AI Implementation in Retail

FIRST RELEASE – JULY 2026

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REPORT STRUCTURE

Contents

Executive summary

The AI revolution is already changing the retail landscape. A majority of Swedish consumers say they use AI chatbots or AI tools at least once a week. These tools are also finding their way into the purchase process – primarily in product discovery and inspiration.

When it comes to agentic commerce, consumers are more reluctant. The technology is still in its early stages, and important aspects need to be worked out – notably security and the question of accountability when something goes wrong.

Behind the scenes, the agentic future is being built now. In our roundtable discussion, many retailers are already doing the unglamorous work of data preparation. The interviews with our knowledge partners Google and Trustpilot highlighted two developments: the Universal Commerce Protocol (UCP), likely to become one of the foundational layers orchestrating agentic commerce, and the coming wave of semantic search and new use cases in product discovery.

Startups are creating new retail services too. We interviewed two Swedish AI startups, Aidgent and the H&M-backed eComID, both building retail services on data containers. This allows business and consumer data and preferences to be stored separately and used by AI models for more personalised product recommendations.

One of the report's key insights is that better data also enables a new form of shopping: system-based shopping, where products are matched and suggested based on what the customer already owns. Richer data also lets models draw on a customer's taste and preferences in a far more sophisticated way than was previously possible. We are likely to see more services in the application layer built on better use of data – where models learn from feedback and improve their decisions over time.

SECTION 01

Introduction

01

A brief history of AI and the breakthrough of the GPT model

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A brief history of AI

1950s Foundations: Alan Turing publishes his groundbreaking paper "Computing Machinery and Intelligence“ in 1950. He introduces a test to determine whether a machine can exhibit human-like intelligent behaviour. In 1956 the term "artificial intelligence" (AI) is coined during a research workshop at Dartmouth College. This marks the official birth of AI research as a distinct academic field.

1970-1990 Expert systems and The AI winter: A lack of computer power and memory capacity leads governments and research bodies to withdraw their financial grants. In the 1980s, the technology experiences a commercial revival through "expert systems" and symbolic AI. These systems use logical rules to mimic the decision-making of human experts in specific fields. In the 1990s, the specialised expert systems prove to be too expensive and difficult to maintain, leading to a new wave of pessimism and cut funding.

1990-2010 Machines against human champions: In 1997, IBM's chess computer Deep Blue defeats world champion Garry Kasparov in an official match. This becomes a major symbolic proof of computers increased computational capacity. The internet explosion in the 2000s grants researchers access to vast amounts of data. AI research shifts focus from logic-based rules to statistical machine learning.

2012-2017 Deep learning and Large scale data: In 2012, researchers realise that graphics cards (GPUs) are optimal for training deep neural networks. This dramatically accelerates the development of deep learning. In 2016, Google DeepMind's system AlphaGo defeats world champion Lee Sedol in the board game Go. The game was previously considered too complex for a computer to master through raw computing power alone. In 2017, researchers at Google publish a revolutionary paper called “Attention is all you need” introducing the "Transformer architecture”. This architecture becomes the foundation for almost all modern language models.

2022-2026 Generative AI: OpenAI launches ChatGPT in November 2022. This makes generative AI accessible to the general public and sparks a global race within the tech industry. Today AI systems have moved from handling text alone to seamlessly understanding and creating video, audio, code, and advanced mathematics in real-time. The focus shifts towards autonomous AI agents capable of executing complex workflows completely independently.

INTRODUCTION

Dartmouth AI workshop photo, The Minsky Family via IEEE Spectrum.

1956: The term "artificial intelligence" (AI) is coined during a research workshop at Dartmouth College.

1950: Alan Turing introduces a test to determine whether a machine can exhibit human-like intelligent behaviour.

Alan Turing portrait, Wikimedia Commons.

The 1950s Foundations

1970 – 1990 Expert systems and The AI winter

1980s: Expert systems use logical rules to mimic the decision-making of human experts in specific fields.

1990 – 2010 Machines against human champions

1997: IBM's Deep Blue chess computer defeats World Champion Garry Kasparov.

Deep Blue/Kasparov. Photograph: Stan Honda/AFP/Getty Images.

2000s: The internet gives researchers access to data and AI research shifts focus from logic-based rules to statistical machine learning.

AlphaGo/Lee Sedol. Photograph: Lee Jin-man/AP.

2011 – 2020 Deep learning and Large scale data

2012: Graphics cards (GPUs) train deep neural networks which dramatically accelerates the development of deep learning.

2016: Google DeepMind's system AlphaGo defeats world champion Lee Sedol in the board game Go.

2017: Google introduces the "Transformer architecture" in the article "Attention is all you need" which became the foundation for almost all modern language models.

Attention Is All You Need

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Abstract

The dominant sequence transduction models are based on complex recurrent or convolutional neural networks that include an encoder and a decoder. The best performing models also connect the encoder and decoder through an attention mechanism. We propose a new simple network architecture, the Transformer, based solely on attention mechanisms, dispensing with recurrence and convolutions entirely. Experiments on two machine translation tasks show these models to be superior in quality while being more parallelizable and requiring significantly less time to train. Our model achieves 28.4 BLEU on the WMT 2014 English-to-German translation task, improving over the existing best results, including ensembles, by over 2 BLEU. On the WMT 2014 English-to-French translation task, our model establishes a new single-model state-of-the-art BLEU score of 41.0 after training for 3.5 days on eight GPUs, a small fraction of the training costs of the best models from the literature.

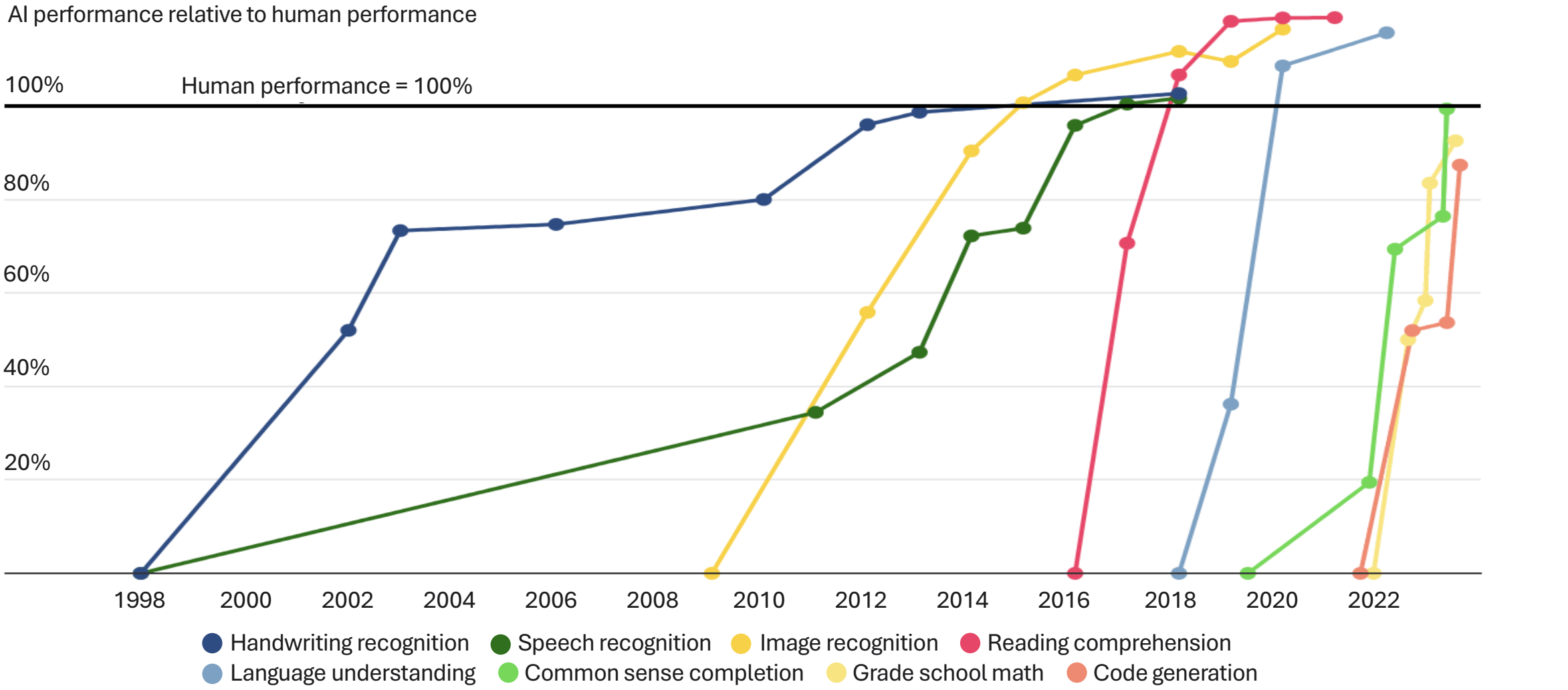
2020 – 2026 Generative AI and AI agents

2022: ChatGPT launches and makes generative AI accessible to the general public.

