### Amelia in Action

A selection of stories from organizations adopting IPsoft's cognitive agent, Amelia



### Meet Amelia Your first digital employee

Amelia is IPsoft's conversational AI platform. Her mission is to deliver best-in-class service to customers, fully automating human-to-human interactions and process execution. Like a human, Amelia communicates using natural language and can respond to customers' emotional states. Unlike a human, she can hold thousands of conversations in parallel.

#### Why is Amelia different?

#### **Conversational Intelligence**

Amelia stands out through her ability to not simply understand the words we use, but also their intended meaning. In contrast to pattern-matching platforms, Amelia can comprehend like a human and get straight to the point. As Amelia detects customers' moods, she is also able to adapt the content of her responses and expressions to create a truly personal experience for each customer.

#### Advanced Analytics

Through her new abilities to analyze data, Amelia generates business intelligence drawn from every interaction combined with data held in enterprise core systems. She uses advanced analytics like machine learning to assess large amounts of data and act on new insights allowing her to make real-time decisions that provide better outcomes.

#### Smart Workflow

Amelia can interact with the most complex dialogues across any channel from voice to mobile and online chat. In addition to interacting with co-workers and customers, she also integrates with enterprise systems like SAP and Oracle, allowing her to orchestrate the actions necessary to deliver end-to-end results and streamline the execution of back-end processes.

#### Experience Management

She selects the most appropriate response from her multiple knowledge engines to keep the dialogue progressing fluidly. When Amelia needs to escalate a call, she passes on all relevant information to her human colleague so the conversation can continue without forcing customers to repeat themselves.

#### Supervised Automated Learning

Amelia has an expanded inventory of selflearning tools to help her extract data from large documents, making her easier than ever to train. She constantly improves her performance and updates her knowledge base by learning from her human colleagues. All new learnings are reviewed before she can leverage them during live interactions.

### A glimpse into Amelia's brain



#### Episodic Memory Neural C

To understand what your customer wants in context, and provide immediate answers

Neural Ontology To allow your customers to have a very natural conversation with Amelia



#### Process Ontology To execute a process for your customer in order to address their needs

**EQ Ontology** To enable Amelia to adapt her responses to your client's emotional state

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# SEB Bank Customer Service Agent

SEB, a leading Nordic corporate bank based in Sweden, has completed a rapid deployment of IPsoft's cognitive virtual agent, Amelia, in a customer-facing role within their banking website. SEB's primary objective is to deliver the best possible service to over a million of their customers by making it more convenient for them to submit banking queries online and have their issues resolved faster. By introducing Amelia, not only does the bank offer customers an opportunity to get an immediate response to their queries but it also ensures that call volume for live human agents is concentrated on the highest value support areas.

An important part of the implementation process involved refining Amelia's Swedish language fluency so that customers could ask questions and provide responses in a manner and tone that is completely natural to them. The next phase involved training Amelia to fulfill a wide array of tasks that are high in volume and time-consuming for customer representatives to handle. Currently, Amelia is handling customer queries such as password resets for online banking accounts, helping users to step-by-step troubleshoot problems with credit and debit cards and providing the location of the nearest bank. In addition to these types of requests, Amelia's overall coverage of customer queries is expanding to include more complex tasks like ID verification questioning, which takes place after an account-sensitive question is asked.

Overall, Amelia is handling her range of roles well and her response accuracy, which has now reached 80% on the content she is trained on, is continually improving as she addresses approximately 200 customer queries per day. Moreover, the rate at which she has been able to detect the underlying intent of a customer's query has also increased on par with her new training and reached 85% during the same time. Her intent recognition abilities allow her to respond much faster to online requests and as a result, elevate the quality of a customer's online banking experience. Amelia's accuracy has now reached 80% on the content she is trained on

As an IT service desk agent, Amelia supported approximately 14,000 employees

To date, Amelia's encouraging performance as a part of SEB's customer service team has resulted in a "triple win" for the bank as customers, employees and shareholders have all benefited from Amelia's deployment. Amelia has been able to deliver faster service to customers, increase employee satisfaction and allowed shareholders to secure a competitive advantage over other banking institutions through optimized customer service.

