



Blockchain , Cognitive technology and automation

Maori Accountants Forum

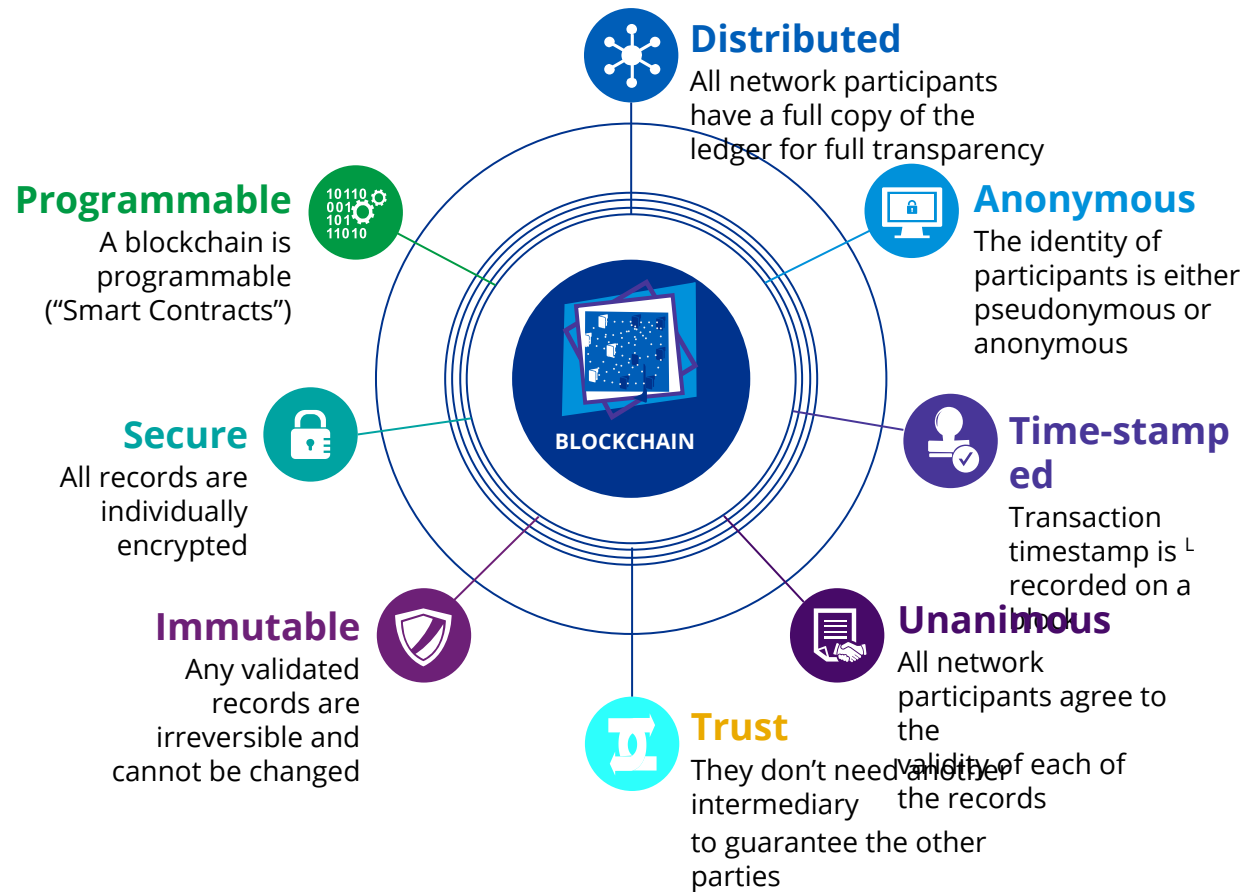
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What is Blockchain?

