bjss Microsoft

Beyond the hype: Practical AI solutions for business leaders

Explore AI applications that deliver measurable outcomes — boosting productivity, enhancing customer experiences, and driving innovation.

Before implementing AI, a business needs to be AI-ready. This requires addressing multiple facets, such as attaining a level of data maturity. Overcoming resistance to change from employees or organisational culture is intrinsic to AI readiness.

Implementing AI solutions comes with challenges, from identifying and prioritising use cases and articulating the value of AI to key stakeholders to ensuring responsible implementation. In the context of AI for business, stakeholders are focused on how these solutions drive impact on key performance indicators.

This eBook provides businesses with a roadmap for adopting AI responsibly and strategically. From identifying high-value use cases to ensuring data readiness, governance, and overcoming resistance, we share actionable insights to help you avoid common pitfalls.

The complexities of AI in business

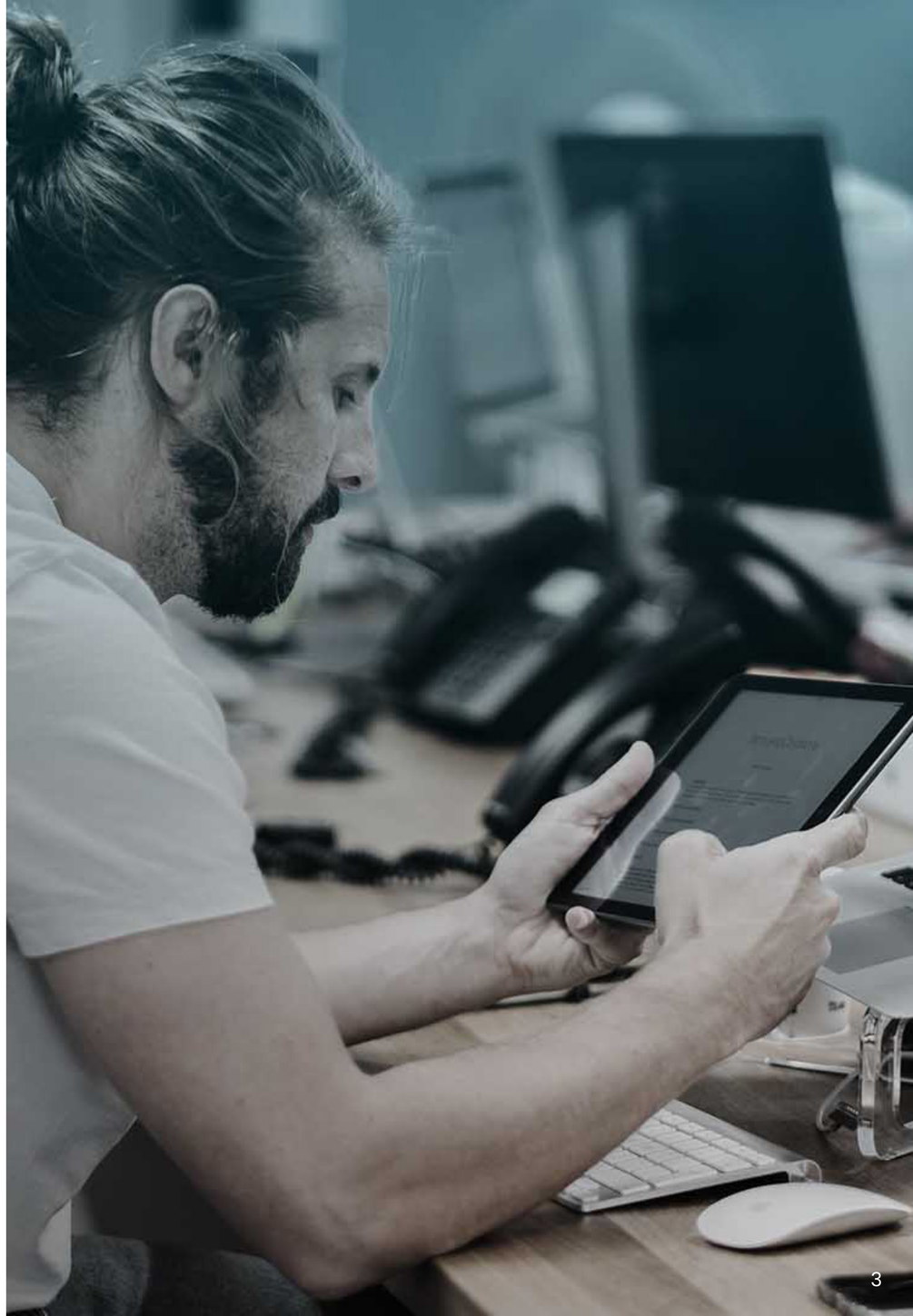
Developing a shared understanding of AI

With all the hype surrounding AI it is hard to identify the right learning resources and discern the truth from marketing. Board executives must develop a foundational understanding of AI: its capabilities and limitations; its requirements; and its potential for impact (positive and negative). It's important to understand that AI comes in many shapes and sizes: in some cases, there may be an off-the-shelf solution that is suitable, in other cases you may need to build AI from scratch. Pairing this understanding with business knowledge is essential for building an effective AI strategy with futures thinking.