Sam Altman, CEO of OpenAI, Wikimedia Commons.

2026: Shift from standalone chatbots to AI agents capable of performing complex workflows.

The rate at which humans are being surpassed by AI is increasing



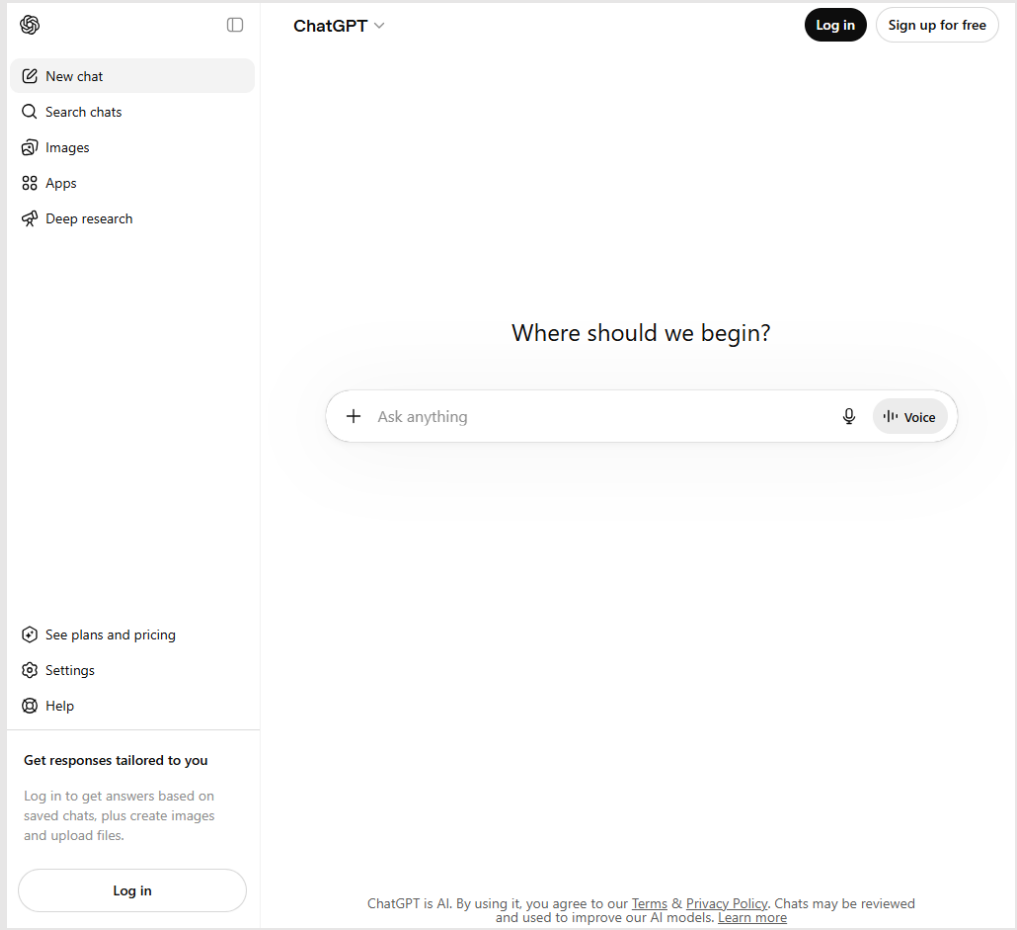
Source: ContextualAI Chart: Will Henshall for TIME

The GPT breakthrough

In November 2022 OpenAI released ChatGPT which marked a turning point for artificial intelligence. While AI had existed for decades, ChatGPT was the first AI application to reach hundreds of millions of users through a simple conversational interface. It transformed how people access information and interact with technology, making advanced AI available to anyone with an internet connection. People at home and in the workplace quickly adopted it as a daily assistant for learning, writing, coding and problem-solving.

ChatGPT is powered by large language models (LLMs) built on the transformer architecture, a breakthrough introduced by Google researchers in the influential 2017 paper “Attention is all you need”. By learning patterns from billions of words, these models can generate human-like responses, summarise information, write code and perform increasingly complex reasoning tasks.

The success of ChatGPT sparked a global AI race, accelerating the development of increasingly powerful models such as GPT, Gemini, Claude and Llama.



AI adoption in different industries

Artificial Intelligence has evolved dramatically over the past five years, driven by investments from technology companies, venture capital firms and governments. What was once primarily a research field has become a rapidly expanding ecosystem of specialised AI models and applications that are transforming industries ranging from retail and media to software development, manufacturing and scientific research.

Different industries increasingly use specialised AI models tailored to specific use cases. In music and audio, models such as Suno can generate high-quality songs and soundtracks from simple text prompts. In video production, OpenAI's Sora demonstrates how AI can create realistic video content, opening new possibilities for marketing, entertainment and content creation. In software development, Anthropic's Claude has emerged as one of the leading coding assistants, helping developers write, review and debug code more efficiently. For knowledge work and research, Perplexity combines AI-powered reasoning with web search to support analysis, information retrieval and decision-making.

Advances in foundation models are expanding AI's ability to understand and simulate the physical world. Several labs are exploring so-called world models that can reason about concepts such as physics, movement and causality, enabling new applications in robotics, automation and digital simulation.

A broader trend is the shift from standalone chatbots to AI agents capable of conducting research, using tools, accessing information and completing complex workflows on behalf of users. As AI capabilities continue to improve, organisations across sectors are exploring how these technologies can enhance productivity, improve customer experiences and create entirely new products and services.

SECTION 02

Consumer preferences

02

Survey-based findings of consumer AI preferences and use

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Swedish consumers use AI-tools regularly in everyday life

Swedish consumers are characterised by their digital savviness and rapid adoption of new technologies. In recent years, this digital readiness has extended into widespread adoption of AI tools.

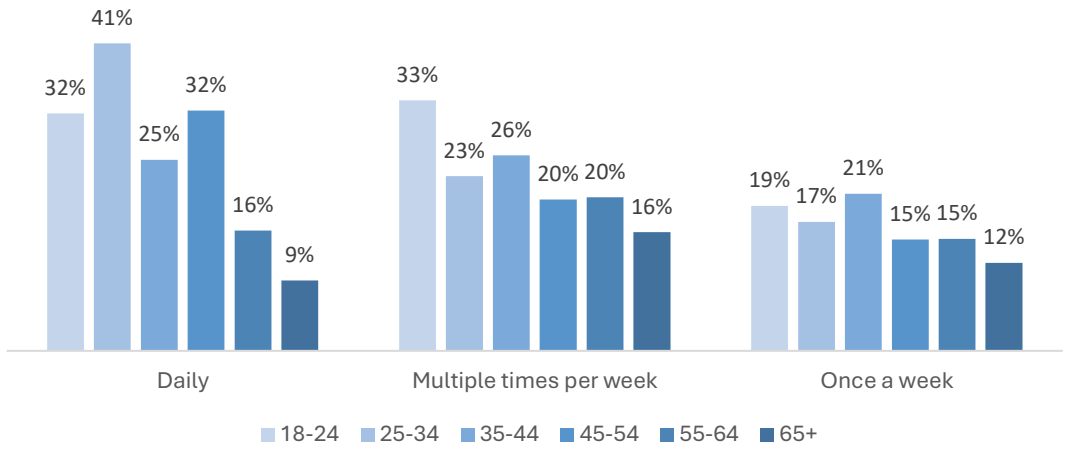
Wide AI adoption among Swedish consumers

AI has achieved broad penetration among Swedish consumers with usage across all age groups. In 2026, 65 percent of consumers used AI regularly*, while 26 percent of consumers used AI daily. Younger consumers aged 18-24 and 25-34 were the most frequent users, with 32 and 41 percent, respectively, reporting daily use. Consumers aged 45-54 showed similar usage patterns, suggesting AI is evolving into a mainstream consumer tool in Sweden.

ChatGPT is the most popular AI-tool in Sweden

Generative AI is emerging as the most used AI. ChatGPT is the most used AI-tool, followed by Gemini, making them the leading brands on the market. Over the past month, 76 percent of consumers have used ChatGPT, while 43 percent have used Gemini. The strong position of ChatGPT highlights the growing importance of generative AI applications in consumers' daily lives and suggests that a small number of brands currently dominate consumer awareness and adoption.