Amelia's present customer-facing role within SEB followed on from her successful implementation within SEB's IT service desk in the latter half of 2016. As an IT service desk agent, Amelia supported approximately 14,000 employees with requests related to identity access and knowledge management such as unlocking active directory accounts or supplying knowledge base answers to questions like, "How do I order remote access?"

# Enfield Council Public Service Virtual Agent

In a move to enhance customer service for more than 330,000 residents, the north London borough of Enfield is adopting Amelia. Enfield is one of London's largest boroughs and its population is growing by four to five thousand each year. Demand for service is growing all the time and each month the council receives 100,000 visits to its website and takes 55,000 telephone calls.

Sustaining consistently high quality customer service in order to meet rising expectations is challenging. This is particularly difficult when set against a backdrop of central government spending cuts. By introducing Amelia, the council expects to increase the volume of queries it manages.

Amelia will be able to absorb time-intensive routine requests while freeing up council employees to focus on more complex issues. In short, Amelia will help the council deliver more with existing resources.

Amelia is currently going through User Acceptance Testing as she is answering planning permission queries from a limited group of constituents on the council website. Thus far, she has handled over 2,300 queries over the span of 3 months and has been able to recognize the intent of user requests 98% of the time.

Amelia's early results have impressed the council to the point that now they are seeing how far Amelia can help in managing application processes for specific areas: for example, prescreening planning applications and providing self-certification for those building plans that fall within specific parameters. As Amelia works alongside the existing service channels, residents will be able to choose how they would like to communicate with the council depending on their personal needs.

Rather than requiring diverse visitors to be technology-literate, Enfield Council will require that their technology be "peopleliterate." Given the fact that Amelia interacts using natural language, the expectation is that she will be well-placed to support everyone.

Enfield's pioneering adoption of cognitive technology is expected to set a trend for other public sector bodies both in the UK and across other regions.

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# Medical Supplies Manufacturer IT Service Desk Agent

A global medical supplies manufacturer has embarked on a company-wide digital transformation. In order to start the journey, the company sought to introduce intelligent automation into its IT function in order to improve service for its 45,000-strong workforce.

After careful analysis, the company's IT leadership identified opportunities for improving the performance on basic L1 issues. The company recognized the potential for Amelia to absorb this workload and allow the IT team to increase its bandwidth for managing other priorities.

IT staff now interface with Amelia through the company's native IT management platform, ServiceNow. As all IT personnel leverage this platform on a daily basis to complete a host of different employee requests, it made sense to integrate Amelia directly into this environment via Single Sign On for maximum ease of use. Once the integration points were defined, Amelia was smoothly integrated with all the necessary enterprise environments and processes.

Today, Amelia is successfully helping employees with an array of requests such as gaining access to a Wi-Fi network, providing access to the USB ports on computers, and providing temporary administrative access to install software.

As a result of implementing Amelia, incident resolution times are falling significantly. For example, for more than 3,400 visitors per month Amelia is granting guest Wi-Fi access with



a 95.9% success rate. Previously this would typically take up to 3 minutes, but with Amelia this request is fulfilled in 30 seconds or less. In addition to improving service for all employees, Amelia's support is allowing IT engineers to dedicate less time to repetitive work, and instead, take on higher priority issues and accelerate their professional development.

Future plans for Amelia involve continually extending her impact into the service desk by implementing more and more use cases as well as other core processes within other business units. A program is underway to implement Amelia with the company's R&D (research and development) process to reduce the time-to-market figures on some of their medical products by handling the changes to medical supply labels utilizing automation bots. She will also assist the procurement team with adding new vendors into their procurement software. Amelia is granting guest Wi-Fi access for more than 3,400 visitors per month with a 95.9% success rate

# Financial Services Company IT Service Desk Agent

An international financial services company with a base of 50,000 employees was having significant cost and customer experience issues within their global IT service desk. Being comprised of three separate locations across the world, their global IT service desk was fractured in terms of resolution protocol and the lack of consistency in ticket processing resulting in slower response times and the increased frequency of human errors. Moreover, these operational challenges were further exacerbated with the constant flow of incoming IT incidents from all over the organization.

In an effort to resolve these issues and streamline the wave of IT issues reaching their IT service desk, Amelia was deployed as an AI platform that would centralize the resolution of tickets.