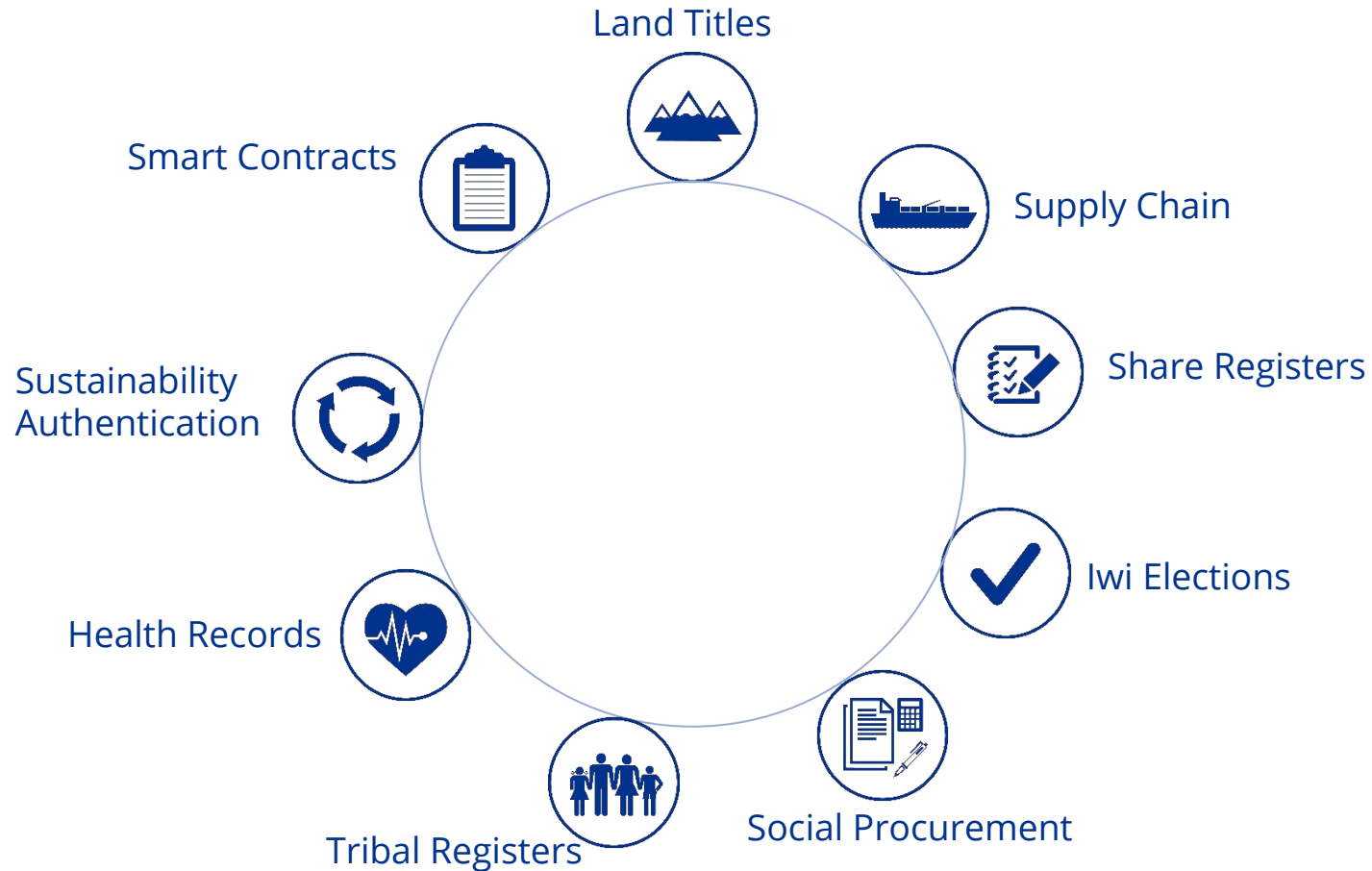


Blockchain characteristics



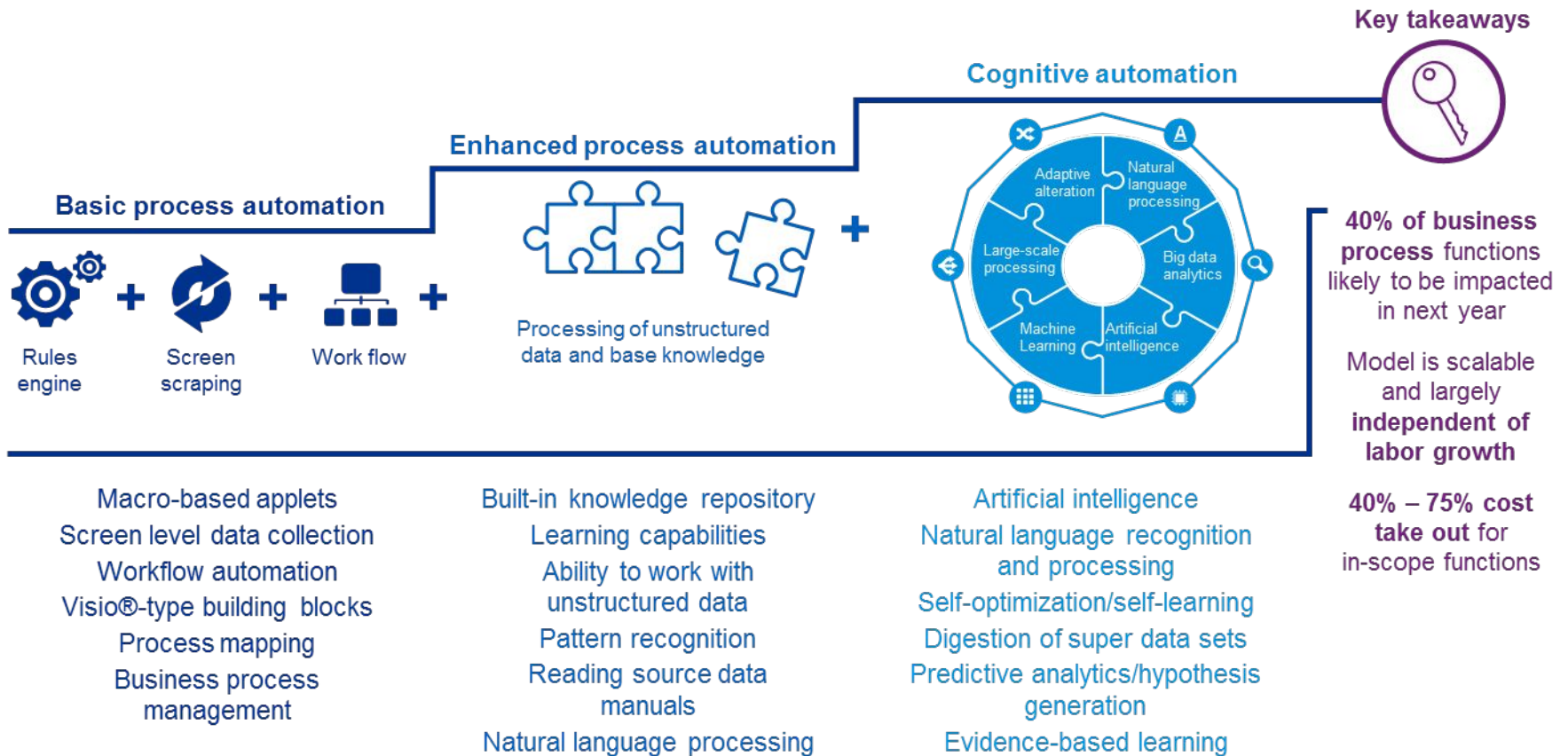
Source: KPMG Research

Exploring Blockchain





Technology overview



Benefits

When can Cognitive Technology and Automation deliver best value?

