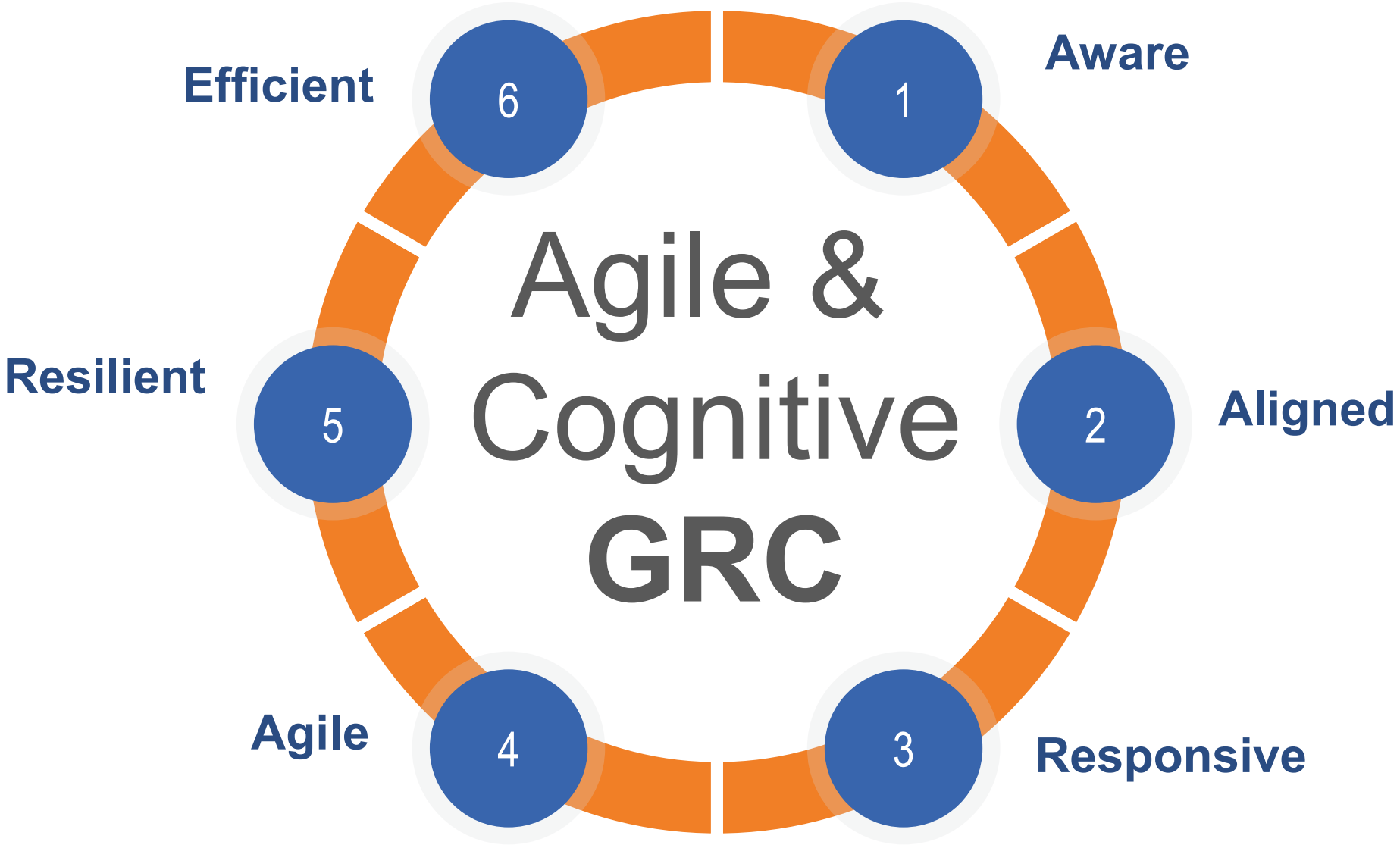
AGILITY
enables quick change

RESPONSIVENESS
drives timely action

ACCURACY
builds confidence

Value of Agile & Cognitive GRC

Benefits of 360° Contextual Awareness of GRC



Questions?

GRC 20/20 Research, LLC (GRC 20/20) provides clarity of insight into governance, risk management, and compliance (GRC) solutions and strategies through objective market research, benchmarking, training, and analysis.

Michael Rasmussen, J.D.

GRC 20/20 Research, LLC

The GRC Analyst, Pundit, & OCEG Fellow

mkras@grc2020.com

www.**grc2020**.com

+1.262.3329188

The GRC Report is the first word in governance, risk, and compliance news – providing leading analysis, insights, and updates for GRC professionals.