Frequency of AI use in Sweden



Q: How often do you use AI in your daily life?
n=1010

26% of Swedish consumers use AI daily

**Regularly refers to consumers who use AI daily, multiple times per week or once a week.*

AI supports different stages of the in-store shopping experience

In Sweden, 52 percent of consumers believe they will use AI more in the coming twelve months than they do today. This suggests that AI is likely to become increasingly integrated into daily activities, including shopping. As AI gains traction in retail, Swedish consumers are finding AI solutions useful in both physical and online stores.

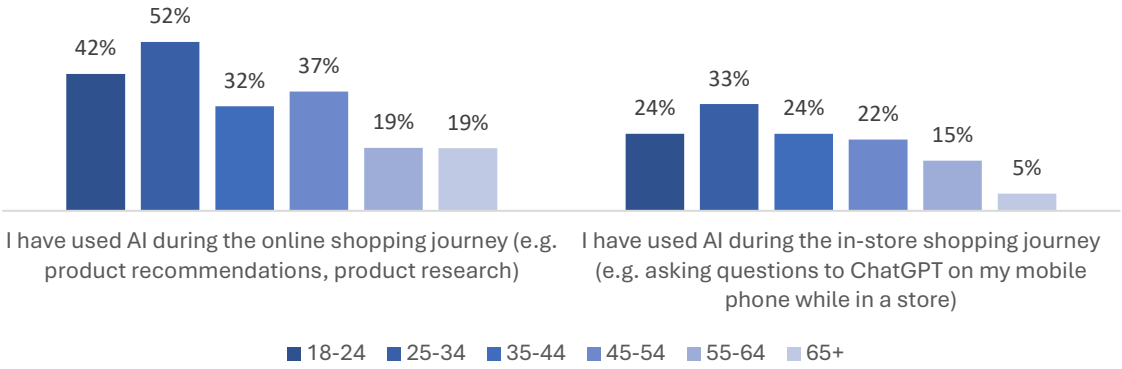
Price comparisons are the most valued in-store AI application

Consumers perceive AI as most valuable when it helps them make informed purchasing decisions. Nearly 40 percent of consumers consider AI-powered price comparisons across different channels to be the most useful application. Other highly valued use cases include access to additional product information, in-store navigation, and personalised recommendations based on previous purchases. Taken together, these findings suggest that consumers see AI as a tool that can support multiple stages of the in-store shopping journey, from product discovery and evaluation to purchase decisions.

Some consumers remain hesitant about AI use in physical stores

While a large share of consumers believe that AI enhances the shopping journey, 23 percent state that they do not want to use AI in physical stores. This may reflect a preference for online shopping, limited exposure to digital tools, or uncertainty about what value AI adds.

Share of consumers who have used AI when buying physical products over the past 12 months, by age group



Q: In what ways have you used AI to purchase physical products over the past 12 months? n=1010

Top 3 most useful AI services in physical stores		
1	Compare in-store prices with online prices in real time	39%
2	Product scanning to access additional information (e.g. reviews, sustainability information, ingredients)	28%
3*	Product navigation Personalised recommendations based on previous purchases	18%

Q: Which AI services would you find most useful when shopping in a physical store? *Shared third place. n=1010

Younger consumers are more prone to use AI-tools in-store

Among consumers who have used AI in physical stores, the younger age groups account for the largest share. By contrast, older consumers dominate among both non-users and those unwilling to use AI in physical stores.

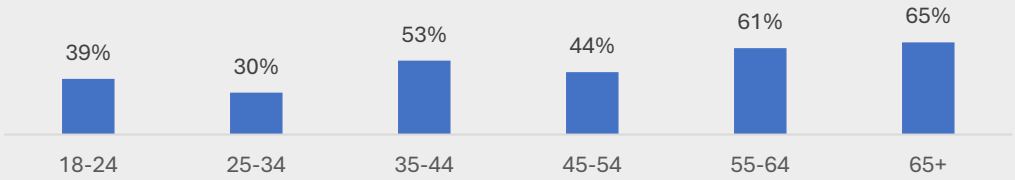
Consumers may be using AI in-store without recognising it

Despite growing AI adoption, 49 percent report non-use over the past twelve months. This suggests a general unfamiliarity with how AI is embedded in physical retail interactions. The pattern may therefore reflect a knowledge gap rather than low exposure. As AI becomes increasingly integrated into app functionality, personalised recommendations and customer service chats, consumers may interact with AI without knowing it.

Practical applications outweigh replacing human interaction in-store

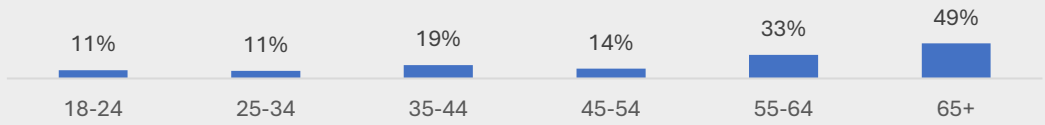
One in three consumers would rather use an AI chat than ask store staff for help. However, consumers are more receptive to AI-tools that provide practical support, such as price comparisons, than solutions that replace direct interaction with store staff. As consumer behaviour evolves, retailers may need to adapt to changing expectations on the physical experience.

Share of consumers who have not used AI in physical stores over the past 12 months, by age group



Q: In what ways have you used AI to purchase physical products over the past 12 months?
n=1010

Share of consumers who do not want to use AI in physical stores, by age group



Q: Which AI services would be most useful to you when shopping in a physical store?
n=1010

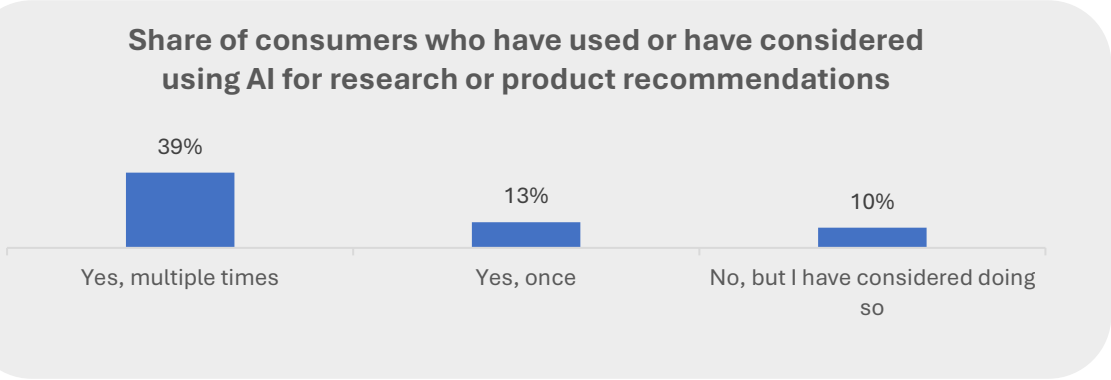
1 in 3 Swedish consumers would rather use an AI chat than ask for service when shopping in a physical store.

AI chats have become part of the online purchasing process

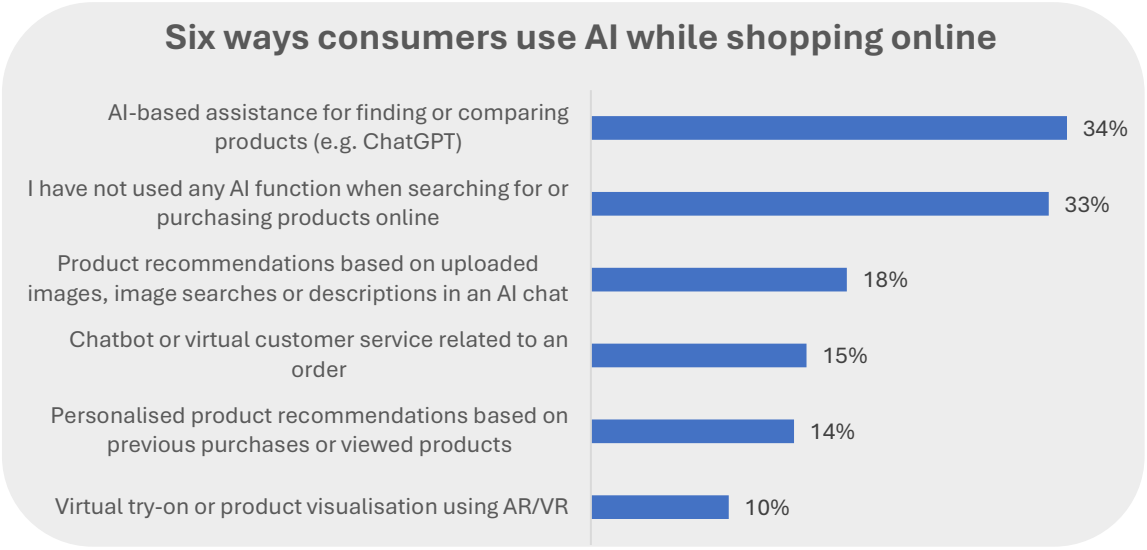
When consumers use AI when shopping online, initial product research is a valued use case. Among Swedish consumers, AI chats such as ChatGPT have become part of the purchasing process, supporting product research and recommendations in the online shopping journey.

