



CGI Intelligent Automation

Enabling our clients to identify, realise and optimise a range of benefits through the accelerated adoption of automation

CGI

Experience the commitment®

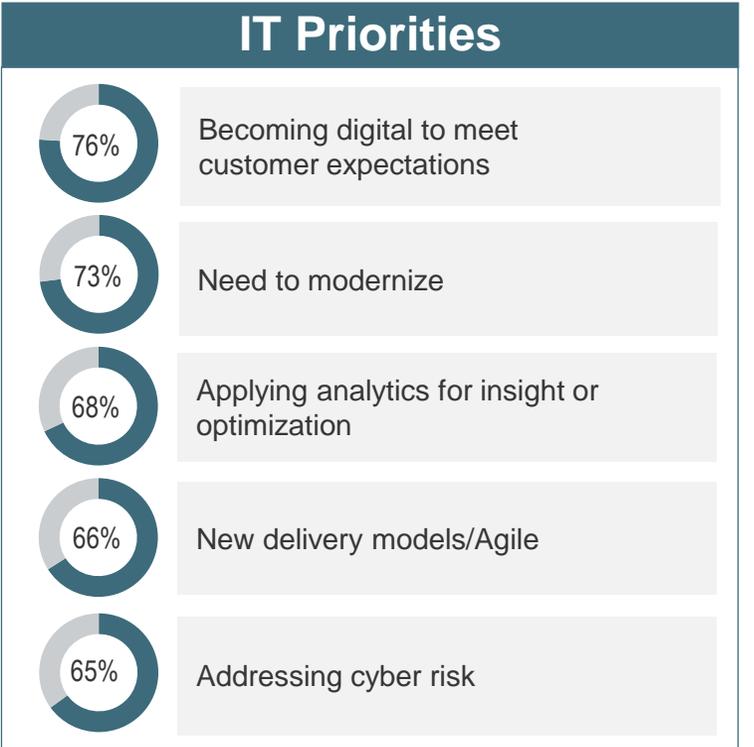
CGI's Global 1000 clients cited an intensifying need to transform

Driven by key global trends



Source: CGI Client Global Insights (2017)

CGI sees a common set of industry trends and emerging priorities for our clients as they seek to reduce run costs, invest in change and growth, and protect their organizations



Emerging in the Top 15

- New delivery models / Agile
- Talent challenges

Growing Importance

- Becoming digital to meet customer expectations rises **from #6 to #1**
- Applying analytics rises **from #9 to #3**
- Business model changes, talent challenges enter **Top 10 priorities**

Source: CGI Client Global Insights (2017)



Evolving from a human first to a hybrid human-robot approach

Intelligent Automation as a key enabler of Digital Transformation

Traditional Business Operations

- Human first approach
- Focus on recruitment & training
- Offshoring, labor arbitrage
- Cost model per human hour
- Standardization, repetitive processes, reporting
- Break-fix
- Humans are the key asset



Digital Business Operations

- Robotic first approach
- Focus on holistic automation
- Machine learning, cognitive
- Knowledge arbitrage
- Cost model per transaction, per robot, per machine
- Preventive, self-heal, self-serve
- Algorithms and software are the key asset

