



SUTHERLAND

TURNING  
ARTIFICIAL INTELLIGENCE  
**INTO RETAIL INTELLIGENCE**



It's been a long time coming but artificial intelligence is finally moving from the Hollywood big screen to the smaller screens of the workplace. It may not be the artificial intelligence (AI) revolution sci-fi fans were expecting (like androids doing the household chores) but for those of us championing advanced analytics and automated customer experience platforms, it's the dawn of a whole new era.

The retail AI opportunity is big. Early adopter brands are reporting 30% higher lifetime values from using AI to enhance their customer experiences.<sup>1</sup> Industry headlines regularly quote long term AI-powered profit growth (up to 56% by 2035<sup>2</sup>) and triple-digit revenue per customer and conversion rate uplifts from AI-powered in-store innovations<sup>3</sup>... but you always need to be wary of industry hype. Sure, AI delivers great results, but it's not a simple off-the-shelf, plug 'n' play solution. Unlocking the commercial potential of retail AI is complex.

AI platforms are enterprise-level, transformative digital tools that require detailed end-to-end planning from design through to development and delivery across a range of business operations and processes. It takes a specialist approach to turn the AI opportunity into the AI win retailers need.

## AI makes Big Data more valuable

In October 2016, a study by Bluewolf considered the role of data in sales teams and gauged the size of the problem called 'dark data,' referring to the fact companies capture a lot of data but only around 20% of it is effectively analyzed for management decision making.<sup>4</sup> Most brands hold a lot of customer data that could be used to improve performance, but don't leverage it. Why?

Companies who invest in analytics find it three times more valuable than analytics laggards, and 85% of mobile marketers report higher revenues from

<sup>1</sup> <https://venturebeat.com/2016/09/26/how-a-i-is-helping-retailers/>

<sup>2</sup> <https://www.forbes.com/sites/louisolumbus/2017/06/22/artificial-intelligence-will-enable-38-profit-gains-by-2035/>

<sup>3</sup> <http://www.fourthsource.com/data/retail-robot-ai-changing-face-market-21884>

<sup>4</sup> <https://www.forbes.com/sites/danielnewman/2017/04/04/improving-customer-experience-through-customer-data/>

personalizing app experiences with customer profile data,<sup>5</sup> but dark data remains a widespread problem. This is because many companies inherit legacy systems that prevent effective data integration, i.e. data gets collected in different systems, and turning all that siloed data into valuable Big Data insight is an extremely complex, labor-intensive task... for humans. However, it's in one area where AI platforms excel.

Our retail intelligence AI platform models the relationships between different data sources, such as historical in-store and online transaction records, customer contact histories, ad click-through/retargeting performance, product hierarchies, customer satisfaction scores, etc. Once it has enriched the company's data in this way, it combines the output with an analytics platform that can predict future customer behavior. The output transforms dark data into Big Data insight, but it's essential to pair this newfound insight with better process design to extract the full return on investment (ROI). It provides an opportunity to create personalized customer experiences and user journeys with enhanced customer profile data, and transform back-office operations (from staff training through to customer care) to match.

For example, we applied AI-powered predictive analytics to a fashion retailer (after combining multiple legacy system data sets) and used the data insights it gave us to develop smarter customer profiles. Then we used that customer insight to train their fashion advisors to provide personalized shopping experiences. The result (after just 11 months) was an increase in average basket size by 7%, and a 67% increase in sales conversions. Addressing dark data problems and enabling smarter operations to leverage Big Data insights is a core value of AI to retailers.

<sup>5</sup> <https://www.forbes.com/sites/danielnewman/2017/04/04/improving-customer-experience-through-customer-data/>



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## AI meets consumer demand for self-service tools and improved in-store experiences.

Self-service is fast becoming a key retail trend, with surveys suggesting around 70% of consumers expect to find self-service tools to resolve queries.<sup>6</sup> Between February and July 2016 nearly 18,000 branded chatbots appeared on Facebook messenger,<sup>7</sup> and around 44% of US consumers express a preference for chatbots over human contact centers for customer relationship management (CRM).<sup>8</sup> In fact, Gartner predicts around 85% of customers will expect to manage their relationships with brands on a self-service basis by 2020,<sup>9</sup> which means, given AI's efficacy for enabling personalization through customer data, it's an essential technology for building this next generation of automated retail experiences.