52 percent have used AI for research and recommendations

Consumers are increasingly using chatbots when shopping online, to gather information, compare alternatives and receive personalised recommendations based on their preferences. While AI supports both physical and online shopping journeys, its role appears particularly relevant in e-commerce, where AI-tools seamlessly integrate into the purchasing process.



Q: Have you used AI, such as ChatGPT, at any point during the past month to research or get product recommendations?
n=1010



Q: Which AI features have you used for product search or online purchases over the past 12 months?
n=1010

Search and product comparisons dominate AI use online

Over the past twelve months, consumers have used AI chat tools when they search for or compare products. Other common uses include image-based recommendations and visual and text search, followed by chatbots, personalised recommendations from past behaviour, and immersive technologies like augmented reality (AR) and virtual reality (VR). The findings suggest that consumers primarily value AI when it supports product evaluation and decision-making.

More than 1 in 4 consumers are reluctant to let AI complete their online purchases

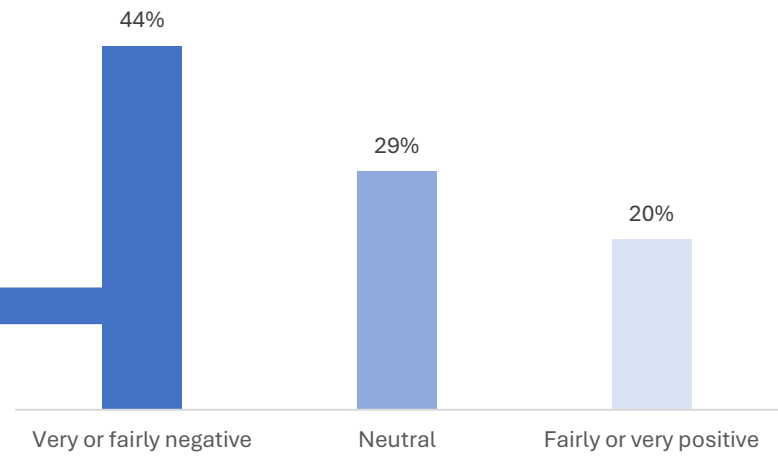
Trust and control are the main barriers for autonomous purchasing
There is a generally negative attitude towards letting AI agents complete purchases in e-commerce. 44 percent of consumers are fairly or very negative, only 20 percent are fairly or very positive, and 29 percent are neutral. The primary reason for this reluctance is a desire to retain control over purchase decisions. However, consumers indicate that their comfort level would increase if critical parts of the transaction, such as payment and ID verification, were handled separately to ensure higher security. This indicates that consumers require clear safeguards to feel comfortable delegating purchases to AI. Another important factor is that the AI agent performing the purchase is neutral, i.e not owned by a retailer or brand.

Relatively low familiarity with AI agents
A notable share of consumers remains unfamiliar with AI agents, with 33 percent stating that they do not know what AI agents are and 26 percent expressing a neutral stance. This limited awareness likely contributes to the overall reluctance to adopt such solutions, as low familiarity often translates into lower trust.

29%
of these consumers would be more comfortable if critical parts such as payments were handled separately and securely
n=443

57%
of these consumers prefer to have full control over their purchases
n=443

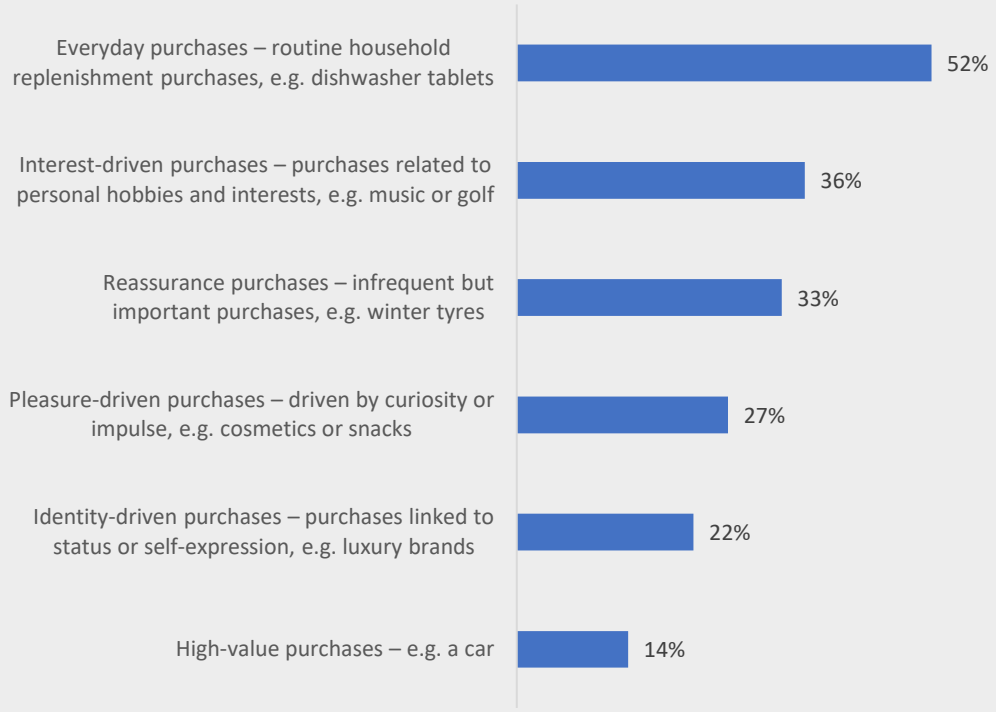
Share of consumers willing to let an AI agent complete their online purchase



Q: What is your general attitude towards letting an AI agent complete the entire purchase on your behalf when you shop online? n=1010

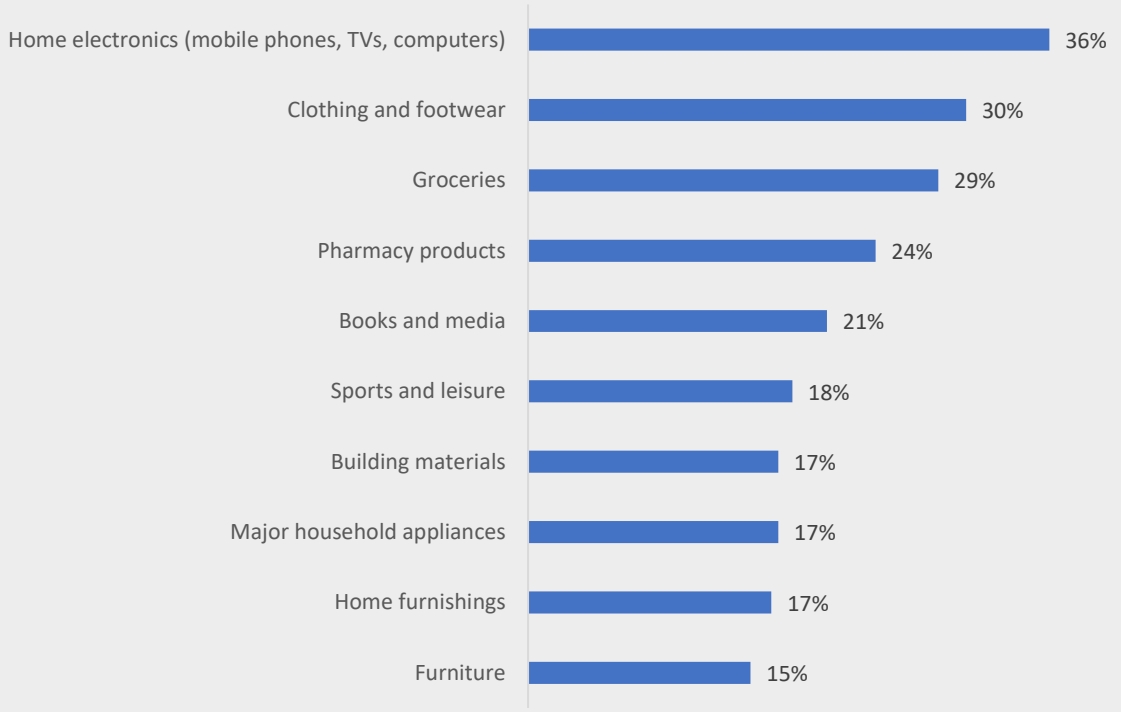
Consumers positive toward autonomous purchasing are more likely to let AI handle everyday purchases

