

A background image showing a close-up of hands holding a tablet. The tablet screen displays several charts, including a bar chart and a line graph with a red trend line. The image is partially obscured by a large white diagonal line that runs from the top left towards the bottom right.

FORRESTER®

Sensemaking In The Era Of Uncertainty

The Urgent Need Of Building An Insights-Driven Organisation

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FORRESTER OPPORTUNITY SNAPSHOT: A CUSTOM STUDY COMMISSIONED BY ST ENGINEERING | AUGUST 2020

Data Can No Longer Be An Afterthought

In the past decade, data has become one of the biggest opportunities and biggest challenges for leaders. The advancement of technology in sensors, cybersecurity, cloud, and edge computing has enabled more data to become available. In the face of today's uncertainties and complexities, translating this data into insights for sharper decision making; better, faster actions; and timely engagement with customers and citizens is critical to driving organisational value and differentiation.

ST Engineering commissioned Forrester Consulting to conduct a custom study on the maturity of analytics and sensemaking in organisations today. In this study, we surveyed 800 senior decision makers across Asia and the Middle East and followed up with 14 interviews to understand their current priorities and challenges. Through this, we also developed a Sensemaking Maturity Index (SMI) that assesses organisations' readiness across technology, strategy, culture, and security.

Key Findings



Most (69%) organisations want to build analytics capabilities to understand customer needs more efficiently; however, only 22% can empower teams with the relevant insights.



Firms are focusing on building a sensemaking strategy but are falling behind in their data culture. This is especially true for public sector firms, where data use is still siloed.



Managing data complexity is the biggest challenge for decision makers: 59% consider their current data environment too complex to manoeuvre into sensemaking capabilities.



Sensemaking

The orchestration of data from sensors, systems, platforms, processes, and people to sense, connect, and make sense of — to provide clarity with meaningful, purposeful lines of sight, insights, and foresights — to enable fast, sharp decisions or outcomes and experiences.

Focus On Sensemaking To Advance Human-First Engagement

Across both the public and private sectors, organisations are focusing on customers' or citizens' needs. Seventy-four percent of decision makers cite improving their end customers' and citizens' experiences as a high or critical priority; 71% are looking at deploying new solutions and systems to address their stakeholders' needs; and 69% want to specifically focus on building efficiency and effectiveness in their customer interactions.

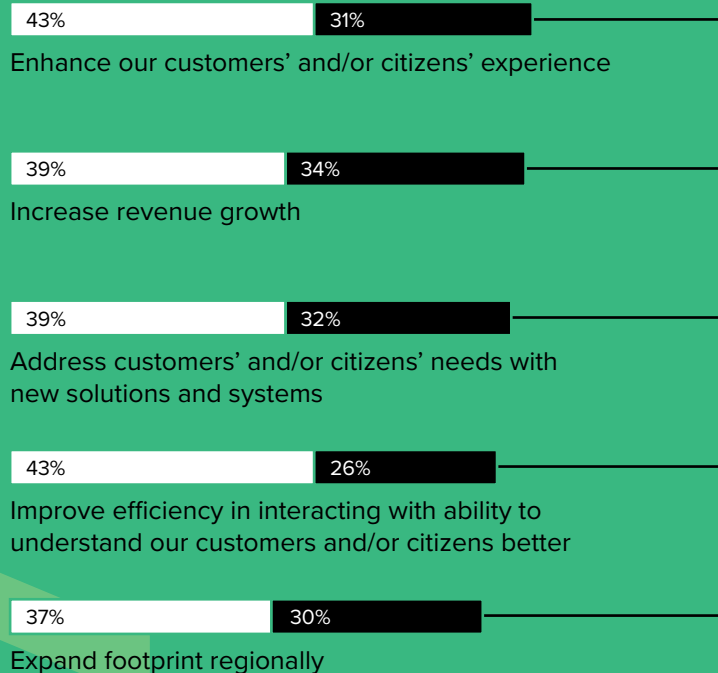
Amid the current COVID-19 pandemic, data has become even more critical in helping organisations understand and address customers' needs.