Value to the Digital Enterprise 



Reduce Process Cost



Boost Employee
Productivity & Satisfaction



Improve Service Quality
& Customer Satisfaction

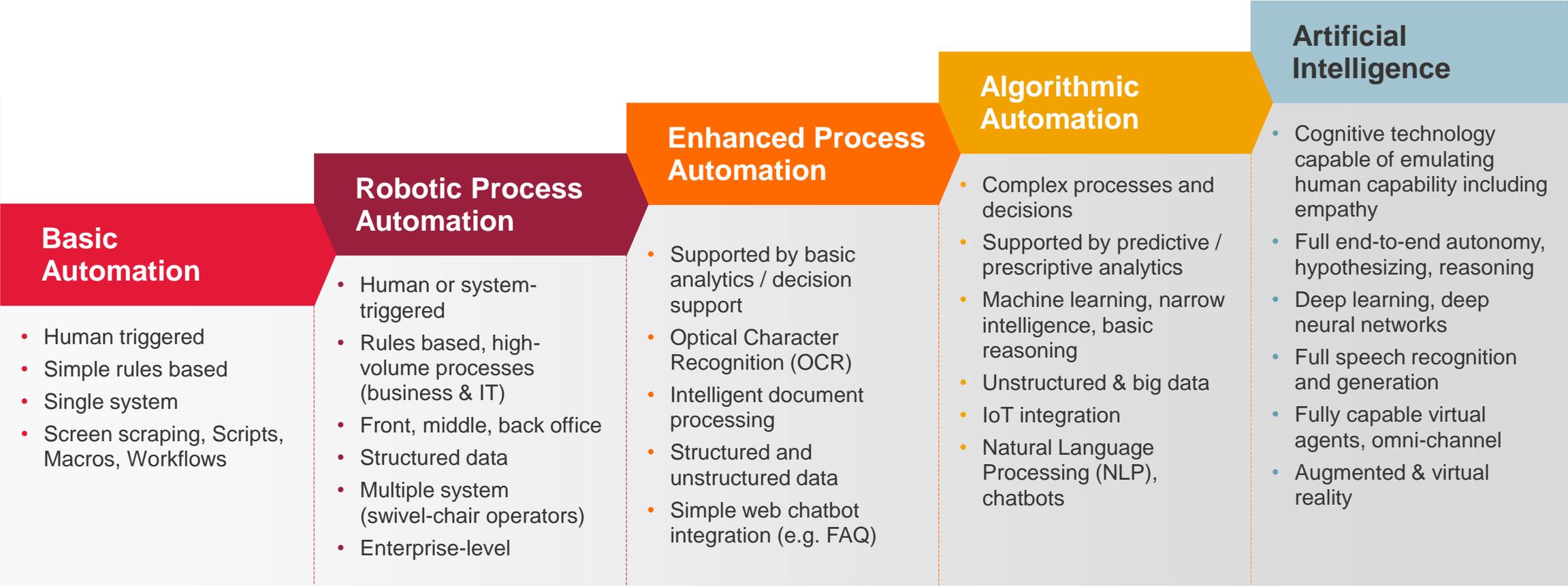


Increase Revenue

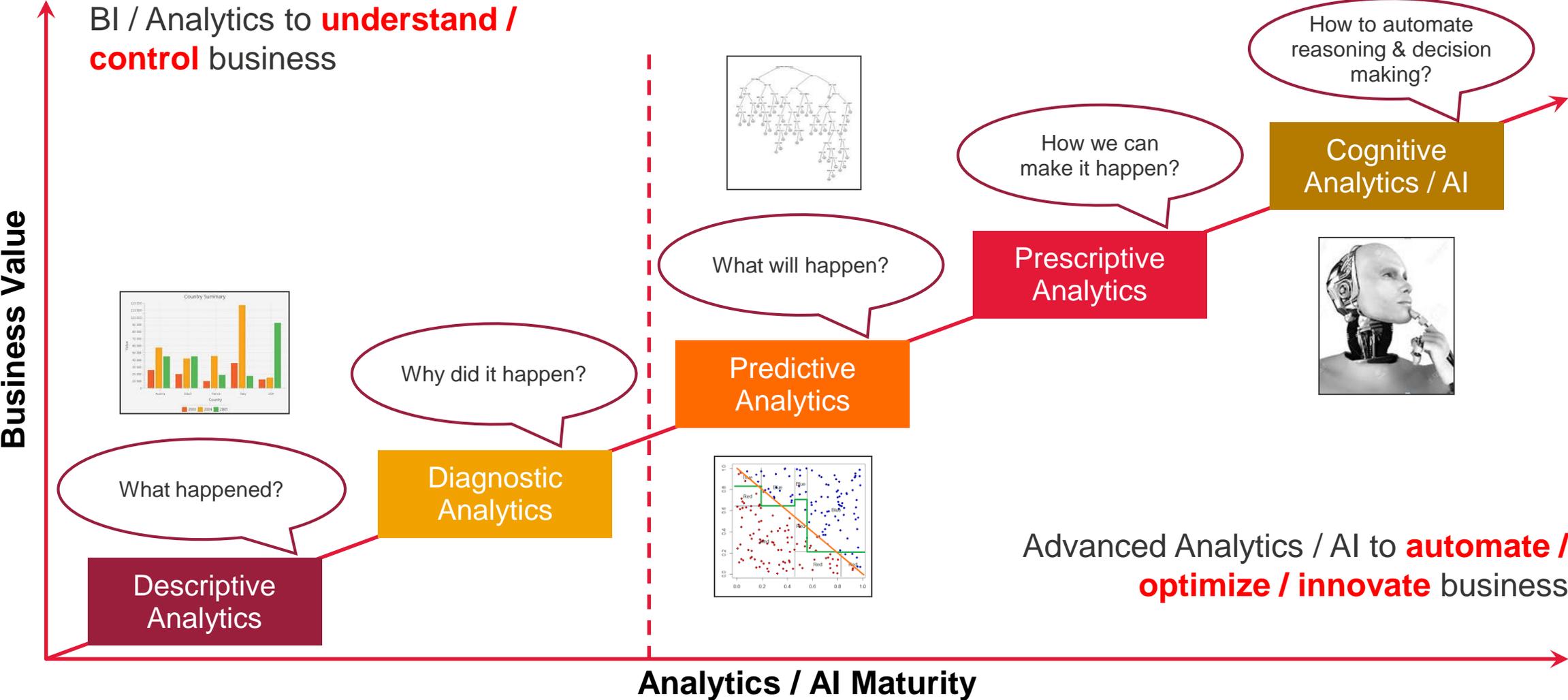