Which of the following purchases would you be willing to let AI carry out?



n=207

Which product categories would you allow an AI agent to purchase on your behalf?



n=207

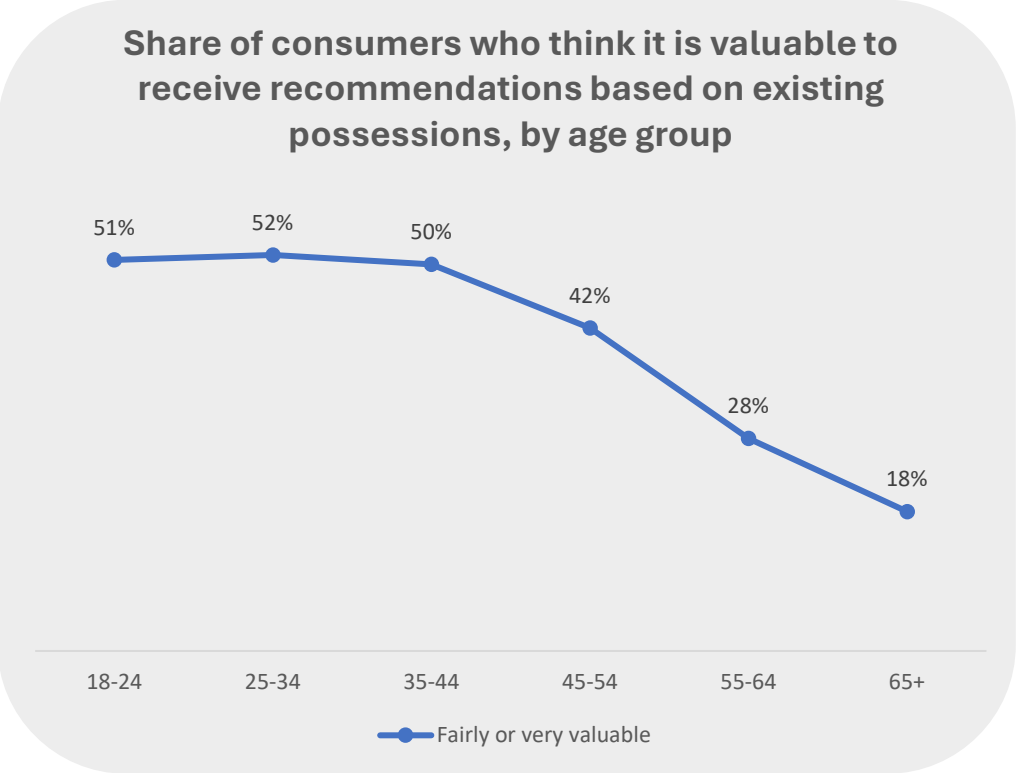
Consumers are more willing to share data for practical value

Consumers are generally more willing to share data with AI when they receive a clear benefit, particularly in the form of personalised recommendations and discounts.

Men are more willing to share data than women
When it comes to sharing data with AI, around 40 percent of consumers are willing to share information if they receive tangible value in return. Men appear more comfortable than women with this trade-off, as 42 percent are willing to share data with AI for personalised shopping recommendations, compared to 32% of women.

Control remains important when sharing contextual data
Consumers are also relatively open to sharing contextual information, such as data on products they already own. 38 percent of consumers indicate that they would be willing to grant access to private images. However, 31 percent of those emphasise that this is conditional on having full control over what information is shared with AI.

Generational differences are evident, as younger consumers tend to place higher value on receiving personalised recommendations based on contextual data and may therefore be more receptive to services where AI can tailor recommendations based on existing possessions.



Q: Imagine that an AI knows which products you already own (e.g. clothing, furniture, or electronics). How valuable would it be to receive recommendations that take this into account?
n=401

SECTION 03

Voices from retail

03

AI implementation insights from the roundtable discussion

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VOICES FROM RETAIL

Early-stage AI implementation in physical stores

As a part of the project HUI conducted a roundtable discussion with Swedish retail companies in May 2026. It became clear that the AI adoption among retail companies was mixed. Efforts to prepare company data for AI-use is relatively common and so are pilot projects to test the technology. Many companies have also adopted AI-tools for specific use cases such as coding and more technical development work.

However AI has not yet been widely implemented in physical stores. Swedish retailers are currently in an exploratory phase, testing a range of AI solutions. The grocery sector has begun introducing AI-powered applications in the in-store environment, such as tools that help staff identify products or retrieve information requested by customers.

Coop's Shop Express is an AI-powered tool that highlights discounts and contributes to a more personalised shopping experience in-store.

> *We have built a service that recommends similar wines in our assortment when for example a wine is out of stock. It handles thousands of requests daily and has been a trusted tool for about five years. It's really appreciated by employees and customers.*

Ulrika Tjerneld · Product Owner AI inhouse development, Systembolaget

VOICES FROM RETAIL

AI can make shopping journeys more convenient, personalised and accessible for consumers

From a consumer perspective, AI has the potential to make retail more convenient, personalised, and accessible. For example, voice assistants may make online shopping more accessible, particularly for older consumers or those with limited digital experience.

One significant opportunity lies in using AI to match size and fit preferences when purchasing second-hand products online or through peer-to-peer platforms. This can reduce return rates, increase customer satisfaction, and improve conversion rates by helping consumers select items that are more likely to fit. As more data becomes available through new technical solutions such as digital product passports, AI-driven recommendations can become increasingly accurate and tailored to individual preferences.

AI agents can simplify the shopping journey further by filling in checkout details or managing recurring purchases, thereby saving consumers time. However, this convenience requires users to trust that the agent will act accurately and securely.

> *If we harness the power of AI, we can unlock circular commerce – helping more people choose second-hand with confidence in the perfect fit.*

Josephine Darlington · Strategic Initiative Developer Retail, AI Sweden

VOICES FROM RETAIL

The role of the physical store as agentic commerce evolves

As agentic commerce makes online shopping increasingly automated, the role of physical stores may evolve from transaction-focused environments to destinations centred on experience and human interaction. Several retailers suggested that consumers may seek out authentic and engaging retail experiences as a counterbalance to highly automated shopping journeys, particularly in product categories where inspiration, exploration and personal service play an important role.

At the same time, AI agents are expected to evaluate products based primarily on objective criteria such as price, quality, availability and delivery speed. Unlike human consumers, agents are unlikely to be influenced by brands or traditional marketing campaigns. This could reduce the importance of investing in brand identity.

As a result, retail may become increasingly segmented. Low-cost and low-involvement purchases could be delegated to AI agents that optimise for efficiency while premium and luxury brands may continue to depend on physical stores to create differentiated experiences, strengthen customer relationships and build emotional connections that AI agents cannot replicate. In this scenario, physical retail becomes less about facilitating purchases and more about delivering experiences that influence consumer preferences and long-term brand loyalty.

> *The question is how we get the customer to prompt that they want to book an eye examination with Synsam, rather than an eye examination in general. In the future, loyalty programs and marketing may not only be targeted at customers, but also at agents.*

Fredrik Melin · Senior AI Business Development, Synsam

VOICES FROM RETAIL

Autonomous purchases through AI agents

At the roundtable the participants discussed whether fully autonomous purchases are desirable from a consumer perspective. Some viewed this as a natural direction for future retail development, while others emphasised that they would still want to make the final payment decision themselves. A likely future scenario is therefore that AI agents support the customer by conducting research, comparing alternatives and preparing the transaction, while the human remains responsible for approving the final step.

This raises important questions around trust, control and payment authorisation. For example, if an AI agent is instructed to purchase concert tickets on behalf of a customer during the night, it is unclear how approval should work in practice. Consumers may need to pre-authorise certain payment methods, spending limits or product categories, while still maintaining control over high-value or time-sensitive purchases.

Another potential challenge is whether autonomous purchasing could increase return rates. If consumers forget what they have asked an agent to buy, or later regret the purchase, this may lead to more cancellations, returns or disputes. As a result, retailers will need to design clear confirmation processes, transparent purchase histories and flexible control settings to ensure that AI agents create convenience without reducing consumer confidence.