There were already several backend systems in place that could not be uprooted given their strategic importance to their business processes. Amelia was able to seamlessly integrate into multiple desktop applications, Blackberry engines and knowledge management systems.

For example, if an employee encountered an Outlook issue, Amelia would be able to complete this ticket on her own given her integration into Outlook and do so from a remote location. Every resolution process is run the same, every time and this degree of consistency removes the possibility of human error.



As Amelia's involvement in their IT service desk has escalated, she has been able to employ her scalability features so the resolution of incidents are still completed quickly and accurately. By the end of the pilot program, Amelia reached a high of 87% accuracy during conversations. Recently, she has been deployed into live production where she will take over 39% coverage of all requests, from routine L1 issues to more complex L3 incidents, and resolve them from end to end.

Some future plans for Amelia beyond supporting a global IT service desk include a role on the trading floor, helping audit and compliance teams out. Typically, it takes a qualified trader 20 minutes to complete a trade. With Amelia, it is projected that she can help bring this time down to 2 minutes with the help of an ECHO (a voice-recognizing consumer product).

### Global Telecom Provider Service Desk Agent

At a global telecom provider, employing 107,000 employees worldwide, Amelia has become the new face of their IT service desk. She is helping the company ensure that its employees remain productive and she is eliminating downtime in resolving issues.

The company's IT service desk is contacted more than a million times a year. Amelia offers the opportunity to keep up with 24x7 user demand. For example, at peak times such as Monday mornings, the team was getting stretched to capacity, making it difficult to ensure that every user was helped within a few minutes of reaching out for support.

For more than 20,000 English speaking staff Amelia is now handling an 83% of IT Service Desk requests and has held more than 100,000 conversations. She is assisting with first-line support requests such as password resets, distribution list additions, permission changes, email issues and two-factor authentication.



Given Amelia's early successes, she is now on a first-name basis with the English speaking staff. She is featured on laptop stickers, flyers and lifesized cutouts around the offices. Employees know to contact Amelia via the intranet portal for help with any IT problems.

Not only has Amelia learned how to execute the requests but her involvement has been the catalyst for improvements in end-to-end processes that have been re-drawn to further leverage automation benefits. Amelia is now handling 82.1% of IT Service Desk requests and has held more than 80,000 conversations

Previously, for instance, forms would be emailed to mailbox owners requesting authorization for the addition of a new user. Now Amelia looks up the mailbox owner independently, sends a message that requires a single push button approval, which dramatically shrinks the time it takes to execute the request. To date, she has correctly identified the intent of employee IT requests 93% of the time and when appropriate, successfully escalated queries she could not complete to her human counterparts in real time.

Eventually, Amelia will provide the same support for employees in the company's German operations supporting another 14,400 employees in their native tongue. Following this she will engage with the company's very large community of Spanish-speaking employees.

Additionally, the telecoms provider is exploring an opportunity for Amelia to take on an external-facing customer support role in an English-speaking market with the goal of further differentiating their service from the competition.

### Gaming Company Customer Service Agent

Online gaming companies often have to deal with fraud attacks from impostors who attempt to access the accounts of genuine players. Most common of all are phishing scams directed at live chat agents who provide support to players. One of the largest global gaming companies is incorporating Amelia into its team in order to block the phishing attacks while maintaining a high quality customer experience.

The average chat contact with a gamer lasts between 12 and 20 minutes. Up to 10 of those minutes are spent on account verification at the start of the conversation. It's during this period of initial contact that certain questions and responses can fool a human agent into giving a "phisher" sensitive gamer account information. The gaming company sought to improve player verification, increase customer service responsiveness and speed up the verification process to provide gamers with better quality service.

Several AI solutions were considered before the gaming company chose Amelia. There were several reasons why she was seen as the best fit. Firstly, the fact that non-IT staff were able to train Amelia on the knowledge required and keep tweaking her knowledge based on observations of her live dialogue was key. This meant that those Amelia does in just 3 minutes what it takes a human 10 minutes to do

On a weekly basis, Amelia handles just under 10,000 conversations

She follows the correct line of questioning with over 99% accuracy who know the content best are able to impact Amelia's performance. Also, the company was impressed by the fact that Amelia could interpret and display an understanding of the customers' emotions, allowing her to provide a better experience that is in line with the company's brand values.