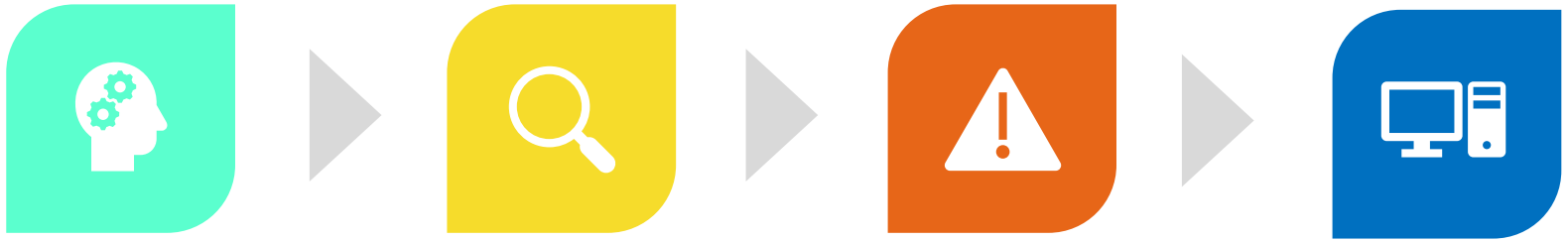
We are dedicated to delivering transparency and providing relevant news to help individuals and organizations stay informed in this ever-evolving field.

grc report

hello@**grcreport**.com

www.**grcreport**.com

Roadmap for Implementation



Understanding AI types

Identifying use cases

Key considerations & Implications

Determining technology

Understanding AI Types

Generative AI

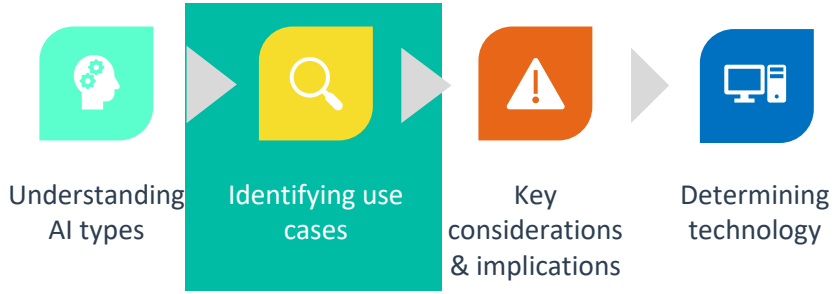
- Text Generation
- Audio Generation
- Audio to text
- Image Generation

Predictive AI

- Predictive Models
- Image Recognition
- Video Recognition

ReadiNow INNOVATE

Understanding AI Types



Text Generation

- Generation of Risk Descriptions
- Creation of Risk Reports
- Automated report creation for compliance audits.
- Generating policy and procedure drafts based on regulations.
- Creation of regulatory update summaries.
- Drafting risk management strategies.
- Automatic generation of meeting minutes for GRC committee meetings.
- Summarizing risk assessment findings.
- Generation of risk-based scenarios for testing.

Audio Generation

- Voice-based alerts for compliance breaches.
- Customized audio instructions for employees during compliance training.
- AI-generated advisories for stakeholders.
- Audio summaries of regulatory changes.
- Voice prompts for guided risk assessments.
- Simulation sounds for risk scenarios.
- Automated voice messages for incident reporting.

Audio to text

- Transcription of GRC committee meetings.
- Automated transcription of whistleblower recordings.
- Converting recorded interviews during audits into text.
- Documentation of verbal agreements or understandings.

Predictive Models

- Predicting potential areas of non-compliance.
- Forecasting risk trends.
- Predictive analysis for fraud detection.
- Forecasting regulatory changes based on historical data.
- Modeling potential impacts of risks on organizational objectives.
- Estimating potential financial penalties for non-compliance.

Image Recognition

- Scanning documents for confidential information.
- Verifying authenticity of documents during audits.
- Recognition and tagging of GRC-related assets in images.
- Analyzing workplace images for safety or compliance violations.
- Identifying unauthorized printed materials in secure zones.
- Automating the categorization of paper-based records.
- Scanning images for potential cyber threats.