- Substantial volumes of transactions or synergies
- Clear benefits to clients and stakeholders
- Efficiency benefits
- Non-financial benefits

What are the benefits?



Productivity/performance



Increased employee value



Cost efficiencies



Scalability



Consistency/reliability



Auditability

Case studies – what's happening out there?

In agriculture

- Reports suggest the agricultural robotics industry is now servicing a US\$3 billion market which will grow to US\$10 billion by 2022

US\$3
Billion
2016



US\$10
Billion
2022

- Increased investment into innovative agri-food businesses, including those that:



- Increase digital solutions that augment the intuition of farmers and producers
- Increase precision application of nutrients and other inputs
- Take advantage of unmanned vehicles
- Develop tools to enable previously unproductive regions to contribute via water capture technologies

- In 2005, agriculture investments in such technologies was estimated at US\$100 million. In 2015, this grew to US\$4.2 billion.

US\$100
Million
2005



US\$4.2
Billion
2015

Case studies – what's happening out there?

The future of accounting

- Automation is significantly transforming the accounting industry
 - Research from Oxford University suggests accountants have a 95% chance of losing their currently roles to automation as data entry, number crunching and data analysis tasks are computerised

“AI will increase our audit quality, as it begins to allow us to ask a lot more questions. It will improve efficiency in what we do and it will provide more insight. More than whole jobs disappearing, we will more likely see an impact on skill sets and we will still need humanities. We want this to lead to a more holistic education for all.”

- *Shamus Rae, Partner, KPMG*

“With more data available, the case load for judgement work is just going to increase”

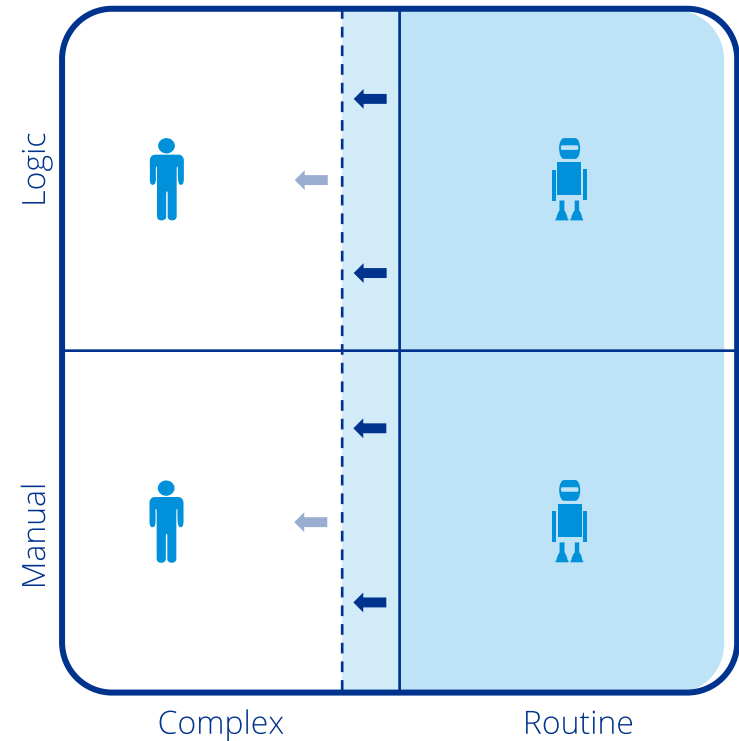
“Do we expect repetitive work and jobs to go? We absolutely do. But an increase in artificial intelligence and consulting work can help our clients to improve their businesses, too.”