“Data analytics has been central to handling COVID-19 — understanding the customer, the impact on the economy, on transport mobility. We need to build on this momentum.”

- Head of data analytics in a smart city development program, Indonesia

“To what extent are the following key priorities for your organisation in the coming 12 months?”

● High priority ● Critical priority



Sensemaking Capability Build Is Caught In Experimentation Stages

While the ecosystem has recognised the importance of data and sensemaking, decision makers' journeys to practically building analytics capabilities in their organisations are still in the experimental stages. Senior leaders are focusing on getting the right tools and capabilities (75%) and building a comprehensive agenda and use cases. In fact, 66% are still trying to understand their analytics needs while building capability around this.

In these nascent stages, organisations are focusing on building technical foundations rather than holistic priorities around data culture and skills development. This approach may need to change to effect seamless data usage and collaboration.

“

If we don't have a data strategy, we lose business. We need to consistently see how to improve customer service and get orders processed much faster.

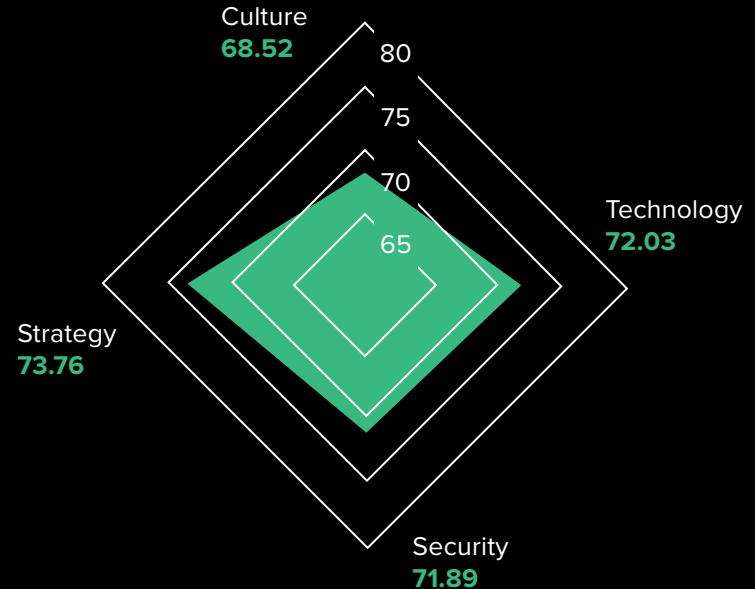
- Data and analytics manager of a global shipping company, Singapore

Data Culture And Frameworks Still Weak Despite Strategic Understanding For Analytics

In general, organisations perform strongly in building their data analytics and sensemaking strategies but fall short in embedding data across their structural fabric. Without the right data culture and mindset, this impedes progress toward executing data analytics and sensemaking strategies.

While two-thirds are collecting data throughout the customer journey and have built processes around collecting, measuring, and evaluating key metrics, almost 50% of decision makers say they don't integrate their analytics capabilities with other qualitative data insights in their decision making. Fifty-five percent lack a data-centric approach to decision making, and only 52% have a centre of excellence (CoE) driving this data-driven culture. Many lack prioritisation of security: Only 48% are considering security frameworks in the near term.

The Sensemaking Maturity Index (SMI) looks at how respondents perform in four critical components of data and customer analytics readiness: culture, technology, security, and strategy