Competitive Advantage

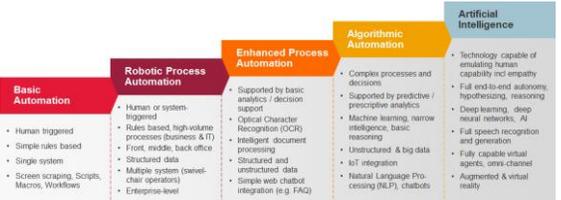
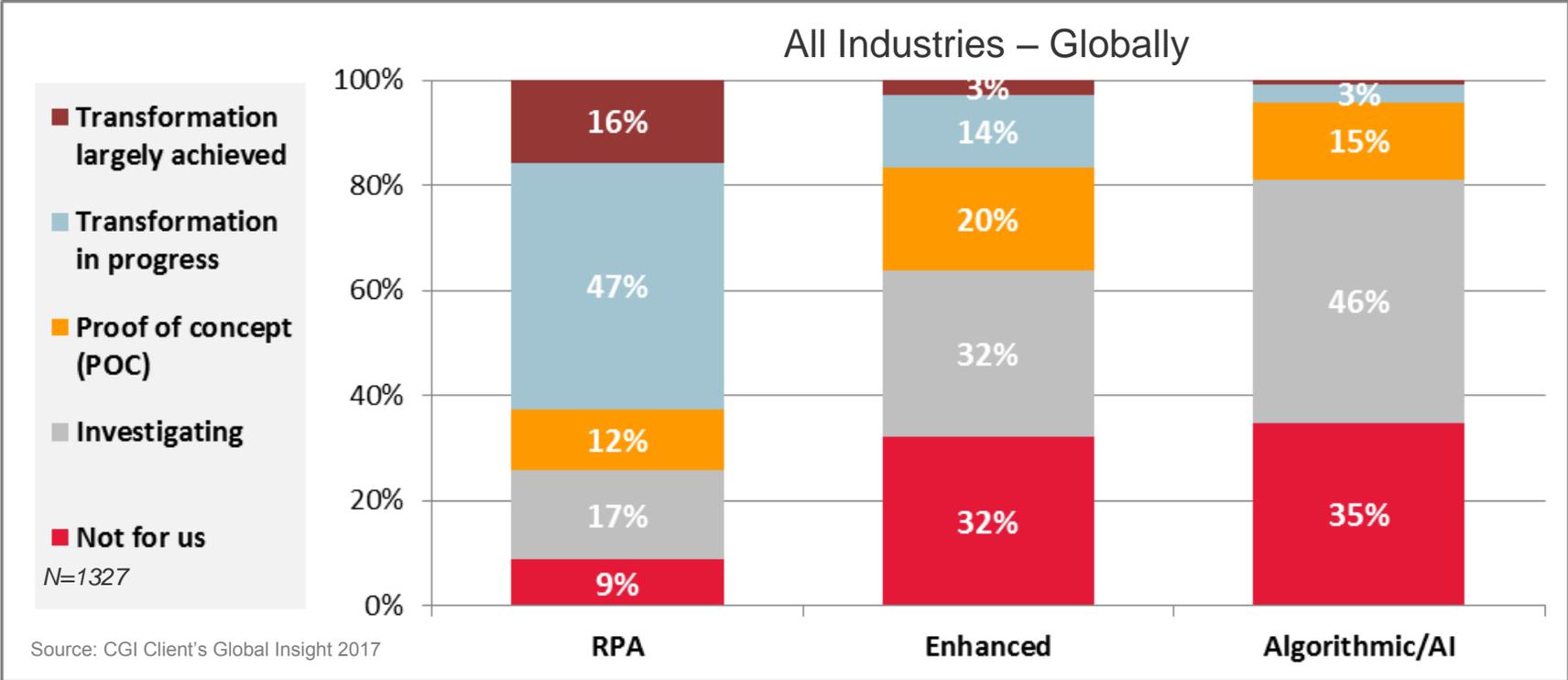
CGI clients are taking advantage of our wider Intelligent Automation Framework to support their goals and achieve competitive advantage