Knowing where to start

Begin by identifying and prioritising use cases that support or redefine your business strategy; too often AI is selected as a solution before the problem has been identified. Even when AI is suitable, the value it can deliver is not always well understood or articulated. It's key to remember that you need to be AI-ready in order to adopt, hence AI can drive increased transformation funding towards improving the status quo rather than to create something shiny which may not have the same long-term value.

Once AI-ready, you can take a 'start small, think big' approach; find the easy wins that will prove value and gain trust.



Ensuring responsible AI implementation

Responsibly implementing AI is crucial for businesses to build trust with their customers, protect user privacy, and prevent potential harm. **92% of the organisations we surveyed already have a defined AI strategy, yet only 47% of organisations have implemented, or are developing, an AI governance model**.

You should always begin by asking: **'Is AI the right solution for this?'**

Once satisfied that an AI solution is the most appropriate, it is essential to deep dive into more complex aspects such as societal impact and potential bias, underpinned by legal regulations such as the EU AI act.

Achieving AI readiness

Successfully realising the benefits of AI and maximising ROI is a journey that requires high digital maturity, including a solid cloud strategy, robust infrastructure, and strong data capabilities. For each use case, identify the data requirements and perform an exploratory data analysis to determine the suitability of the available data.

In some cases, it may be that your data is not sufficient for an AI solution, and investment in data readiness is required. This journey can be taken in parallel with the development and rollout of your first AI use cases, provided they have been selected with careful consideration of your organisation's current level of maturity. Similarly, cloud strategy and infrastructure must be assessed and elevated where necessary.

Navigating resistance to AI

AI rollouts promise to transform enterprises, but resistance to AI and/or change can derail success. Hence, it is essential to prove value quickly with a meaningful use case where uptake is likely to occur. Businesses should consider implementing a framework that addresses employee concerns, provides comprehensive training, and fosters adaptability.

Delivering measurable value

AI initiatives frequently encounter high failure rates and often do not progress beyond the proof-of-concept stage before they can deliver any value. Gartner **finds that 85% of AI projects fail to deliver the desired outcomes and struggle to move from pilot to production**. The reasons often include a lack of clear business objectives, inadequate data infrastructure, and challenges in scaling AI solutions effectively. Careful selection of AI use cases and thorough planning can mitigate the risk of failure.

10 practical AI use cases

AI is revolutionising industries by addressing challenges and unlocking efficiencies. From enhancing customer experiences to optimising complex operational workflows, AI applications are diverse and impactful.

Through technologies such as machine learning, natural language processing (NLP), generative AI, operations research, and computer vision, businesses can streamline processes, drive innovation, and deliver tailored solutions.

This section explores 10 practical use cases of AI, illustrating its versatility and transformative potential across various domains.

1. Enhanced document-based workflows with intelligent document processing (IDP)

Businesses face significant challenges in efficiently processing and extracting information from documents which are originally paper-based or not in a machine-readable format, such as images of receipts, scanned contracts or PDF invoices.

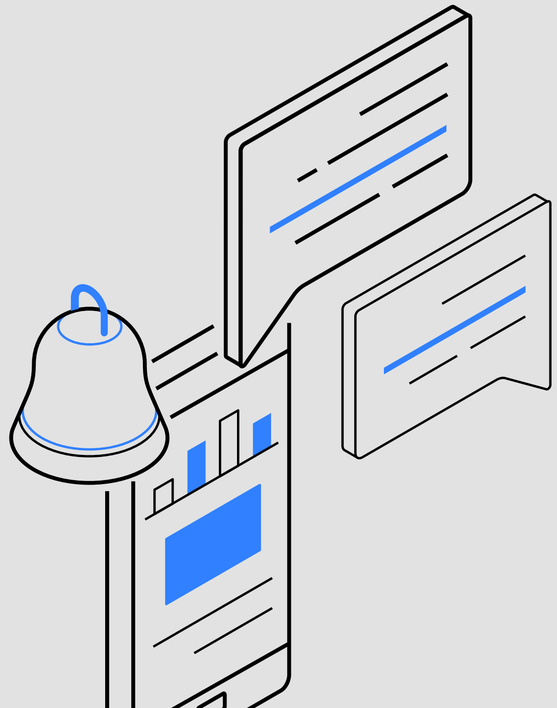
Extracting data from these documents is often manual, time-consuming, and prone to errors, leading to high operational costs, reduced productivity, and delayed decision-making. The lack of scalable and accurate solutions to handle large volumes of diverse document types further exacerbates these inefficiencies, limiting businesses' ability to reallocate resources toward higher-value activities and innovation.

