Data-driven processes and services

Data-driven services support decision making through using more sophisticated data analyses to identify and deliver value to customers, clients, or stakeholders. Many organisations, large and small, are moving toward data-driven approaches, but it is still a challenge for many. Data privacy, security and sovereignty challenges also need to be addressed.

What we're seeing

The 'metric' society

We are becoming an increasingly quantified society. Thanks to developments in digital technologies, and analytical methods, it has never been easier to collect, analyse, and share data.

Data rich, information poor

Data analytics is heavily promoted as "the future" for every organisation. It will, it is claimed, boost profits, generate new sources of revenue, and add value to processes and customer services. However, becoming data driven isn't simple or easy.[1]

Many organisations collect a lot of data already, but don't use it, or use it poorly. Often, it may be collected just for compliance reasons.[2] Large tech companies will often know much more about communities than organisations that work within them.[3] While a lot of attention has been given to "Big Data", in reality there is an "all data revolution" underway.[4]

Improving services with analytics

MacDonald's is using data and artificial intelligence to improve its supply chain. Its menu is also becoming dynamic, responding to customer orders.[5]

Estonia provides digital IDs and health records, as well as a variety of other digital services.[6] The truck company Scania has established a data services arm to help customers better monitor their vehicles, as well as help with administrative tasks.[7]

Challenges to becoming data-driven

Despite significant investments many organisations have not yet benefitted from more data-driven approaches. A range of factors are responsible, These include poor understanding of business context and customer/user needs, poor data quality & access, lack of skills, and poor leadership & communication. Moving from data silos to data ecosystems is also seen as critical[8]

Storytelling with data

Increasingly, it is being recognised that just having "good data" and stylish dashboards isn't enough. Data needs to be woven into narratives that engage the organisation, customers, and others.

In the UK, big data is being combined with "thick data" – people's lived experiences, often captured by filming behaviours – to better understand the issues.[9]

Data privacy & security

Despite increasing security features, data breaches now seem to be a regular occurrence.[10] Attitudes toward privacy are changing, but 60% of kiwis would still change providers if they had concerns about privacy and security.[11]

Data sovereignty

Data sovereignty is a particularly important issue for indigenous people. Control and governance of data about themselves is central to discussions about data gathering and use by the public and private sectors.[12]

Potential implications

Create
- Added value and utility from better use of data

Relate
- Improved communication and engagement inside and outside organisations through analytics and storytelling

Consume
- Products and services than better meet the needs of customers and consumers

Degrade
- Trust in institutions declines through misuse of information and poor information security

Connect
- Better use of data can help build connections
- Building & maintenance of trust is essential for social licence

Define
- Insights come from quantitative plus qualitative information

More information (links)

[1] Challenges organisations face in becoming data-driven
[2] Data rich, information poor
[3] Sport and the digital revolution report
[4] Big Data is neither a fad nor a panacea
[5] MacDonald's is using AI and data to optimise its supply chain
[6] Estonia's X-Road
[7] Scania's data services
[8] Challenges organisations face in becoming data-driven
[9] Blending big data and thick data
[10] Data breach statistics
[11] NZers' attitudes toward privacy shifting but key concerns remain
[12] Te Mana Raraunga - the Māori Data Sovereignty Network