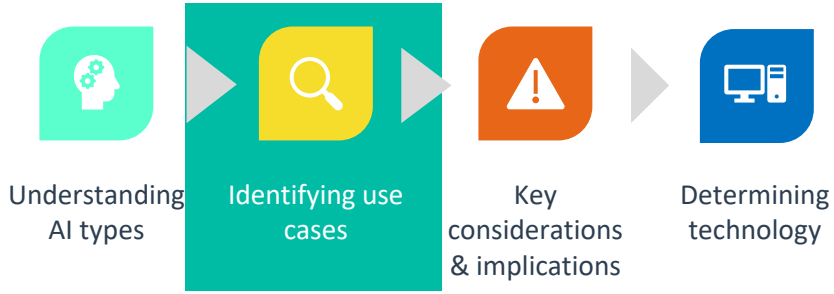
Video Recognition

- Monitoring facility videos for compliance with safety standards.
- Analyzing behavior patterns for fraud detection.

ReadiNow INNOVATE

Identifying Use Cases

Document your processes



Risk:

- Determining Risk Appetite
- Risk Identification & Assessment
- Risk Reporting

Compliance:

- Regulatory Monitoring
- Compliance Assessment
- Policy and Procedure Management
- Training and Awareness
- Compliance Reporting

Audit:

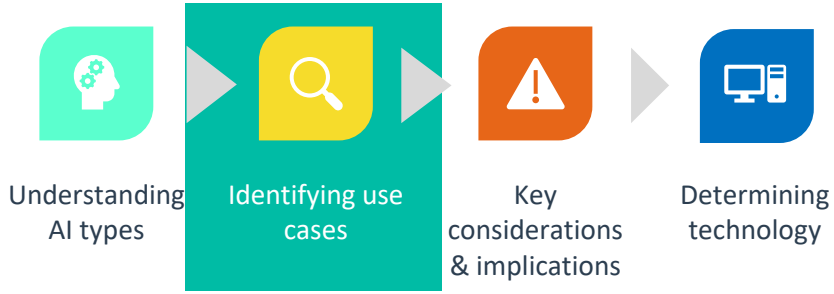
- Planning
- Execution
- Reporting
- Follow-Up
- Internal Control Assessment
- Stakeholder Communication

Incident Management:

- Incident Detection
- Incident Reporting
- Incident Analysis
- Incident Response
- Incident Resolution
- Incident Review

Identifying Use Cases

Risk Identification & Assessment



Identify Risks

- Identifying Key Stakeholders
- Setting scope & templates
- Risk Workshops & Brainstorming
- Documenting Identified Risks

Risk Assessment

- Risk Analysis
- Assessment
- (Qualitative or Quantitative)
- Determining Dependencies

Risk Treatment/ Response

- Evaluate Treatment Options
- Assign controls
- Develop Action Plan
- Assign to owners
- Approvals

Monitor & Review

- Document KRI
- Continuous monitoring
- Regular Review
- Audit and Assurance

Add Digitization and Automations

- Integrations with HR Software to identify stakeholders in each business unity
- Creating online forms for risk templates
- Qualitative Risk assessment based on Key indicators
- Linking to Centralised Control Libraries
- Auto Notification to risk and control owners
- Automate approval process
- Reminders for Risk Reviews
- Automated KRI Monitoring

ReadiNow INNOVATE

Identifying Use Cases

Risk Identification & Assessment

Identify Risks

- Identifying Key Stakeholders
- Setting scope & templates
- Risk Workshops & Brainstorming
- Documenting Identified Risks

Risk Assessment

- Risk Analysis
- Assessment
- (Qualitative or Quantitative)
- Determining Dependencies

Risk Treatment/ Response

- Evaluate Treatment Options
- Assign controls
- Develop Action Plan
- Assign to owners
- Approvals

Monitor & Review

- Document KRI
- Continuous monitoring
- Regular Review
- Audit and Assurance

Add AI

- Suggestion of typical risks for given scenarios, business types, processes etc
- Auto Scribing Risk workshops/whiteboards
- Risk Modelling/simulations for automated risk scoring
- Pattern Recognition – correlated similar risks
- Auto Assigning Controls
- Generation of Risk Treatment Plans
- Risk insights and trending
- Predictive analytics

ReadiNow INNOVATE

Identifying Use Cases

Risk Identification & Assessment

Identify Risks

- Identifying Key Stakeholders
- Setting scope & templates
- Risk Workshops & Brainstorming
- Documenting Identified Risks

Risk Assessment

- Risk Analysis
- Assessment
- (Qualitative or Quantitative)
- Determining Dependencies

Risk Treatment/ Response

- Evaluate Treatment Options
- Assign controls
- Develop Action Plan
- Assign to owners
- Approvals

Monitor & Review

- Document KRI
- Continuous monitoring
- Regular Review
- Audit and Assurance

ReadiNow INNOVATE

Key Considerations & Implications

- Security/Data Privacy
- Accuracy/Bias
- Data Quality
- Resources
- Process Maturity

What is ReadiNow?