> *Consumers and businesses demand accurate and transparent product information, while AI agents need to be able to identify and differentiate products. GS1 standards ensure that data is unique, consistent, and verifiable, leading to greater visibility and sales.*

Lena Coulibaly · Industry Portfolio Manager, GS1 Sweden

VOICES FROM RETAIL

Key issues to address in agentic commerce

The roundtable participants highlighted that most of the technical foundations required for agentic commerce are already in place. Existing payment and commerce frameworks provide mechanisms that could support such transactions, but there remains uncertainty regarding who should bear responsibility if the purchase goes wrong. While the prevailing expectation is that merchants will carry this responsibility in the United States, it remains unclear how liability will be allocated within the European regulatory context.

The participants also pointed to broader questions around technological sovereignty and the dependence on predominantly U.S.-based platforms and systems. As Europe seeks to strengthen its strategic autonomy and reduce reliance on foreign technology providers, some questioned whether the development of fully independent European alternatives would be feasible in the near term and whether the required investments would be justified.

At the same time, companies are already adapting their infrastructure strategies to meet European regulatory requirements. One organisation reported investments in European-based data centres to address compliance, data governance, and localisation needs. Even companies with U.S. ownership emphasised the importance of aligning their operations and infrastructure with European regulations and market expectations.

> *The technical aspects of payment through AI agents are largely already in place, but who will be responsible if something goes wrong?*
>
> **Frank Almenning** · Business Development, BankID

CASE STUDY

Trustpilot

How do AI-agents know what to trust?

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CASE STUDY · TRUSTPILOT

How do AI-agents know what to trust?

Over the last few years Trustpilot has emerged as one of the key infrastructure nodes in the AI ecosystem. With 400 million reviews it is now one of the top sources used by ChatGPT when recommending products and services. HUI got the opportunity to interview Nicole Stutz and Michelle Wrede at Trustpilot for this report.

One thing that immediately becomes clear is that Trustpilot has seen a big increase in site visits from AI-models. Nicole mentions that there was a big shift at the end of 2024 and beginning of 2025 when a lot of consumers started to turn towards AI-models for product related questions. According to Nicole, 58 percent of consumers preferred an AI for product related questions in 2025 versus just 25 percent two years prior. Trustpilot is also cited far more by AI-models the closer the consumer gets to the actual purchase of a product.

How do AI-models choose what to trust?
When it comes to trust, Nicole mentions that the AI-models focus primarily on the three “R”s, which are relevancy, ranking and recency. Relevancy focuses on how relevant the content is to the query, ranking is based on a set of trust signals and content richness, and recency refers to how fresh the data is.

However, it is not just structured data that can influence the models. Nicole points out that it is useful to consider that the AI-models want to provide the user with relevant data, and that they will use the available sources to do so. These can be review sites like Trustpilot, but also sites like Reddit or Youtube where people post comments and engage in product discussions. Therefore, it is increasingly important to monitor how brands and products are discussed online.

“AI-models focus primarily on the three “R”s, which are relevancy, ranking and recency

A new world of semantic search

A recurring theme in the interview with Trustpilot was the shift from Google keywords and SEO towards semantic search for products. Nicole explains that the LLMs are using the deeper meaning and context to find something rather than just matching keywords, which is far more sophisticated than the previous search algorithms.

The Trustpilot data is also semantic. Users describe their experiences when writing reviews in personalised ways, which the AI-models can understand. This means that consumers can now get recommendations for highly specific queries such as a left-handed-drill suitable for people between 35 and 50. And the LLMs can give far more personalised recommendations than that, such as basing a recommendation on many pages of conversational context from an AI discussion.

Consequences of the shift

Nicole mentions that one of the consequences of the shift is that it will be more difficult to hide flaws or game the system. If a product has a recurring issue, the AI-model will find it in the aggregated sentiment data and potentially exclude it from the recommendation. However, Nicole emphasises that the models also value positive trends and recency. It is okay to have flaws in the business, everybody does, but the LLMs are very good at identifying if the company corrects those flaws over time.

The bar will likely be raised Nicole says. However, she also points out that many great companies have acted on customer feedback and done a lot of great work in the past which has not been fully recognised or rewarded. These companies will be better rewarded and recommended as the AI-models pick that up.

> *It is okay to have flaws in the business, everybody does, but the LLMs are very good at identifying if the company corrects those flaws over time*

A few tips for retailers

Finally, Nicole and Michelle gave a few tips on what retailers should think about when using AI-tools and agents. First make sure to do the basics. Use standard markups and make the website machine readable. Nicole mentions that an extended Q&A section is valuable as the questions and answers are more semantic, similar to the type of questions consumers might ask an AI.

Learn from the hospitality industry
As Trustpilot is active in many industries, Nicole and Michelle pointed out that the hospitality industry tends to be more inclined towards good semantic search practices. Traveling is often personal and experience-focused and described as something more than the service, for example the excitement of New York or the charm of a Paris restaurant. The descriptions are experience-based, whereas retail is often more focused on metrics and facts. Describing the product experience can become far more important than it used to be.

Encourage more relevant reviews
Reviews are one of the key inputs the AI-models use for product recommendations. Nicole mentions that one can ask for reviews through Trustpilot in a standardised way, but that there is also an option to customise how the question is asked. Michelle pointed out that when doing so it can often be a good idea to frame the question towards giving a review to help other consumers.

Be careful with AI-translations
AI-models are often seen as very strong at language-translation, but in the semantic world text, meaning, tone and nuance becomes very important. Trustpilot sees this as an area where humans should be involved, and they are careful about when and how to translate reviews.

> *An extended Q&A section is valuable as the questions and answers are more semantic in nature*

CASE STUDY

eComID & Aidgent

Data containers for AI

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Data-containers for AI

Oscar Rundqvist is the Co-founder of eComID an H&M-backed AI company with the ambition to lower customer return rates. The company makes a digital shopping passport that currently has 20 million users globally. It is an individual data-container that includes body measurements, fit and other customer preferences and datapoints which can be accessed by AI-models for better product recommendations and a more personalised experience.

A personal data-container

The idea is that the data-container connects to eComID connected brands' websites and AI-models and the shopper controls it. This also provides the added benefit of establishing a single source of truth – rather than each AI-model having different sets of customer data. Oscar mentions that the models can request and use the information as input for their decisions without storing the information themselves.

This highlights a trend of emerging compartmentalisation of agentic systems. Consumer data and even algorithms can be decentralised, containerised and controlled by the user.

Oscar also points out that an additional benefit of this setup is a more personalised shopping algorithm as it is tied to a personal account. The system specifically asks for whom the purchase is made to keep purchases for friends or relatives separate from the personal purchase history, to keep the data clean.

A new customer experience at Houdini

Oscar describes a new pilot-project with the sportswear brand Houdini. This might be one of the more ambitious attempts of new e-commerce recommendation systems in existence today. When the customers sign in with their eComID they are shown relevant products in the correct size and in accordance with their taste. The product algorithm on the Houdini site adjusts in accordance with the data-container; giving the consumers a highly personalised experience specifically for them.

> *“Our users have a 30 percent lower return rate than average”*

Oscar Rundqvist · Co-Founder, eComID

When the product speaks

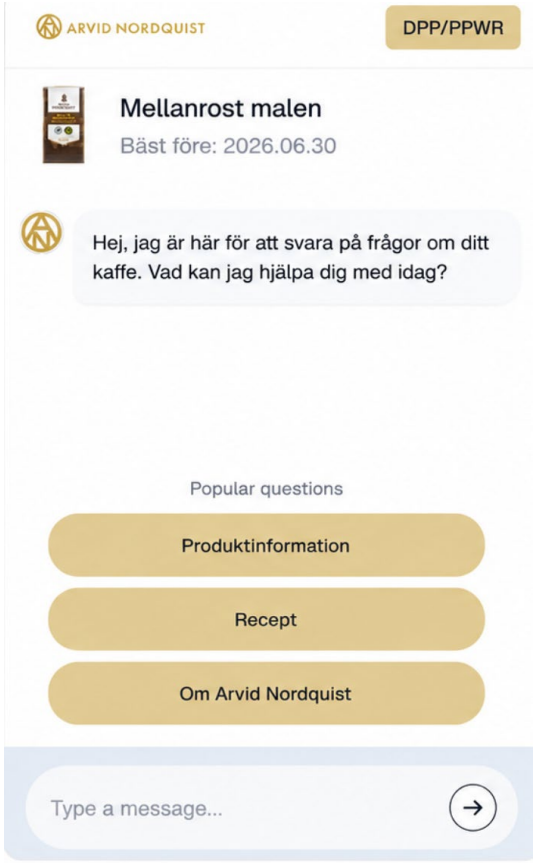
For this case study on data-containers HUI also spoke to John Kjellquist, founder of the AI-startup Aidgent. This startup also works with data-containers but for companies and their products rather than for consumers. Aidgent is working with a broad set of customers, from hotel chains and heavy machinery to fashion brands. The idea is that the product manual and other relevant product information is placed inside a data-container to be used by an AI-model. By scanning a QR-code (printed on the product) the customer can ask the product related questions which will be answered by the model – such as warranty issues or how to order appropriate spare parts.