Advanced Analytics & AI underpin Intelligent Automation

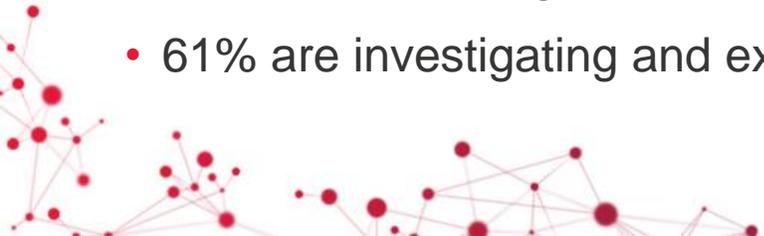


CGI clients across the world are executing Robotic Process Automation programs and investigating Algorithmic Automation and AI



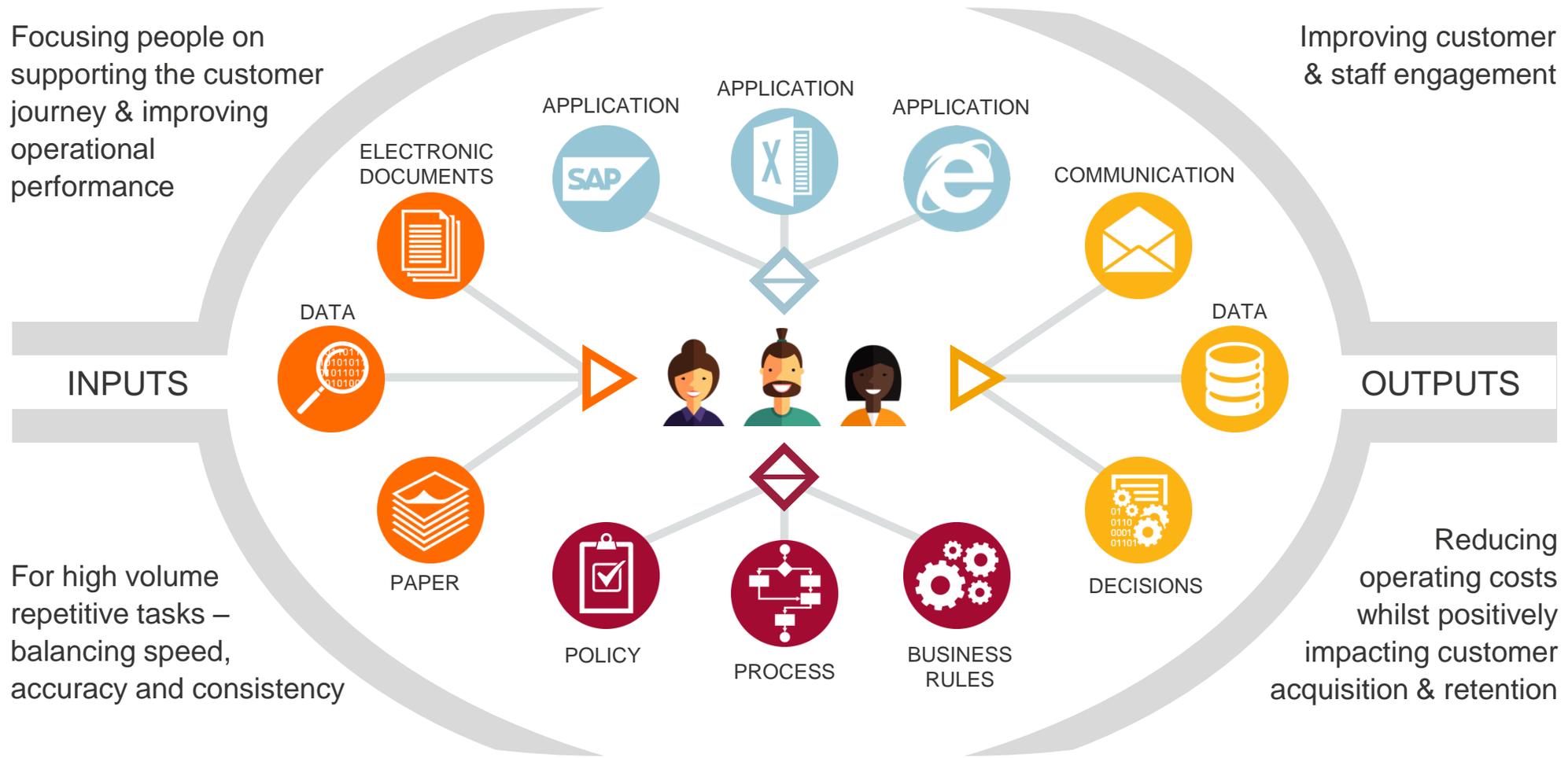
*numbers don't add up due to rounding

- 63% of clients are executing on RPA.
- 17% are executing on Enhanced Automation; 52% are investigating; 32% have not begun.
- 61% are investigating and experimenting with Algorithmic and AI applications; 35% have not begun.