ReadiNow
INNOVATE

What is ReadiNow

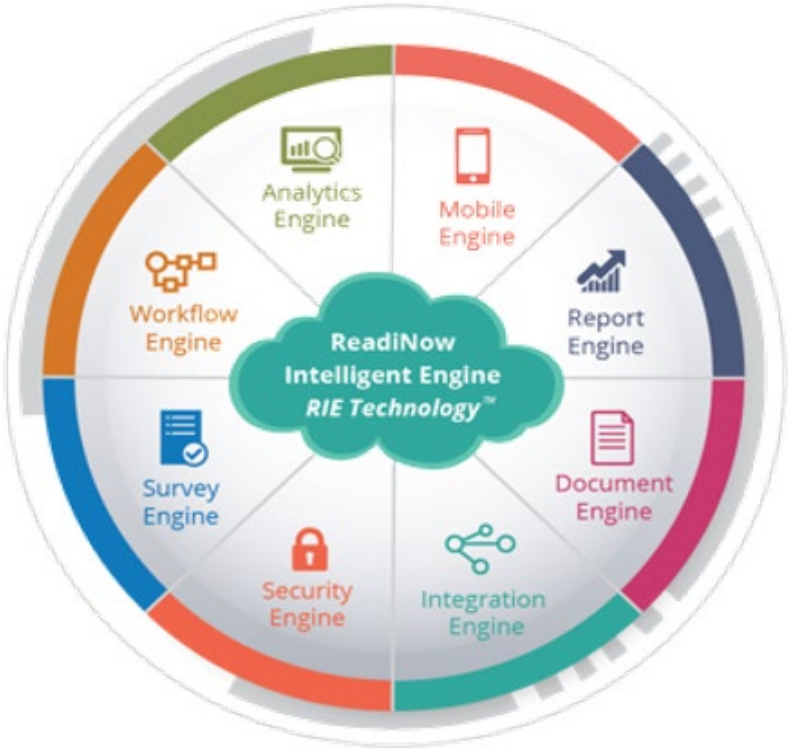
Excel Sheets or External Data

New User Requirements

New Ideas

Legacy Applications

ReadiNow **No-Code** Drag & Drop



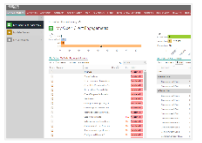
Transform or Build Unlimited Use Cases

Risk

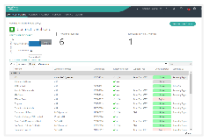
BCM

Compliance

ESG



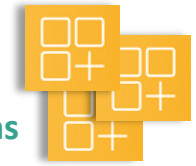
Audit



ITDR

Incidents

+ Any custom Use Case Applications



ReadiNow INNOVATE

Governance, Risk & Compliance

- BCM
- Risk
- Compliance
- Audit
- Incident
- WHS
- Vendor
- Complaints
- Key Indicators

IT/Cyber Solutions

- IT Risk
- IT Security Incident
- ITDR
- IT Compliance

Environmental, Social & Governance

- Materiality Assessments
- Disclosure
- Metrics

+ Any custom Use Case Applications

- Configurable Forms & Screens
- Dashboards
- Analytics
- Workflow
- Mobile
- Role Based Security
- Document Generation
- Alerts & Notifications
- Integrations

Automating your GRC

Risk

Identify Risks

- Identifying Key Stakeholders
- Setting scope & templates
- Risk Workshops & Brainstorming
- Documenting Identified Risks

Risk Assessment

- Risk Analysis
- Assessment
- (Qualitative or Quantitative)
- Determining Dependencies

Risk Treatment/ Response

- Evaluate Treatment Options
- Assign controls
- Develop Action Plan
- Assign to owners
- Approvals

Monitor & Review

- Document KRI
- Continuous monitoring
- Regular Review
- Audit and Assurance

ReadiNow INNOVATE

Automating your GRC

Identify Risks

- Identifying Key Stakeholders
- Setting scope & templates
- Risk Workshops & Brainstorming
- Documenting Identified Risks