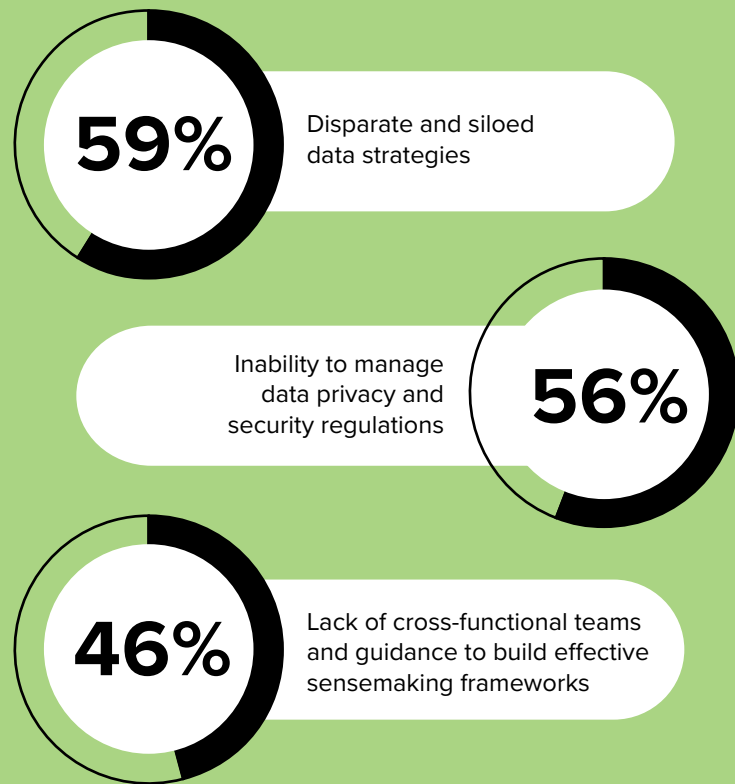


Challenges Persist Around Managing Siloed Data, Data Security, And Organisational Structure

Data complexity overwhelms decision makers; 59% consider their organisations to have siloed and disparate data strategies. This inevitably impacts their ability to create connected data flows that enable the relevant stakeholders at the edge to gather actionable insights. Furthermore, data quality issues are still a problem at their core. A leading bank interviewee commented that more than 50% of their time was “spent just on improving data quality.”

As highlighted in the SMI, foundations in data security are key; however, manoeuvring around complex data privacy and security regulations is still a challenge, according to 56% of decision makers surveyed.

Challenges In Executing Data Strategy



Path Towards Enabling Insights-Driven End User Experiences

While two-thirds (67%) of decision makers report that data is centralised, 55% still say that customer-facing teams do not have access to the right customer data. Furthermore, only half (53%) make use of internet-of-things (IoT) data for customer profiling and predictive analytics capabilities (59%).

From an end user context, 64% of decision makers recognise that their citizens or customers expect more personalised experiences from them; however, building such experiences without adequate data flows proves difficult. Currently, only 25% of leaders say their firms have the right data dashboards and visibility to enable this.

Moving forward, to help employees gain accessibility to actionable data, 73% of decision makers plan to invest in descriptive analytics tools (i.e., dashboarding and visualisation) within the next three months.



64%

know their customers
or citizens expect
personalised
experiences

73%

are keen to
invest in data
dashboarding
and visualisation
capabilities

Immediate Technology Needs Revolve Around Visibility, Agility, And Security

The near-term technology priorities of decision makers are in line with the shortfalls they recognise in building strong and secure analytics capabilities. Beyond visibility, the top focal points for technology investments involve embracing cloud and building strong data security through their analytics and sensemaking journeys.