However, it's easy to underestimate how important AI will become to brick and mortar (B&M) retail as well. There's no doubt B&M retail is facing many issues at the moment. Established brands

<sup>6</sup> <https://www.fastcompany.com/3013177/why-the-future-of-customer-service-is-self-service>

<sup>7</sup> <https://venturebeat.com/2016/09/01/why-facebook-messenger-doesnt-have-a-bot-store/>

<sup>8</sup> <http://uk.businessinsider.com/chatbots-vs-humans-for-customer-relations-2016-12>

<sup>9</sup> <http://www.businessinsider.com/sc/chatbots-future-customer-service-2016-9>

like Sears, JCPenney, and Kmart, and smaller 'middle-mall' brands like Crocs, Abercrombie & Fitch, and Guess are closing locations. In total, it's estimated that over 3,500 US B&M store locations are set to close by the end of 2017. There are many reasons for this (such as restrictions on credit availability since 2008 and a subsequent period of relatively low wage growth) but one major factor is the change in consumer habits driven by digital shopping and home deliveries. The low friction and 24/7 accessibility of digital retail experiences is changing our expectations of B&M retail.

Some brands appear to think the best solution to poor B&M performance is shutting-up shop and going fully digital, but that's not a sustainable long-term fix. B&M retail, like digital, is moving towards more complex, personalized customer journeys. This is stimulating demand for retail AI solutions, because as new in-store technologies transform B&M retail customer experiences to keep pace with digital, these in-store technologies need AI platforms to achieve the best results. The current rash of B&M closures are most likely a short-term blip, because the hands-on social aspects of real world shopping are powerful attractors for customers, and can't be replaced by fully digital experiences.



AI is an essential technology for building the next generation of automated retail experiences.



Our research for a large mall brand suggests retailers need to invest in AI-powered platforms that enhance both online and B&M experiences. We built a retail intelligence system for one of America's largest retail chains, designed to power self-service applications in both digital channels and B&M point of sale kiosks. The same system also powers a 'digital curation' platform for their customer-facing assistants. It uses predictive analytics to anticipate customer behavior in every customer contact situation, then prompts the assistant with the 'best next steps' based on the customer's profile data. That application will deliver a marked decline in customer churn, and increased cross-sell and upsell conversion rates from customer contacts. It blends the low-friction flexibility of digital with the hands-on, interpersonal strengths of B&M in one multipurpose AI platform.

Future B&M customer experiences will use context aware devices that optimize inventory and restocking, enable frictionless checkouts through automated charging, and reduce sales opportunity losses using augmented reality apps to navigate malls more intuitively, locate price promotions, earn loyalty rewards, and enable sales support functions like virtual dressing rooms. These kinds of in-store/digital crossover applications mean AI is a game changer for B&M retail as well as digital.

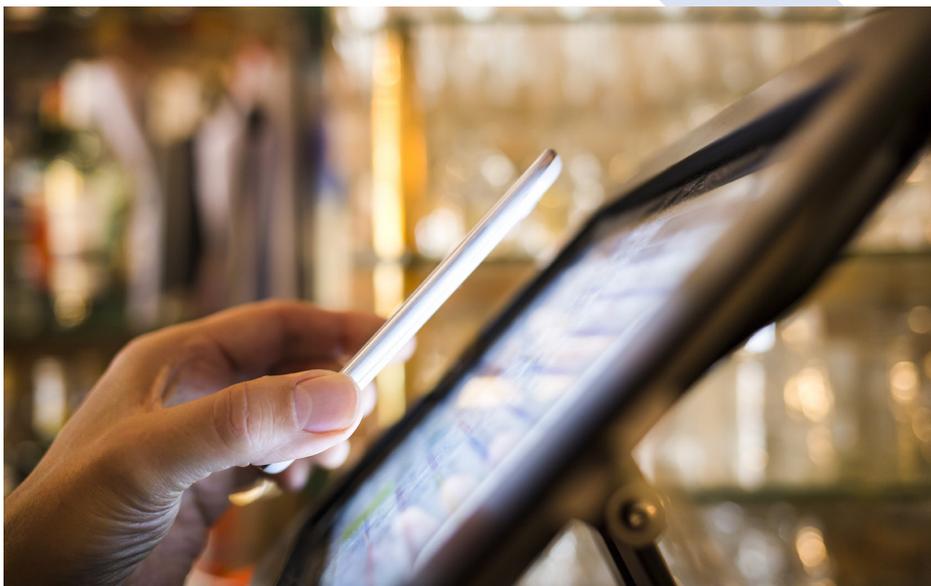
### **But... AI won't work effectively without a digital labor program.**