- *Shamus Rae, Partner, KPMG*

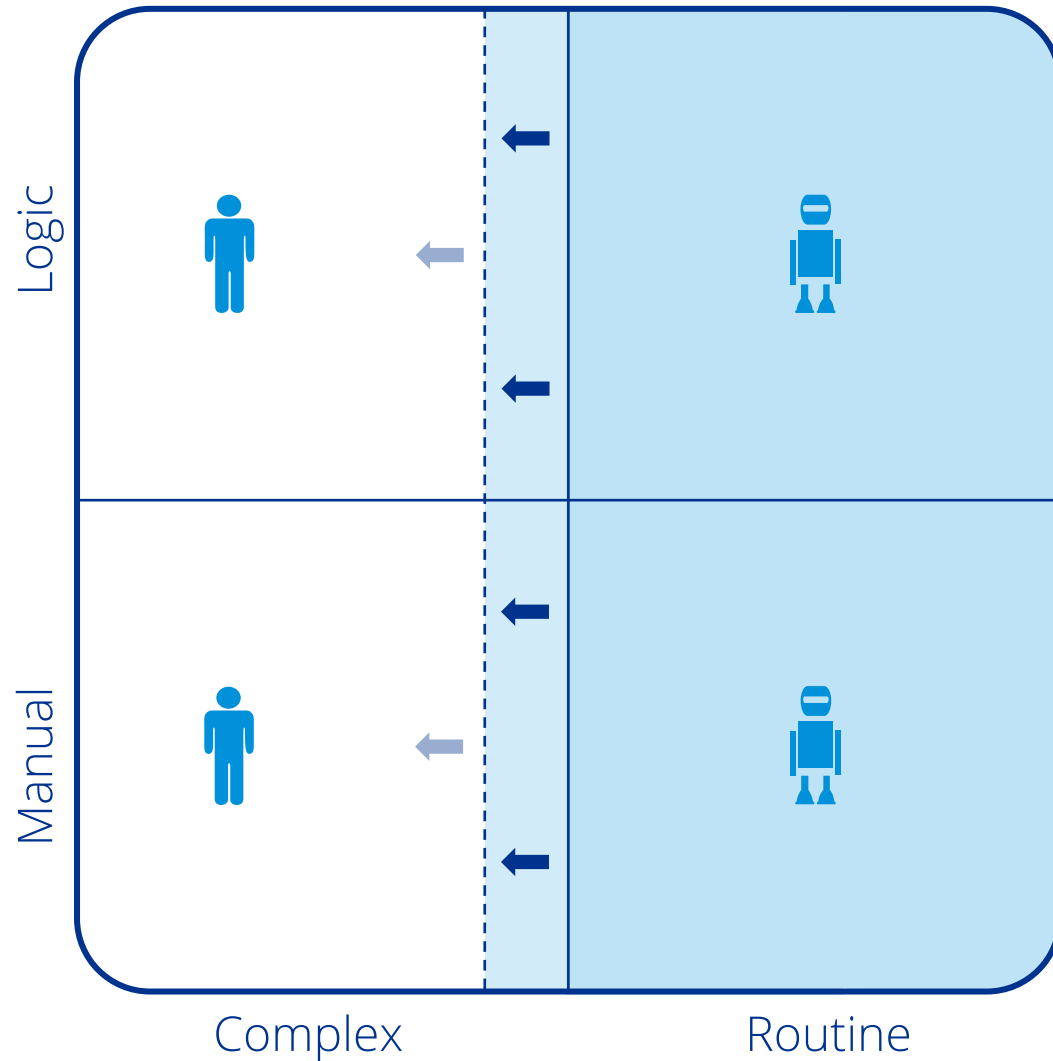
What might this mean for people and jobs?

Employment trends

- The impact of automation on jobs depends on the occupation
 - A report by the International Institute for Sustainable Development suggests automation could replace more than half of mining jobs in the next 10 years
 - More than 80% of vehicular transport jobs could be replaced by automated technology
 - People with tech skills will be needed in every industry
 - Jobs that require empathy, communication skills and close personal interaction are likely to still need a significant human component.



Exercise – characterise jobs



Discussion

What could this mean for:

- Accountants (risks and opportunities)
- Maori (risks and opportunities)

Discussion

What do you think?

- What things do you think should remain exclusively within the control of humans?



- How do you feel?