Since live implementation, the gaming company has been encouraged by Amelia's early performance. She has been able to bring down the average chat time to 3 minutes all the while ramping up the amount of chats she handles on a weekly basis from 190 initially to just under 10,000 conversations. She's proven adept at blocking phishing attacks, following the correct line of questioning with over 99% accuracy.

With Amelia, approximately 4% of total chats were found to be phishers and so far has saved more than 100 hours of wasted labor. Moreover, Amelia's customer satisfaction levels have risen each week since the initial rollout and have now reached 88.06%. These metrics are a testament to Amelia's capacity to continually enhance the quality of her interactions with end-users through supervised machine learning.



# Hotel Group

A British multinational hotel group is seeking to boost the quality of service it offers franchised hotel employees by ensuring its central IT Service Desk offers best-in-class responses to their queries. Moreover, with the substantial volume of queries being submitted to the group's global IT service desk on a daily basis, which serves over 100,000 end users, they found themselves constantly overwhelmed.

Aside from challenges related to incident volume, another specific area of attention is the group's reservation engine and property management system which plays a critical role in the smooth running of each hotel. Currently, support for the systems is distributed amongst several thirdparty entities and problems have arisen when IT Service Desk staff have contacted the wrong vendor. Not only does this slow down end-user response but also causes the group to incur significant call transfer fees.

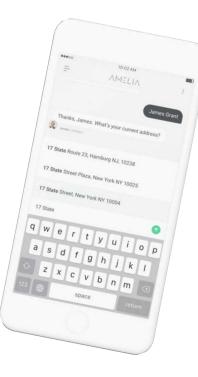
Amelia is now being trained to act as a central reference point for hotel management employees so she can receive support requests and quickly direct these to the appropriate support agent. In this capacity, Amelia will help eliminate operational costs associated with contacting the incorrect support staff and expedite resolution. She is available 24/7 and is swiftly resolving high-volume, low-level issues such as password resets and FAQs.

Amelia is achieving over 90% accuracy on the queries she receives and in parallel, expanding the processes she can support

As an example, in just one month she has learned more than 50 new processes Not to mention, Amelia is capable of seamless context switching or in other words, multitasking during live customer interactions. An enduser may ask one type of query and Amelia immediately initiates the resolution process for that query. In the midst of resolving this issue, the end-user asks another unrelated question and Amelia is then able to simultaneously address the new inquiry without abandoning the first request.

In addition to re-routing calls, Amelia is being taught how to answer common end-user IT queries so that she can relieve some of the workload pressure on the current IT Service Desk. Amelia is achieving over 90% accuracy on the queries she receives and in parallel, expanding the processes she can support. As an example, in just one month she has learned more than 50 new processes.

As her role continues to grow beyond the 32% of the total workload she currently handles, it offers the group the ability to focus its staff on developing a program that will lower their dependence on outsourced IT labor over the long-term and achieve short-term cost savings.



# Health Insurance Company Digital Service Desk Agent

Each year health insurers in the Netherlands experience an extraordinary rise in volume during the country's mandatory annual enrollment period. In order to maintain excellent customer experience throughout this peak in demand, this leading health insurance provider is pioneering the use of cognitive technology, through the adoption of Amelia.

The company receives 4.2 million phone calls a year, plus email inquiries. Each hour, as many as 1,000 people log onto the insurer's benefits site, so there is a huge opportunity to meet the annual spike in demand for information by incorporating Amelia within the company's website so that she can answer queries in the customer's native Dutch language.

A pilot is underway that tests Amelia's ability to answer questions about reimbursement for health insurance. She is being trained to answer questions related to a wide range of different policies from dealing with reimbursements for everything from glasses and physical therapy through to dental care. Typical questions Amelia will need to field might include: How many physical therapy sessions are eligible for reimbursement? How much would I need to pay out of pocket for a dental visit?

As part of this training, the company has run five onsite sessions, in which staff members asked Amelia reimbursement questions. They made sure to ask challenging questions about

exceptions that might arise in certain situations and were impressed to see Amelia's resolution rate reach an average of 90.41%.