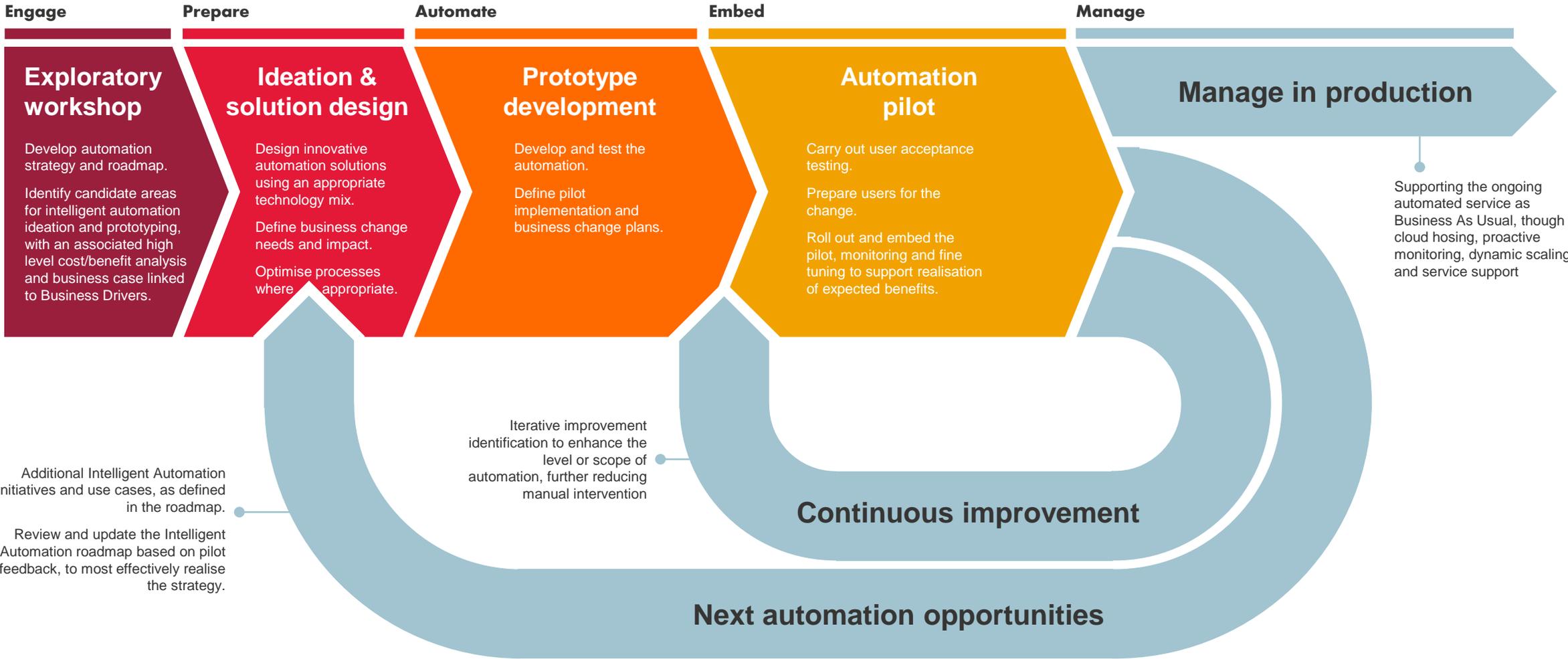
IA focus RPA

- A virtual workforce that mimics and emulates the human workforce
- No changes to underlying processes, workflows, and systems
- Automating high volume, manual & repetitive tasks



Benefits	
↑	Accuracy
↑	Standardisation
↑	Quality
↑	Capacity
↑	Customer service
↑	Scalability
↑	Staff morale
↑	Management information
↓	Cost
↓	Staff time tied up in low value/skill repetitive tasks

CGI's Intelligent Automation approach lowers risk and accelerates benefits



Back office IA Application

CGI helped **create a new operating model** to ensure the continuity of high quality services, **reduce run costs** to create the correct cost structure, and provide faster project delivery. CGI is now moving towards **Digital Transformation, Data, Robotics, Cybersecurity and Agile services**.