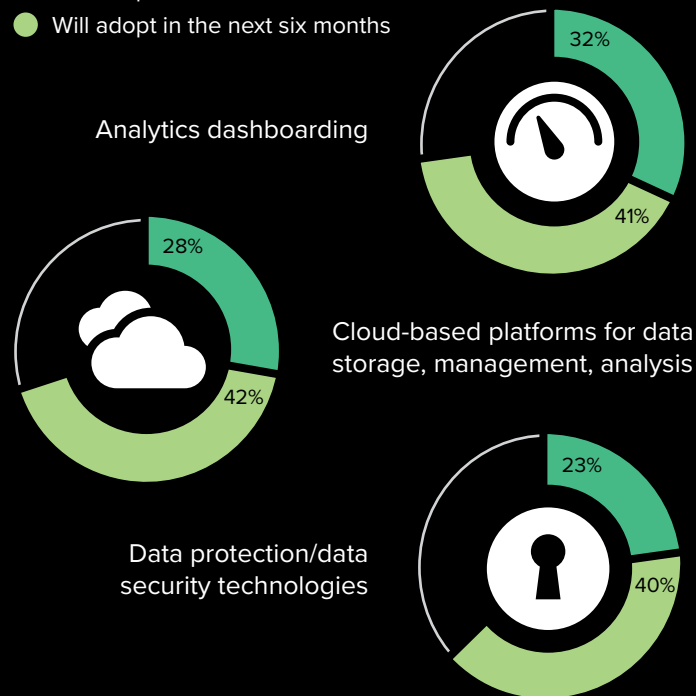
Technology partners will also play a key role in enabling these priorities effectively. Most (64%) leaders believe that efficient data collation and analysis, especially at the edge, require relationships with the right technology partners.

While organisations still need to work on internal clarity in strategy and culture, building the fundamentals for data visibility, agility, and security and leveraging external partners tactically will be key to accelerate success.

“What are your adoption plans for the following technologies/capabilities?”

(Showing results for top three selection of near-term implementation only)

- Will adopt in the next three months
- Will adopt in the next six months



Recommendations

Most organisations are already aware of the strategic importance of data in becoming customer-centric but lack the capabilities to accelerate their speed-to-market.

- 1. Close the data culture gap.** Determine early on what meaningful, useful data looks like. Cultivate collaboration interests and map out clear, defined purposeful outcomes and use cases upfront with stakeholders. This promotes understanding of the value of data in specific use cases as a first step in the analytics adoption. With clarity in purpose, organisations can then prioritise data sets to be sensed and collected.
- 2. Accelerate speed-to-market with sensemaking data-sharing models and seamless processes and applications.** To facilitate self-evident insights and advance intended outcomes, consider how you can enable data to find the right users — and not the other way around. Implement a data

analytics platform that facilitates and protects data usage with defined data governance, integrity, and transparency without compromising on data stewardship and policy. It is also vital to map out the scale of adoption and how you can shift the usage and applications of data upfront — moving from being informative and preemptive towards predictive and transformational.

- 3. Bridge execution gaps with robust emerging technology for accuracy, scalability, and digital trust.** Sound predictive data stems from accuracy at the source, and data availability and accessibility are highly dependent on the scalability of your data architecture. Fool-proof sensemaking is made possible with hardened modular platforms developed around the data. From sensing to analytics platforms; from software-defined networks to edge computing and cloud for seamless connectivity; from fortified communications and digital space to robust operations centres — these pillars are

core to maintaining agility and dynamism in a safe, smart, and sustainable way.

4. **Advance data and sensemaking investments by being clear on their returns.** Whether it is for enhancing end user/customer experiences, for the safety and security of citizens, or to transform business models for growth, organisations should build practices to scale, integrate, and collaborate. Management sponsorship to drive adoption, facilitate collaboration, and ignite creativity and innovation via experimentation remains important as you advance further along the analytics journey. Look beyond current users within the ecosystem and explore other human-centric needs and any economic areas that may be critical to your organisation and community. Build practices that enable data integrations and holistic management to develop proactive next-best actions.

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Methodology

This Opportunity Snapshot was commissioned by ST Engineering. To create this profile, Forrester Consulting supplemented this research with custom survey questions asked of 800 senior leaders with decision-making authority or influence in their organisations. The custom survey began and was completed in May 2020.

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Demographics

COUNTRY

China – 19%

Hong Kong – 6%

Indonesia – 15%

Philippines – 13%

Singapore – 13%

Thailand – 13%

United Arab Emirates – 13%

Vietnam – 10%

INDUSTRY

Banking services – 16%

City planning – 13%

Healthcare – 16%

Government – 27%

Security and emergency services – 10%

Transportation – 10%

Utilities – 10%

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