For the insurer, the true measure of Amelia's success will be her ability to provide guidance that is so thorough that customers have no need call back in order to confirm or clarify additional points. The industry refers to this as the "no dial back" ratio and monitors it continuously. Amelia's performance against this measure was high, as 70% of users in the test sessions confirmed they would not require any additional follow up.

Having reached a high level of confidence, the company is now preparing to place

Amelia on its website. Customers will be invited to click a button on the site to initiate a conversation with Amelia about reimbursements. In the initial phase of the rollout, Amelia will answer under the supervision of human agents who can intervene if they feel it is necessary. Within a short time, however, the expectation is that Amelia will be able to deal with the majority of queries on her own. A pilot is underway that tests Amelia's ability to answer questions about reimbursement for a wide array of different healthcare policies ranging from eye exams and physical therapy through to dental care.



# Global Investment Group IT Service Desk Agent

An American global investment management corporation, with an employee base of 13,000, has been actively searching for a way to increase employee satisfaction levels within their IT Service Desk. Rather than narrowing their search to standard chatbot solutions, they wanted to raise the bar for employee experience and employ a cognitive agent who can resolve incidents quickly and accurately at scale while also having the capacity to grow more intelligent over time. Given her long track record of successfully taking on IT service desk roles, Amelia has been identified as the ideal AI platform to deliver high impact results to an organization's IT operations.

The program is now underway to introduce Amelia as a self-service option for internal employees, making it faster and easier for them to resolve requests while, at the same time, reducing the volume of calls that are being fielded by live agents in the help desk. The goal is to allow live agents to increase the number of complex issues they can field rather than addressing many of the high-volume, repetitive queries that stunt their professional growth.



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Amelia is currently being trained to manage the following incidents independently:

- Active Directory Password Reset/Unlock
- Cisco Login Password (PIN Code) Reset/Unlock
- Cisco Voicemail Password (PIN Code) Reset/ PIN Reset
- RSA Token Management (Account Verification)

Each of these four requests are critical toward general employee productivity and have significant cost implications because the volume of such requests is so high and they require a great deal of IT labor resources to resolve promptly.

Amelia is in the final implementation stages before being deployed into production. User acceptance testing is in full swing to ensure she is responding naturally and accurately to employee queries. In training, Amelia achieved a 91.5% accuracy rate, putting her on track to handle 19% of all service desk queries.

# Financial Services Company IT Service Desk Agent

A major financial services company is undergoing an in-production pilot for Amelia to support its global internal service desk. The company's IT Service Desk receives about 30,000 tickets a month and aims to see how Amelia can absorb responsibility for resolving many of those issues and do so quickly and efficiently.

IPsoft has already implemented several use cases for the client in an on-premise deployment of Amelia in addition to integrating her with multiple channels such as Skype, the web, and mobile devices. The tasks she has been trained on include:

- Password reset: Amelia will connect to five password systems.
- Ticket status: Amelia will monitor ticket status based on five ticketing systems and give users real-time feedback on their tickets, including escalation processes.
- RSA (remote security access) token resets: The client has 80,000 employees, many of whom require remote access.

By allowing Amelia to take over these tasks from service desk agents, the inefficiencies derived from having to look up ticket incidents on up to five different systems of record have been eliminated. Amelia's seamless, back-end connectivity with each ticketing system has provided service desk agents with a quick means of looking up ticket information and in the process,

boost their own productivity levels. At the same time, high-volume, repetitive tasks such as password and RSA token resets are no longer handled by service agents, freeing them up to work on more complex, higher priority issues.

So far during the pilot program, Amelia has been operating at a 90% accuracy rate, which means she is both understanding the user intent behind an IT service request and completing those requests successfully.

Soon, Amelia will be deployed across the entire organization.

In parallel, this global bank is also working with IPsoft to define a brand new use case, in which Amelia will help streamline employee onboarding. She'll ensure employees have everything they need from their first day on the job including, but not limited to, information regarding paid timeoff and who they can talk to about IT-related problems.

Beyond these immediate use cases, there are plans in motion to produce a POC (proof of concept) to employ Amelia in a customer-facing role in the form of a receptionist. It is expected that she will handle all requests typically asked of a human banking clerk.

# Life Insurance Company Virtual Agent

One of the largest mutual life insurance companies in the United States wants to deliver the highest degree of customer service to their consumer base as well as better serve their own workforce. Their objective is to reduce the amount of time needed to effectively resolve high-volume customer and employees requests.

