

Data & AI: game-changing opportunities?

Emerging technologies use data in new ways and many benefits flow from this. We can tap into new sources of insight. Automation can transform how we plan resources. So what are the opportunities? And how do we release this potential?



The key emerging technologies for customer operations involve real-time AI Automation. This uses data in new ways. It creates new types of data. We saw the evidence in our earlier article on page 85.

Many benefits flow as a result of this. We can now create agile, data-driven operating models. And we can be faster in responding to changing requirements or new opportunities. So, what are these game changing opportunities? How do we realise this potential in data with AI and Automation? And what do we require to do this?

What are the types of automation?

We already see our members using more and more automation. Indeed, learning about this needs to be a priority for us. Why? Because whatever our role, time is short. So we need to use our time in the most valuable way. And automation will help us with this. It can help in each of the professional communities, from planning to insight or improvement.

- **Process automation** has enabled huge saving in operational budgets already. It uses data to automate tasks. Now the benefits are starting to go beyond FTE savings. Real time automation is transforming the roles of operational teams and planners. We saw this on page 55. It makes possible working practices that weren't affordable or quick enough before.

- **Data automation.** This type of automation is especially powerful in customer operations. Why? Because there are so many numbers, and we can lose sight of the wood for the trees. Automation saves analysis time. It also means we can analyse anything, yet only flag up what is most important. We cut out noise. We make sure that everything people see is relevant and easy to take action on.
- **Machine learning (ML)** enables computers to learn from experience. It trains algorithms to learn from data and build new rules. So, machines can take new actions or decisions without being re-programmed to do. It is a branch of AI that takes automation to a new level.
- **Use new data sources.** When we capture speech, text, images and video as data, even more becomes possible. AI can process this data in a way that is like human intelligence. So it can be used to 'understand' and generate speech, images or video. This is sometimes called 'conversational AI'. It can make decisions as well as learn from data.
- **Intelligent Automation.** Using AI computers and machines can perform tasks that normally require human intelligence. This is a game changer in customer operations. Now AI can 'understand' the meaning of what customers and colleagues are doing. It can automate actions on the back of this. And ML can extend this understanding without human involvement.

How do we join up data?

To make this work we need to **link data across functional siloes**. In the diagram below, the key step is called profile unification. This allows us to link a customer's experience across different channels or journeys. This is important because half of all customers engage in 3-5 channels over the course of one journey, according to data from McKinsey. So **look at how your data is structured**. Can you join up data by transactions or cases? Can you see who the data relates to, by colleague or customer? Successful analysts already overlay data from different sources to derive broader, actionable insight. Sometimes we call this "meta data".

These data connections are vital to unlock the true potential of **Intelligent Automation**. This technology can find patterns and insights automatically. It can search huge quantities of seemingly unrelated data. But you'll never realise that potential if you don't connect those data streams. So, **that's what we need to unblock**. Then AI can help us with steps on each side. It supports data collection by creating new data sources. It automates segmentation by identifying groups and patterns. It makes predictions and decisions. It can support people in making better decisions too.

Use of data is often siloed by department, as we see in the research from **Calabrio** on page 95. Insight from the contact centre is still shared infrequently. It's daily or weekly at best (<50%). "That's not enough because conditions change rapidly", explains Ed Creasey. "The first hints of **changing trends can show up in customer conversations**". Yet three quarters of contact centres still don't work closely with Marketing or IT. And very few work as data partners with the product team (12%), supply chain (7%), sales (16%) or finance (12%). Automated reporting is required to scale this up. We need to integrate this into workflows

and decision-making processes, using playbooks. And there are blockages to overcome around culture and engagement.

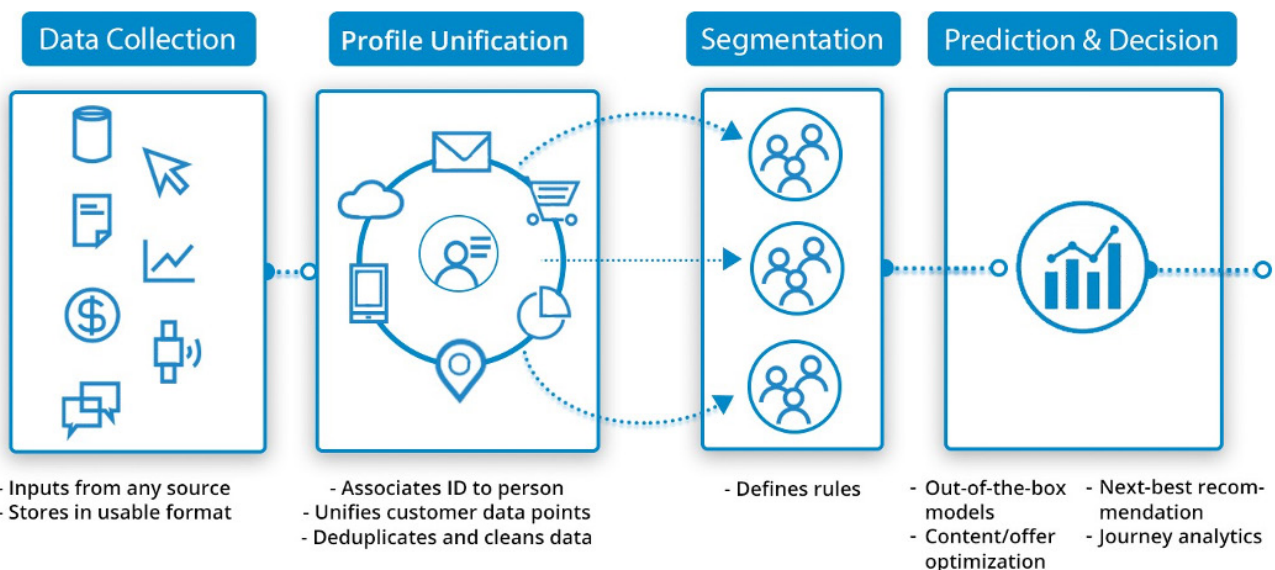
More broadly, consumer **attitudes on data privacy** are undermining traditional marketing strategies. These often depend on third-party data. Online we depend on device identifiers. Instead, we could focus on helping people see the value to them when we use this data. Could we design customer experience to build this understanding and trust? Would that change the value of human contact? Potentially this is where contact centres can drive the next generation of marketing.