Tone and tuning

One important aspect when building data-containers for products is a tone of voice that matches the product, the company and its values. These AI-services are still very new, but if the AI-model is representing a company it is important that it aligns with how the company wants to be perceived. John mentions that the AI-model often picks up a lot of this through the material it is fed, as companies tend to produce documents that mirror their values. It might also be more important for companies with a strong brand identity than for other companies.

Another vital issue for these AI-services is safety. John points out that the requirements differ between companies depending on what the AI-models are used for. He also emphasises that for some customers – for example in heavy machinery – incorrect AI-answers are not acceptable and can be dangerous. Therefore, the models have stringent guardrails and are thoroughly tested.

Want to have a chat with your coffee?



The picture shows the AI-interface from an Aidgent pilot study with Swedish coffee brand Arvid Nordquist

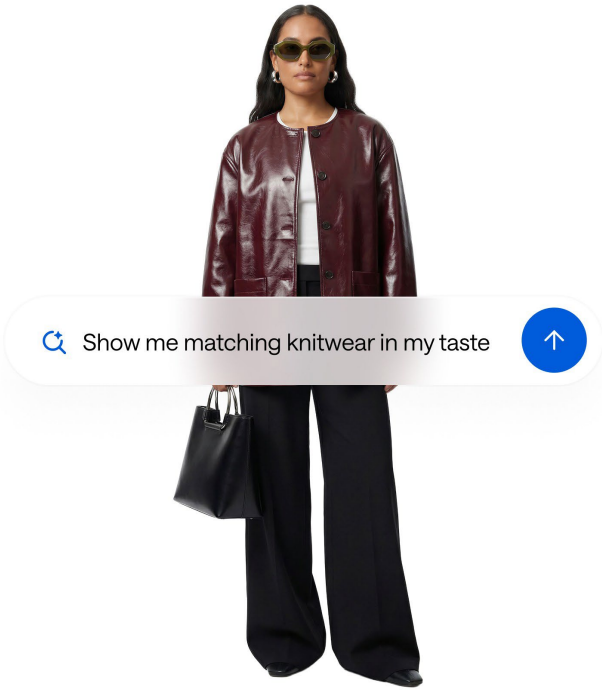
Product recommendations of the future

> *“A revolution is coming for product recommendations.”*
>
> **Oscar Rundqvist** · Co-Founder, eComID

The big potential of good data
As we move back to the consumer and eComID in the case study. One very interesting aspect of personalised data-containers, and higher quality data is that they allow systems-based or context-based shopping. Shopping can be seen as more of a matching problem: what product slots into an existing ecosystem of other products rather than what product in isolation the consumer may like. These are two very different problems. With additional context and product information we are probably going to see new types of sophisticated recommendation systems using AI.

Oscar mentions that eComID has been exploring a somewhat similar idea to the systems-based approach, namely how to capture consumer preferences more deeply from context. He mentions that the term “style” has proven to be abstract and difficult to quantify and prefers “taste”. Oscar says that there might be alternative forms of taste – such as preferred music or cities – that might give clues about the person, and a big enough collection of those taste-markers might be able to guide AI-recommendations of products better – particularly in the fashion or lifestyle segment.

Improved data lowers the number of returns
With improved user data and better data quality, Oscar thinks that product recommendations can improve drastically in the future. Fashion brands tend to have different sizes, where a large size for one brand might be a medium for another, which confuses consumers. With enough data, eComID's AI can help with better recommendations and adjustments for consumers to avoid buying the wrong product. Oscar also mentions that the data feedback for product returns currently tends to be very mediocre. A better data-feed can help the brands to get better relevant feedback on why their products are being returned.



The picture shows eComIDs AI-solution

SECTION 04

Analysis

04

The future of the physical store and the rise of the agent

hui.

ANALYSIS

The state of AI in retail

Over the pages in this report some patterns start to emerge. Most Swedish customers are now using AI at least once a week. Compared to previous technology shifts, e-commerce took over 10 years before half the population had tried it, smartphones took about 5-7 years. For AI (LLMs) we are down to 2-3 years. The consumer technology adoption is very fast.

Most consumers have already used AI for purchasing decisions. This is most common in the research and discovery phase for e-commerce purchases. However, 20 percent of consumers have also used chatbots on their smartphones inside a physical store.

While consumers are adopting AI-tools quickly, the adoption within retail is slower. In our roundtable discussion the level of AI adoption among retailers proved to be mixed. There is concern that products are increasingly seen through the lens of AI-models. The models decide which products are to be presented to the consumer, and how they should be described and rated.

There is a risk that this can cause a brokerage effect. As mentioned in our interview with Trustpilot, this makes it even more important for retailers to monitor what the perception is about their products, and to respond to criticism as the AI-models will pick that up.

> *Most consumers have already used AI-tools for purchasing decisions*

ANALYSIS

Consumers want control and safety

There are several concerns in AI and agentic commerce systems that remain to be solved. Research and product recommendations are the primary use for consumers today and are seen as reasonably safe, but allowing agents to operate more freely is seen as unsafe and unpredictable. The consumers also have concerns about liability in the agentic systems – who is responsible if something goes wrong?

In the consumer survey the respondents were asked what it would take for them to trust and use agentic commerce systems. A higher degree of safety and more compartmentalisation were the top choices. Compartmentalisation meaning that critical parts of the purchase are handled by separate systems.

In our interview with Google, it was pointed out that a lot of work is dedicated to address these concerns and to create safe systems. Still, some of the issues are difficult to solve. Prompt injections can be contained and managed but probably not entirely solved. The same goes for AI hallucinations. The errors cannot be eliminated entirely but they need to be reduced to an acceptable level, and the risks need to be managed.

Fundamentally we are unlikely to see autonomous agentic systems any time soon for mainstream retail purchases. The technology might be adopted for some niche segments, like recurring purchases of some household products, but most purchases will require a human in the loop to prove purchase intent, to handle the liability side for errors and because the consumers prefer it.

> *We are unlikely to see autonomous agentic systems any time soon for mainstream retail purchases*

ANALYSIS

Looking towards the future of AI

As we look towards the future of AI a few things stand out. Even though technology moves incredibly fast it is still very early, and many of the key AI companies and services of the future are not yet created. As pointed out in our case interview with Google, AI-use is probably transitioning towards the smartphone where it is becoming increasingly multimodal.

We also see new interesting products and services being built on top of existing infrastructure, eComID is one example, with containers for consumer data. Rearranging those containers in the agentic system and letting AI-tools access them allows for new services to be developed. There are huge amounts of user data and context – partly produced by the AI-models themselves but also from consumer behaviour and shopping. Better organised, this data can be very valuable and shopping might become more systems-based. It might increasingly answer the question: what product fits into the consumer's existing life – what fits with currently owned products, the consumer's taste, interests and preferences? This is a different problem to solve than what product (without context) might a person be interested in.

The second interesting aspect for the future is the possibility for feedback or self-improvement in the agentic systems (application layer). Trustpilot mentioned that reviews could serve such a function. One can envision a system where the model learns to distinguish and evaluate good purchase results and being able to iterate and adjust its behaviour. That means that the model could become better and more personalised over time. And as Google pointed out in our interview: they might even become proactive and predictive and take initiative. Like having a highly competent personal shopper that has worked with you for many years.

“There is the possibility for feedback or self-improvement in the agentic systems

ANALYSIS

A few final words of advice for retailers

The development of AI is often compared to the development of internet in the 1990s, and it is hard not to see some of the parallels. The strong hype and investment, experiments like Open Claw with big security concerns. While some of the AI-hype might be overblown, it would still, undoubtedly, have been valuable for any 90s business to try the internet out, even at a modest pace. Creating a website, getting seen on search engines. As AI Sweden often points out: the most important thing is to start and try the technology.

Currently, consumers mainly use AI-tools in the discovery and research phase of the shopping journey. A simple thing for retailers to do is to test different AI-models and see how they rate and discuss their company and their products. As AI models tend to become brokers between consumers and retailers, the way they view products is import. They might have perceptions of flaws that are important to address. This can also differ between AI-models and even between different versions of the same model, which makes it important to test the most popular ones.