With a large, international base of over 10,000 employees and a similarly sized customer base, they began to entertain the possibility of deploying a cognitive solution to help mitigate the torrent of requests they were receiving on a daily basis.

For them, it was vital that any cognitive technology they were considering could actually communicate with their employees and customers in a humanlike, natural manner. They held no interest in implementing a standard chatbot solution commonly found on many websites today, but rather a virtual agent that could understand the intent and context of a request and engage in conversationally intelligent dialogue. The client has a large, international base of over 10,000 employees and a similarly sized customer base

Amelia has generated a 95% success rate so far Amelia successfully showcased these exact features to high level decision-makers from the company and initiated a proof of concept for specific uses cases earlier in the year.

On the employee-facing side, Amelia was taught how to respond to eligibility questions regarding an employee's health and dental insurance plans depending on their state of residence.

In terms of customer requests, Amelia learned how to process an address change, a loan request and change the frequency of payments on an account.

Currently, Amelia has been in user acceptance testing for these business cases and has generated a 95% success rate so far. The success rate metric reflects the accuracy and coverage of Amelia through online chat, including moments of call escalation — in essence, she is handling conversations correctly 95% of the time.

As a result of her early success via online chat and the way she interacts with clients so naturally, the insurance client has given us the green light to deploy her voice capabilities within other segments of their business infrastructure.



Large Investment Bank IT Service Desk Agent

In search of optimizing their customer experience and increasing the efficiency of their IT business processes, a premier investment bank began to evaluate Amelia as a potential addition to its customer support and IT service desk teams.

Their initial proof of concept covered the development of a deployment strategy and schedule for one of the bank's more complex financial requests: retirement deceased distribution. Amelia's role will involve interacting with customer sales assistants (CSA) to identify the right documents needed for an interaction with a recently deceased person's family member for the distribution of death benefits.

Once the POC was successfully completed, the pilot program was initiated enabling Amelia to handle this wealth management use case from beginning to end.

The first phase involved Amelia validating the deceased client's account information as well as the beneficiary's account details. She then provides the CSA with the necessary documents the beneficiary would have to complete and then assists with the submission process once all completed documents have been

Once Amelia is placed into customer environments at a larger scale, Amelia is expected to reduce operations costs by 20-30%



received for review. At this point, Amelia notifies the CSA once documents have been approved internally and is able to then move funds into the beneficiary's designated account.

According to the bank, the differentiators that led to Amelia being the right solution were her advanced natural language processing capabilities, her ability to integrate easily with their existing core knowledge bases, and critically, her ability to process information from those core systems and use it to full effect during live interactions. An important part of the process the bank has been testing Amelia on thoroughly is customer authentication. This process requires Amelia to ask probing questions and disambiguate the customer's response to ensure the customer's correct identity before providing the appropriate retirement deceased distribution documents to the CSA.

Once Amelia is placed into customer environments at a larger scale, she is expected to drastically improve service quality and experience, and reduce operations costs by 20-30%.

# **Insurance Company** Digital Service Desk Agent

A large US-based insurance company wanted to make its digital-only service incorporate state of the art support and integrate Amelia into its website in order to provide superior service. The company's web only offering has more than 3,000 users a week and is growing quickly. By employing Amelia, the increased demand for chat-based interactions can be met while improving customer experience. The company's long term goal will be to deliver revenue growth by giving Amelia access to additional systems so that she can play a role in the initial quotes process.

Over a six-month pilot program, Amelia was integrated into the company's existing chat platform, LivePerson, alongside other human chat agents. In the first phase, she took on queries from 7pm to 7am, out-of-hour times when other chat agents were offline. Amelia was given the knowledge to manage more than 150 query types, and in a short time, she was consistently performing at a 93% accuracy rate. This is particularly impressive considering the queries spanned a wide range of questions. Amelia was also successfully trained to hand over queries that she was not able to manage herself to her fellow live agents.

The next step in the program involves connecting Amelia to the relevant systems so that she can provide customers with help on more complex tasks such as reinstating their insurance policy, offering live claims support and retrieving or changing lien holder information.