We also need to **stop seeing every problem as a new problem**, as we discuss in the article on forecasting on page 35. Instead we need to build scenarios and models that link the data together. Connect cause and effect, action and consequence. Then we can see where the past fits into present challenges. And where it doesn't. So, we need to change the way we capture and label our data at source. Our analysis needs to prepare us for using the same data in a different world, to be prepared for the unexpected.

How do we operationalise AI?

The key to unlocking the benefits of data and AI is to embed them within the operation. It's like with any technology. We need to point it at the issues that matter most. There are different levels of automation, and they unlock different layers of benefit. We can trigger decisions and actions. We can also trigger information, to the right people at the right time. All this drives many operational benefits. Crucially, it is no longer all about saving costs. We can make life easier for our people and our customers. We can cut out noise, which clutters and distracts. We can make data more actionable when we present it to the right people at the right time as recommended action.

The data platform: bringing all views of the customer together





So we need a more holistic approach to workforce strategy and operational practices. Operational playbooks can support this.

Data is the foundation on which we build change in a digital age. We build strongly when we use data-enabled playbooks. Read all about the power of playbooks on page 27. Playbooks start to join data to actions. They focus on who uses it, and what happens as a result. Data describes both the triggers for action and the consequences of that action. This means they can be tracked and measured, which helps us to learn. And it allows us to automate, which makes possible more powerful, dynamic playbooks. These can be used to build flexible, agile operating models. We need to be purposeful about this kind of operational and data planning. Then we can be very much better prepared for a volatile and uncertain world.

We also need to focus on the interaction between human and artificial intelligence. This is where our attention is most urgently required. **Judea Pearl**, the acclaimed computer scientist, wrote the **Ladder of Inference**. He argues that AI or machine learning “needs a push” in deriving explanations from raw data. Today we talk about training AI models. We develop data scientists. Academic researchers help train **Chat GPT**. Contact centre advisors help train speech and text analytics. Carolina Lemos at **TalkDesk** speaks about this in the articles on page 88 and 101.

The work of AI and automation needs quality checking too. This is often overlooked. As we build complex machine learning models, we may need human intuition. Humans can be great at imagining counterintuitive cases. This tests the model’s underlying assumptions. We need to prevent rogue Bots or algorithms. We may start by doing this manually and then build Bots check other Bots! Or we can test a variety of inputs and examine how they might change an outcome or explain a situation. We

need to create a quality approach that goes beyond system or user testing. Quality looks at the customer impact of the things we do. It looks at the outcomes of our conversations and how we have delivered these.

Chat GPT: try it for yourself!

One area of AI that has attracted a lot of attention is ChatGPT. It’s easy and free to sign up. So why not take a few minutes every month to explore it for yourself. For instance I asked it to explain the difference between AI and Machine learning. It was clear and accurate. Then I added “in 80 words”, A much shorter version appeared. Each time I changed the length, it was a slightly different phrasing. So, I gained lots of good ideas when writing some of the paragraphs above! Why not try it for yourself?

At the same time there are many questions it can’t answer. I asked it: why is **ChatGPT** important in customer operations? It doesn’t know yet. I guess we don’t either! As you see in the news, it also answers some questions wrongly. This is to be expected. And therein lies a clue to how we can best use AI more generally. We can use pioneering AI as a support for human intelligence. We can also use proven cases of AI for production systems. We see this in the many successful Chat Bot and Voice Bot systems. But we can’t just jump on a bandwagon and expect it to always work in our particular situation.

Why not be curious and learn?

The fact is that curiosity drives innovation. Automated quality came from user innovation. We need people going out using stuff in new ways, pushing the boundaries, asking themselves “how do I make this work for me from the software that’s available?” We can listen and learn from each other in our network. When people are addressing challenges they face with the software, they will challenge it. Why doesn’t it do this? How can we make it do this? And we can share about that as well in our professional networks.

It’s important to be up to date with the latest trends, especially as AI is so fast moving. So why not ring-fence time to do this? Short regular slots usually work best. You could make a short list of projects or ideas to test out. Most of us learn best by exploring. You could build in time for ‘desk research’ each week. There is a wealth of public information on the web. Use trusted publications or industry groups as well. As a professional you need to learn how to sift and prioritise all this information. You can do this by balancing research with networking and practical activity. This balance gives you a perspective from which to critically review what you read or watch.



Paul Smedley & Ian Robertson lead **The Forum’s** best practice work in this area. Get in touch if you would like to know more.