Reduce process costs and reduced routine tasks



Improve Service Quality



Boost employee productivity & value

- The project is estimated to last until the end of 2018
- Currently more than 10 CGI RPA experts providing Business Process Analysis, RPA design, implementation and test services; RPA tooling is used in partnership with Blue Prism
- 34 processes have been automated, in production to date
- 173 processes are currently under design in the backlog
- Overall process portfolio identified for automation 350
- RPA Application Management Services in production
- 20-50% process cost reduction achieved



Partner

blueprism

CGI

Leading Global Reinsurer

Automation of the Claims First Notice of Loss (FNoL) process and the establishment of an Enterprise platform to support process automation expansion

CGI developed a solution for ingesting unstructured and inconsistent form content and automating the Guidewire application data entry process using Robotic Process Automation. CGI also trained the client's Operations Team to operate the Robotic Control Room to manage production bots.



Reduce process costs and reduced routine tasks



Boost employee productivity & value

Client Challenge

- FNoL process data is sourced from a number of varying forms and document formats
- Form data is not consistent and required standardizing prior to intake to the FNoL claim registration process
- Claims must be entered into Guidewire application manually
- Reinsurer was unable to cope with increased volume and needed to hire temporary staff to process the claims

Client benefits

- 4 Bots are currently in production processing 4,000 FNoL claims per month
- Reinsurer was able to reduce FTEs by 70% without the need to hire temporary staff
- Processing time was decreased by 75%



Partner

blueprism

CGI

IA focus Conversational AI

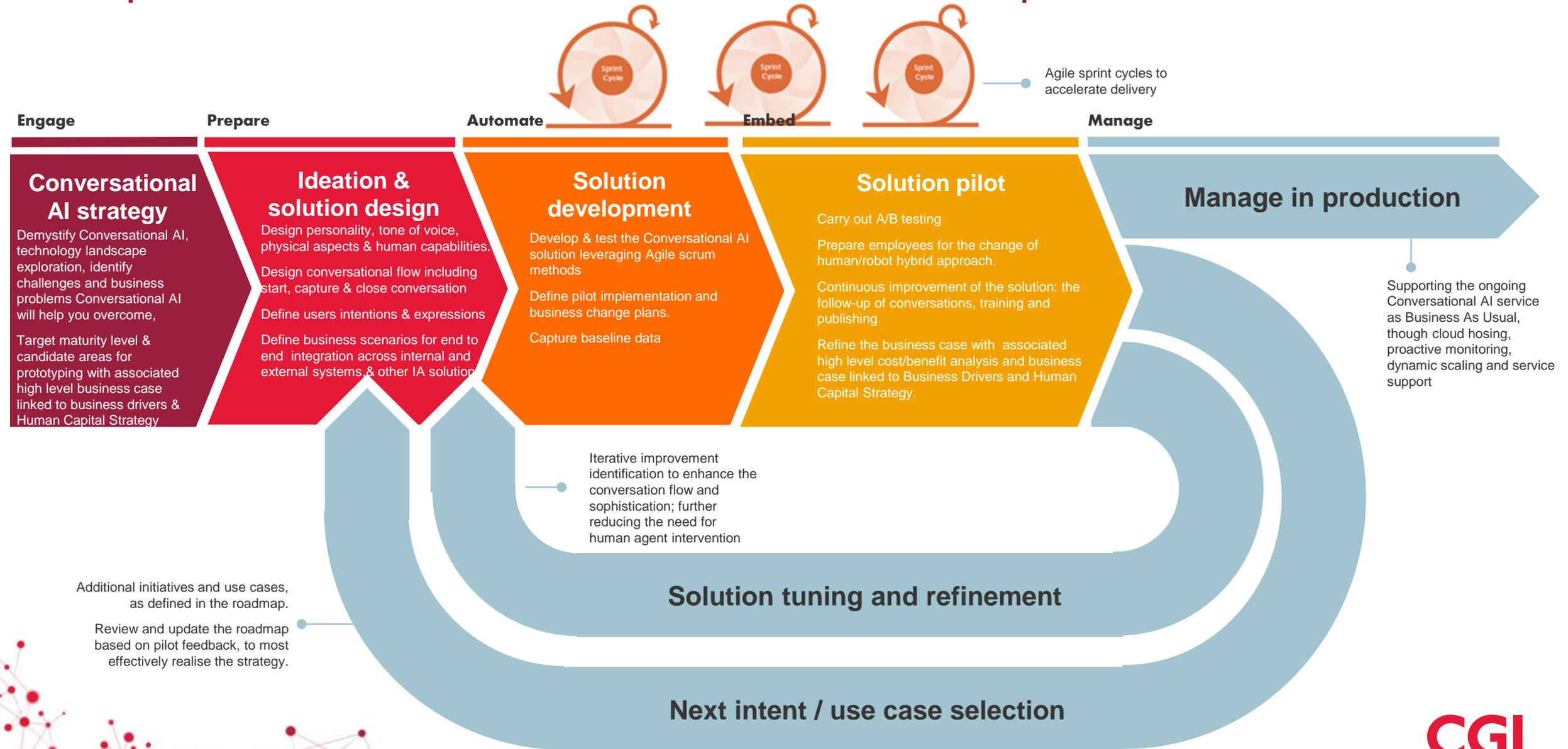
- Ranges from simple FAQ chatbots to fully capable virtual agents
- Complex landscape of technology and AI components
- Requires input from psychologists, sociologists, linguists