# Procurement Provider Digital Negotiator

An international provider of best-in-class procurement services, which manages more than 25 billion euros in spend for its shareholders and clients across 40 countries, has begun to explore how AI can enhance and speed up the negotiation process with suppliers. By introducing Amelia as a digital negotiator, the CEO wants to optimize negotiations with vendors by creating leverage from the company's procurement expertise.

Currently, more than 3, 000 NDAs (non-disclosure agreements) are sent out per year with each one taking up time and specialized resources. The company sees the potential for Amelia to improve the process by answering NDA queries accurately, looking up client information quickly, implementing edits to the NDA and negotiating respective terms. It is envisaged she could also provide clients with the option of downloading an amended agreement and then offer the client the means to upload the signed agreement to be securely archived. Amelia's natural language capabilities coupled with her ability to consume and understand documentation will allow her to negotiate with customers in real-time and execute changes with speed and accuracy.

A proof of concept has been successfully completed for Amelia and now implementation teams from both the IPsoft and client side are collaborating on the development of the business rules and negotiation algorithms Amelia will need in order to effectively fulfill her role as a contract negotiator, as well as expand her skills to include price negotiations. A soft launch of this highly complex process is expected to take place at the end of this year.

### Car Insurance Company Sales Agent

Customers seeking an online car insurance quote often must fill out numerous forms with dozens of required fields. It is a time-consuming and often frustrating process. One of the US's most popular insurers is poised to improve this experience by deploying Amelia to act as an insurance sales agent.

The goal of the project is to provide the bespoke service and attention customers would get from a personal insurance assistant and provide it at scale to every customer contacting the insurer online.

Amelia will guide prospective clients through the entire process of getting a personalized quote for auto insurance. Once the dialogue has started, Amelia ensures she extracts all the information required in order to feed the company's underwriting decision system.

For example, she will ask customers where they live and how many drivers will be on the policy. Importantly, Amelia will be checking the dialogue



to extract information that has already been provided as part of the conversation rather than walking through a painstaking list of questions in a set order.

During the conversation, customers are free to ask Amelia clarifying questions of their own. For example, what is liability insurance? What is a VIN number? Insurance is a highly regulated industry and only licensed brokers can give specific recommendations for insurance policies.

However, Amelia can provide generalized guideline information based on statistics. For example, "most people living in your area have chosen this plan."

Amelia further simplifies the interaction for the user by presenting information on screen so that it is easy for them to see the policy being built and a record of which choices they have made so that they can go back and amend these at any time. The overall experience is much more effective and pleasant as Amelia turns the interaction into a conversation rather than an interrogation and ensures the customer is always confident about the next step.



### Hospitality School Student Registration Clerk

The world's leading hospitality management university in Lausanne is looking to reshape the way students interact with the school by involving Amelia. Their aim is to create a first class experience that enables students from across the world to complete their application to the university and prepare themselves to make a smooth transition into the school. During tests of the process, Amelia hit 89% accuracy in conversations with students and staff members

Before starting their studies, students receive an email filled with paperwork and some guidelines. Variables such as nationality determine which documents are relevant to specific students. Recently, the school completed a proof of concept using Amelia for student registration support. By having Amelia provide a personalized service, the university seeks to streamline and improve the registration experience.

In the proof of concept, Amelia guides students through the complete registration process. For authentication, students provide Amelia with their email addresses and personal details. Once Amelia has verified a student's identity, she pulls his or her records from the university system. She provides students with the correct documents, some of which are prefilled with their information. Amelia confirms students'

addresses and advises them on whether they need to register a new address. Depending on the student's address, she will provide a map showing the closest registration office where they need to deliver their paperwork.

During tests of the process, Amelia hit 89% accuracy in conversations with students and staff members. The students responded enthusiastically, with 90% indicating that they would like to use Amelia again.

The school's ambition for Amelia's impact on student life goes far beyond her integration into its own administration processes recognizing the importance of giving their students the knowledge and inspiration to imagine how AI could transform the hospitality industry. It is an invaluable lesson as a part of their teaching to expose students to the practical use of AI through Amelia so that they can pioneer her adoption in their professional life.