Risk Assessment

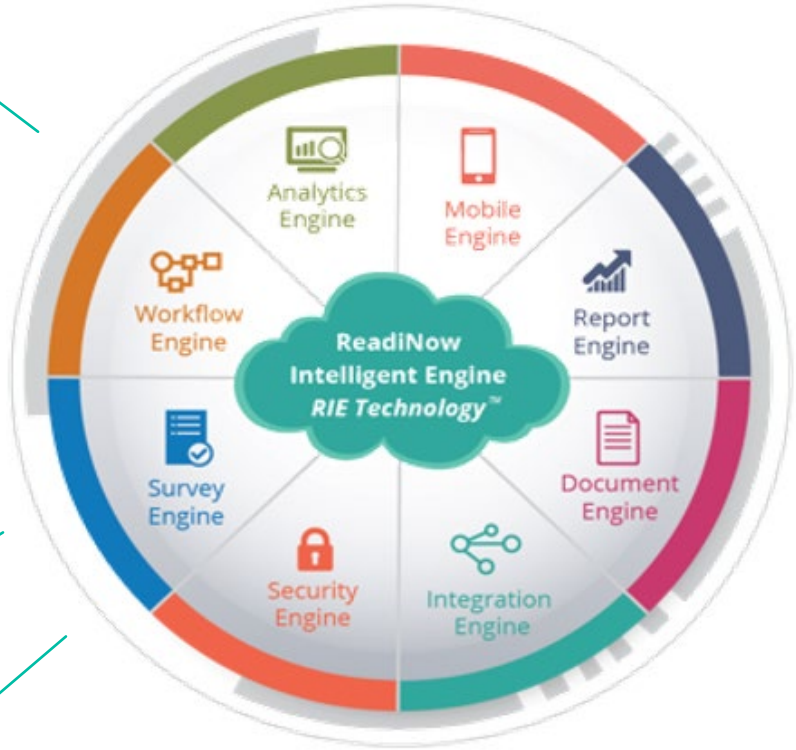
- Risk Analysis
- Assessment
- (Qualitative or Quantitative)
- Determining Dependencies

Risk Treatment/ Response

- Evaluate Treatment Options
- Assign controls
- Develop Action Plan
- Assign to owners
- Approvals

Monitor & Review

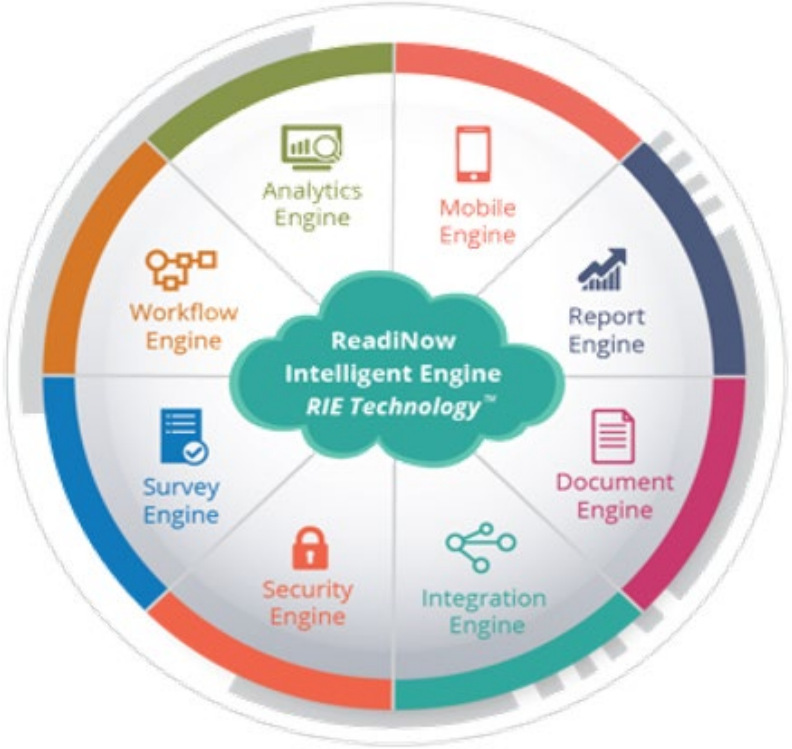
- Document KRI
- Continuous monitoring
- Regular Review
- Audit and Assurance



ReadiNow INNOVATE

Automating your GRC

Automation Engines



+

AI Engines

ReadiNow AI Suggest	***In Beta testing***
Future ReadiNow AI Engine	***In Beta testing***
Future ReadiNow AI Engine	***In Development***
Future ReadiNow AI Engine	***In Development***
Future ReadiNow AI Engine	*On Roadmap*
Future ReadiNow AI Engine	*On Roadmap*

ReadiNow INNOVATE