FAQ Bot	Scripted Chatbot	AI Chatbot	Virtual Assistant / Agent	Fully Capable Virtual Agent
<ul style="list-style-type: none"> • Human – bot interaction • Simple fully scripted, rule based, narrow content • Limited number of channels / single language • Menu & intent driven • No personality • Descriptive / diagnostic analytics 	<ul style="list-style-type: none"> • Complex fully scripted / structured communication • Multi-channel / multi-language • Information gathering • Rudimentary personas • Limited use of routing and escalation to agent • API queries into deeper content • Diagnostic analytics 	<ul style="list-style-type: none"> • Complex scripting w/ machine learning • Contextual intelligence • Multi-channel & language • More complex personas • Bot initiates contact • Extensive use of routing and escalation to agent • Integration into e-commerce / API's • Predictive / prescriptive analytics 	<ul style="list-style-type: none"> • Limited Virtual Agent mainly text and email • Single and multi-channel • Limited sentiment analysis / limited empathy • Extensive use of routing and escalation to live support • Narrow intelligence, basic reasoning • Integration into e-commerce / API's • Beginnings of cognitive analytics 	<ul style="list-style-type: none"> • Technology capable of emulating human capability incl.: <ul style="list-style-type: none"> • Avatar • Human physical aspects • Sentiment analysis / empathy • Full speech recognition / generation • Computer vision • Multi-channel / language • Full end-to-end autonomy, hypothesizing, reasoning • Deep integration into e-commerce • No back buttons, no home buttons • Cognitive analytics

Hybrid human-robot approaches require skills and input from experts in psychology and sociology, organizational change management and human resources

Degree of Complexity of Interaction & Depth of Human Emulation

CGI's approach to Conversational AI and Chatbots combines experimentation and innovation in AI with Agile practices



Major Utility leverages chatbot to automate customer contacts

The client was looking to establish a partnership to build Artificial Intelligence (A.I.) solutions. A first step was the agile development of a conversational agent to drive automation in the contact center (170k contact p month)



Reduce process costs and reduced routine tasks



Improve Service Quality



Boost employee productivity & value

Client Challenge

- Looking for **partner to build AI** solutions
- 1st focus **Conversational Agent / Chatbot** to automate 80% of contacts
- Goal to **free up contact centre agents** from answering repetitive questions
- Little experience with conversational AI technologies and the
 - linguistic, social and psychology aspects needed to
- develop a high-quality automated customer interaction experience

Client benefits

- CGI used its **agile and iterative** chatbot development approach
 - 1st Phase Proof of Concept; use cases: address changes and new service sign up.
 - Selected best NLP technology for dual language
 - NLP accuracy reached 98% after 4 month machine learning period
- Chatbot now in **production** and being **optimized** and **baselined**
- Chatbot integrated to Salesforce CRM, SAP ERP, Customer Portal and price benchmarking to insert insights in the conversation



Ik kan u helpen met heel wat vragen rond de verhuis van uw energiecontract.

Waarmee kan ik u helpen?