### Insurance Company Digital Service Desk Agent

A Fortune 100 insurance company is introducing digital labor to improve efficiency and customer service. The plan is to integrate Amelia into their customer-facing teams so that she can ensure these agents are able to deal with customer requests faster while staying within the policy framework for financial products to which the company must adhere. To begin this transformation, the company has trained Amelia to support two initial user groups: agents working in the call center; and licensed agents who sell the company's insurance out in the field.

Amelia interfaces with the insurance firm's licensed field agents to ensure they remain productive and can access all the technology platforms needed to sell the company's products. Agents can access Amelia on a laptop or via their smartphone. When they run into problems, she guides agents through a series of steps to resolve issues. For example, Amelia walks licensed agents through installing essential software such as Gateway, an application that connects to the insurer's network.

Amelia has now been trained to resolve the most common queries by integrating with a range of other systems – most notably the company's policy and underwriting applications as well as the firm's IT service management tools, including ServiceNow. Insurance agents handle hundreds of forms due to regulation requirements and it's easy for mistakes to be made and time lost during the process of making corrections. Now, Amelia confirms exactly which form must be compiled and submitted. At the moment, she is handling approximately 10,000 interactions per day and doing so at a 93% accuracy rate.

### Safety System Supplier Customer Service Agent

In the industry of safety system manufacturing, this Swedish company is trying to incorporate AI into their safety products and in the process, completely differentiate themselves from their competitors. They are the largest supplier of airbags in the world and have exclusive deals with some of the largest automobile brands in the world, such as Volkswagen and BMW.

Their objective with AI is to create an artificially intelligent vehicle with the technology. After an extensive vetting phase where other solutions were considered, they deemed Amelia as an ideal fit for the project. Amelia's natural language capabilities paired with her ability to recognize the emotional state of a person during live interactions were the types of humanlike attributes the safety product manufacturer was looking to install and expand upon within their smart car.

The initial steps of the project involved retrofitting a vehicle with motion capture and facial recognition software. After the vehicle has been fitted with the appropriate gear and software, Amelia would then be installed into the automobile's digital mainframe—connecting each piece of technology to Amelia's cognitive engine. In essence, Amelia would become the conversational interface between the driver and the applications embedded within the vehicle. During the testing phase that would follow, the primary goal is to turn Amelia into a driver's faithful, knowledgeable companion who can understand and react to voice commands in real-time at 100% accuracy.

Development teams from both IPsoft and the client now are ensuring the automobile prototype is fully voice-activated and immediately responsive akin to Siri on the iPhone. The smart vehicle is in the process of being completed, with several rounds of internal and external testing to follow.

### Global Banking Group Customer Service Agent

When customers of a global banking group call to dispute a credit card transaction, they speak to Amelia in their native Spanish language. Without needing to spend lengthy periods of time online filling out a claim form, they can simply telephone the usual customer service number and be put through to Amelia. After accessing the bank's core systems to verify the customer's identity and locating the transaction being queried, Amelia creates the claim while speaking to the customer. Within the easy context of a conversation, the customer's concerns are logged and a formal claim logged in the bank's systems. Better still, a confirmation email to the customer noting the claim number for the dispute reassures them that the bank is acting fast to resolve their query.

Amelia began her first day on the job after having proved her ability to manage conversations about queries successfully; she achieved a 98% accuracy rate in training. Not only is her Spanish fluent, her comprehension of business processes is top quality too. By accessing core systems to act on the information exchanged in each contact, Amelia helps the bank move ever closer to its straight through processing targets.

In addition, Amelia is impacting the amount of calls being handled by the bank's customer service agents by also acting as a customer service filter, preventing customers from asking non-credit card related queries to live human agents who are only trained in answering credit and debit card-related calls. Amelia requests certain requisite information from the caller and if they cannot provide this information, then the call cannot be escalated to a live human agent. This encourages customers to seek out the answers to their general questions



through the bank's website and allows the banking institution's human agents to remain on-task and not deviate from its operational objective in resolving complex credit card issues. To the pleasant surprise of the banking client, Amelia has managed to reach a 69% abandon rate, which is a positive metric for this particular segment of their customer service operations. The next step will be to broaden her roles and allow her to provide a better experience for a greater number of the group's 70 million customers. At the moment she is handling 400 valid claims per month and the objective is to expand that claim volume to somewhere between 40,000 and 50,000 as Amelia helps settle credit card disputes on a global scale.









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