Curiously, unsuccessful retail AI platforms don't necessarily fail because of the AI part; it's the human side of the process that holds it back. That's because most executives anticipate digital innovations like AI will transform their business but relatively few companies have a digital labor program in place to help them integrate automated tools into their operations. Put simply, many companies still view digital labor as being akin to software and IT systems, when in fact, they're a new addition to the workforce and need to be considered more like employees than other digital tools.

What does a digital labor program look like? Well, at Sutherland, we've been designing customer experience chatbots for a couple of years now, and in each case, we integrate these digital laborers with existing human customer service teams. When the AI platform spots a customer asking repeated questions or using inappropriate language - both signaling the bot has reached the limits of its functionality - it alerts a human customer care assistant to take over the chat to get an effective outcome. Without this kind of bot-human process design, many branded chatbots appear to fail. But it isn't always a software issue



The 'digital curation' platform uses predictive analytics to anticipate customer behavior in every customer contact situation.



that causes this failure; it's often a digital labor problem. Facebook research indicates 70% of bots fail,<sup>10</sup> but this suggests a lack of integration between the bot and the human processes that back it up, not just badly designed bots.

The relative lack of digital labor planning is linked to traditional supplier relationships within retail. AI platforms and automation require a mix of skills, from in-depth user experience (UX) research to consulting and specialist platform expertise, plus the agility to roll out continual upgrades at the speed and scale global brands require. That's a major organizational challenge for an in-house management team (most likely hampered by legacy systems) working with the familiar combination of retail partners such as a consulting firm, a separate robotic process automation (RPA) vendor, and front-end / back-end IT infrastructure suppliers.

There are so many elements across an organization that need to synch-up to make AI projects succeed, it requires a specialist end-to-end approach. It's a process transformation challenge that demands a change to traditional supplier-client business culture, which

<sup>10</sup> [https://www.theregister.co.uk/2017/02/22/facebook\\_ai\\_fail/](https://www.theregister.co.uk/2017/02/22/facebook_ai_fail/)

might sound complex but it's essential if the retail industry wants to unleash the full potential of digital labor.

### Into the future...

Anyone who worked in retail back in the late '90s when Amazon was a disruptor brand on the fringes and iPads were something you only ever saw on Star Trek, will know the impact of technology in the commercial marketplace can be hard to predict. Disruptive new business models can emerge very quickly, and decimate an established brand's market share just as fast. However, when you consider the recent decline of B&M retailers, the growth of omnichannel customer experiences, and note the large body of research predicting a highly-automated future retail space, one prediction we can confidently make is that AI will feature heavily in the future of both online and B&M retail.

The big commercial question about this automated future is "Are you ready to welcome your new digital labor force?" and the answer to that could very well decide who are the winners and losers in the era of retail AI, or as we like to think of it, retail intelligence.



Are you ready to welcome your new digital labor force?



**Is your organization ready for a new model of process transformation that puts exceptional customer experiences first? For more information on how we can help you transform your process to optimize the customer experience, please visit us at [www.sutherlandglobal.com](http://www.sutherlandglobal.com), email us at [sales@sutherlandglobal.com](mailto:sales@sutherlandglobal.com), or call 800-388-4557 ext.6123.**

As a process transformation company, Sutherland rethinks and rebuilds processes for the digital age by combining the speed and insight of design thinking with the scale and accuracy of data analytics. We have been helping customers across industries from financial services to healthcare, achieve greater agility through transformed and automated customer experiences for over 30 years. Headquartered in Rochester, N.Y., Sutherland employs thousands of professionals spanning 19 countries around the world.