Mijn verhuis starten

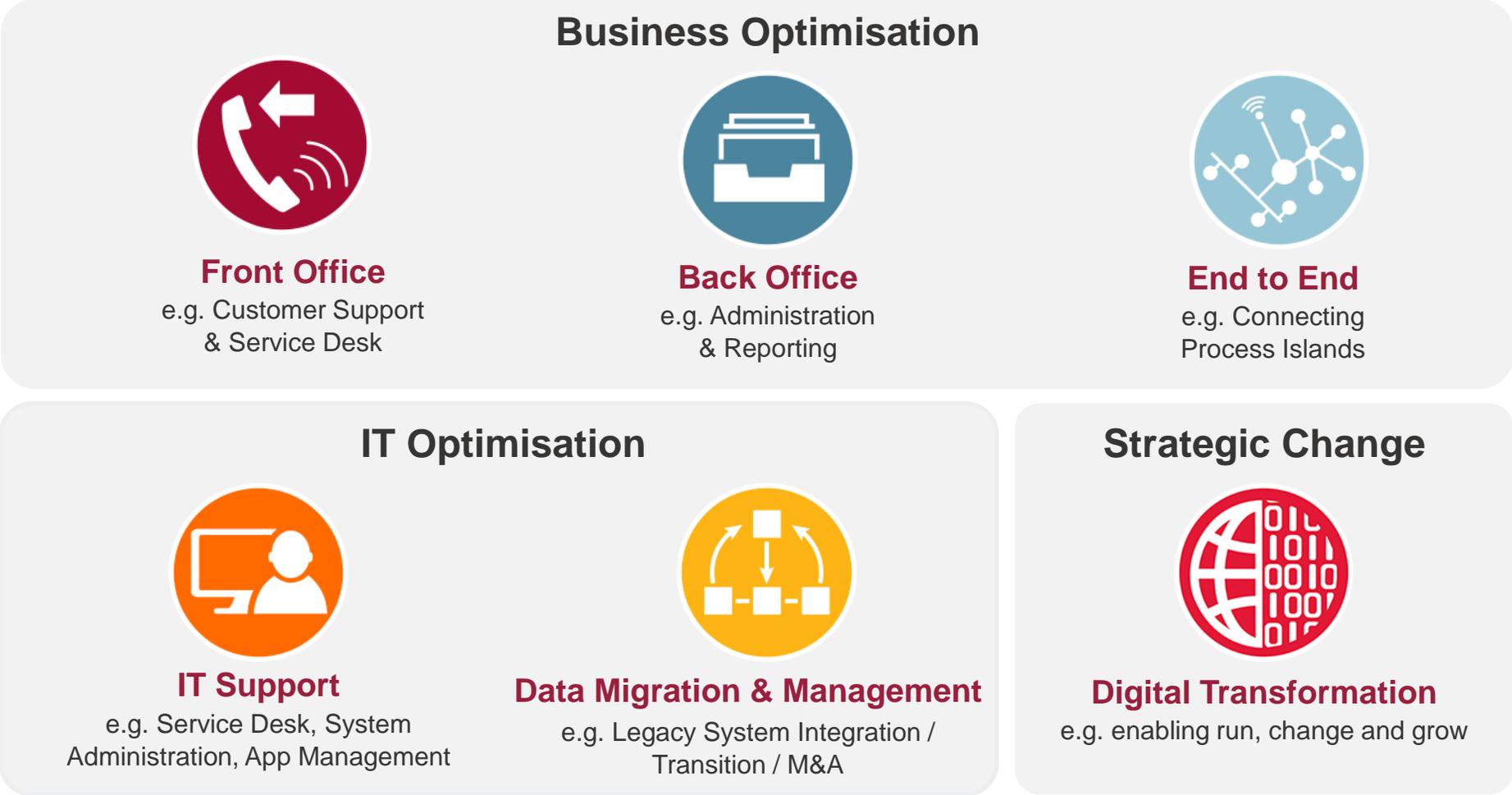
Een andere vraag

Built on

Chatlayer.ai



Intelligent Automation realizes benefits across a wide range of business and IT processes



Thank You

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CGI

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CGI's Intelligent Automation Service Framework offers three-tiers of services, supporting wherever a client is on their intelligent automation journey

Offering	Key Services	Value Proposition
 <p>Consulting & Systems Integration</p>	<ul style="list-style-type: none"> Enterprise automation strategy & roadmap - from RPA to AI Intelligent Automation ideation & integrated solution design Technology evaluation, selection & integration Automation benefits analysis & business case generation Business change management & workforce re-alignment 	<ul style="list-style-type: none"> Proven progressive RPA delivery methodology Cross-industry benefits from 100s of automations Innovation labs Holistic approach to technology, process and people change
 <p>Managed Services</p>	<ul style="list-style-type: none"> RPA factory: automation development & management Flexible IA platform hosting & operation (including secure cloud & on demand) Integration of enhanced capabilities like chatbots, virtual advisers, AR/VR, advanced analytics, machine learning, AI, IoT RPA as a Service 	<ul style="list-style-type: none"> Technology agnostic Flexible commercial models Proven RPA templates, factory approach & global delivery network Advanced automation / AI / IoT / analytics
 <p>Outsourcing</p>	<ul style="list-style-type: none"> Automation and AI as an integral part of transformation Automation of IT ops in ITO & business processes in BPO Accelerated digital delivery and operations Annual IA/AI innovation plan 	<ul style="list-style-type: none"> Accelerated transformation with IA as a driver New, insight-driven, connected operating models Continuous innovation and experimentation Security that's "designed in," not bolted on

250+ RPA practitioners; 1000+ Advanced Analytics/AI; 50+ R&D; seamless global delivery

- RPA
- IT Ops autonomics
- Chatbots / virtual service agents

CGI Intelligent Automation Platform
 virtual workers | virtual engineers | virtual agents

- machine learning / deep learning
- natural language processing
- digital image processing