Another important aspect is that an AI-model relies heavily on reviews and consumer feedback. Being active responding on review sites and addressing concerns on sites where feedback occurs is likely a good strategy.

It can also be valuable to experiment in terms of how your products should be presented and written about on the website. Trustpilot mentioned that the hospitality industry is generally better at describing the felt experiences of travel. This is of course product dependent, but some retail industries would likely benefit from a more semantic approach if that is what the AI-models are searching for.

Currently, consumers mainly use AI-tools in the discovery and research phase of the shopping journey

CASE STUDY

Google

The Universal Commerce Protocol (UCP)

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CASE STUDY · GOOGLE

The Universal Commerce Protocol (UCP)

During the interviews and roundtable discussions, the Google UCP protocol was often mentioned. In April 2026, Meta, Microsoft, Amazon, Stripe and Salesforce joined the Tech council for the UCP protocol, which positions it as the best supported agentic standard at the time of writing. HUI has interviewed Nelson Diotto from Google to better understand UCP and how it will influence agentic commerce going forward.

Why is a standard important?

As the AI-field moves so fast it is easy to forget that UCP is just a couple of months old, at the time of writing. Nelson mentions that the protocol was released in early 2026. The idea is to orchestrate different parts of agentic commerce and to set a standard that can be used in the checkout process. Nelson points out that it would be very inefficient if all market participants had to customise integrations for different payment providers. The purpose of the standard is to agree on one reusable way to do it. In some ways this is similar to how HTTP became the standard way to request webpages on the internet.

The merchant is in control

Agentic commerce can function in different ways. According to Nelson it depends on how the agents are used. If you are using Gemini (the Google chatbot) it will show products directly in the chat window. The user can choose to purchase a product which will then be managed by the agent through the UCP protocol, where the agent interacts with the merchant and payment provider. One important aspect that Nelson highlights is that the merchant is always in control. It is the merchant who decides what systems it gives the agent access to. And the merchant orchestrates the sales process.

> *In April 2026, Meta, Microsoft, Amazon, Stripe and Salesforce joined the Tech council for the UCP protocol*

Future proof design choices

UCP is intentionally future proof

As technology moves fast, Google has been very intentional in making the UCP protocol as future proof as possible. Nelson mentions that the way we interact with agents is likely to change in the near future. He points out that we still tend to use computers to access AI-models, but that this is likely to shift to smartphones or to other wearable devices. As this shift occurs, users might use voice and images as input for the models to an increasing extent. As the top AI-models are already multimodal and both images and voice input can be used, this transition can occur relatively quickly. UCP is built with that mind. Nelson also mentions that the agentic system might have to handle further potential inputs. The latest Google models are so-called world models, with the ability to understand the physical world around them.

How small can an agent be?

Another aspect of agentic commerce is what the requirements should be for an agent to participate in agentic systems. Nelson mentions that this is something Google is testing. How small (in parameter size) can a functioning agent be? This has become increasingly relevant as in the shadow of massive models like Gemini, ChatGPT and Claude many small models have emerged that are impressively capable and run on consumer hardware. Googles Gemma series is one example. Some consumers will probably prefer their own local models when shopping, but as the small models tend to be less capable and clever then the bigger ones, clear minimum requirements and thorough testing is important. Especially as AI-models can be unpredictable.

> *We still tend to use computers to access AI-models, but this is likely to shift to smartphones or to other wearable devices*

CASE STUDY · GOOGLE

Proactive agents and AI guardrails

When agents turn proactive

When discussing the future of agentic systems Nelson mentions that one big change might occur when the AI-use transitions to the smartphone, which might allow them to become more proactive. When properly designed, an AI-solution in a smartphone might have more context available about the users, their habits or preferences. This allows for the agent to become more proactive. Nelson gives an example: if a friend's birthday is coming up, the model might suggest five gifts based on existing data or context. It can start to predict and adjust with context awareness. And, as previously mentioned, this is what the UCP protocol is designed for, not necessarily the AI experience of today.

The Google Merchant Centre and a human in the loop

One very important part of agentic commerce is safety. One part of this is what the models should trust and how they know what to trust. Nelson mentions that there are trusted sources where AI-models can verify that a company is legitimate, for example like the Google Merchant Centre. Nelson also says that the UCP protocol is built on well tested solutions that have a lot of safety checks integrated. As the external agentic system have its own set of safety checks, the LLMs also have their own internal guardrails for a dual safety system. Still, for the foreseeable future Nelson points out that fully automatic agentic purchases are unlikely to be the standard, there will probably be a human in the loop making the final purchase decision

> *The UCP protocol is built on well tested solutions that have a lot of safety checks*

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FRAMEWORK

Appendix: The framework

01

HUIs Agentic Commerce Loop. A visual model for agentic commerce

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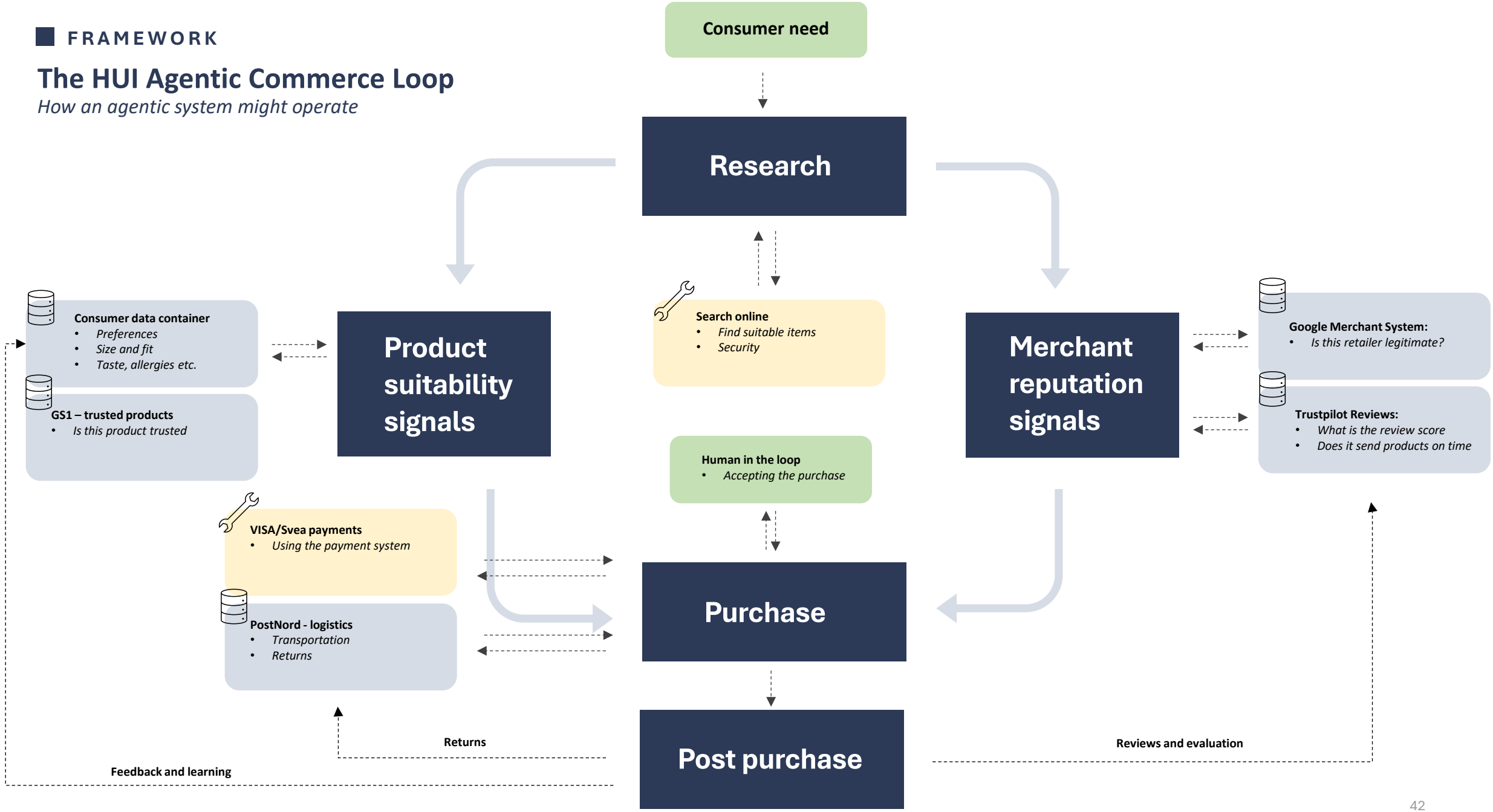
FRAMEWORK

The HUI Agentic Commerce Loop

How an agentic system might operate



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