By leveraging computer vision or generative AI, we can extract text from documents, enabling automated and enhanced document-based workflows.

IDP allows businesses to streamline operations, enhance productivity, and unlock the value of hard-to-leverage data, making it a cornerstone of digital transformation initiatives across industries.

Example use case: Invoice processing and automation

AI-powered IDP can automate the extraction of key data from invoices, reducing manual effort and the risk of errors. Additional AI tools can then be used to identify important details like dates, amounts, and vendor names, ensuring quick and accurate processing.



2. Data-driven customer insights

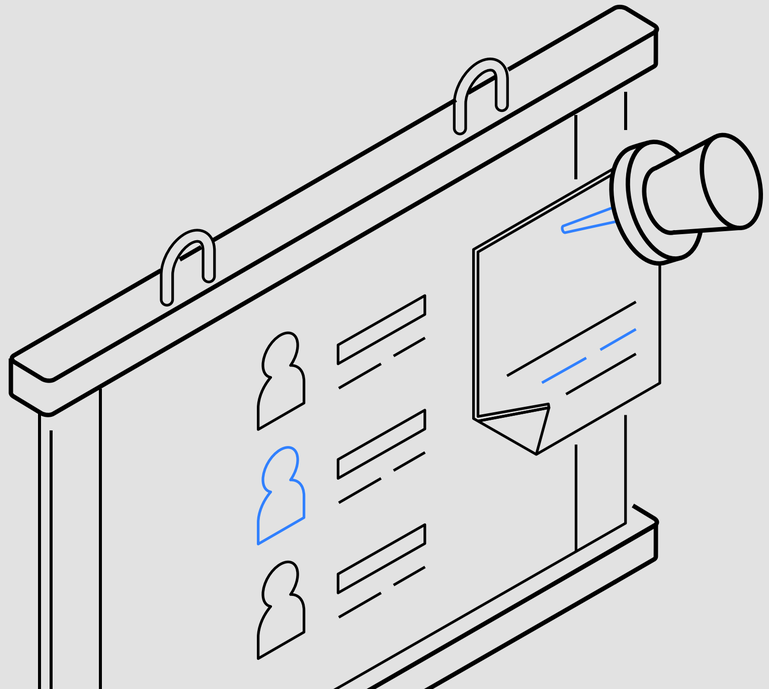
Businesses often struggle to gain meaningful insights from the vast amounts of unstructured customer data generated across multiple channels, such as social media, emails, and transactions. Analysing this data at scale manually is not only time-consuming but often fails to uncover actionable patterns, leading to missed opportunities for personalised experiences and customer retention.

Combinations of machine learning, generative AI, and NLP can be used to analyse structured and unstructured data at scale to uncover signals in the data. AI capabilities can also be used to inform on future trends and behaviours using predictive analytics.

Businesses can leverage previously unattainable insights, anticipate customer actions, and proactively optimise strategies accordingly.

Example use case: Customer sentiment analysis

AI can be used to analyse and summarise customer feedback from reviews, social media posts, and survey responses to identify sentiment trends. This helps businesses understand customer perceptions, address concerns proactively, and enhance brand loyalty.



3. Personalised AI learning

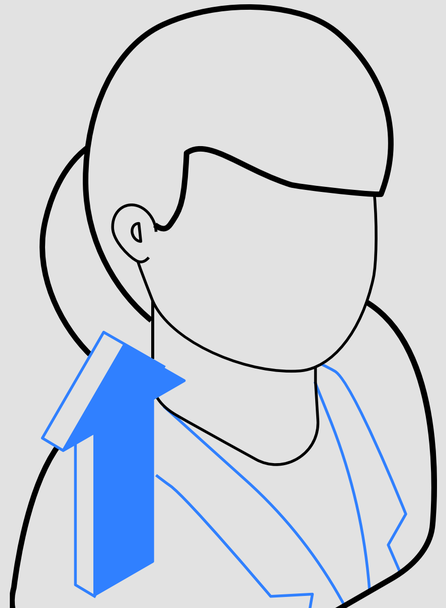
Traditional teaching methods often fail to address individual learning needs, leading to disengagement and inconsistent outcomes. Education institutions and businesses struggle to deliver tailored content that adapts to each learner's pace, preferences, and skill levels, especially when managing large and diverse groups.

AI-powered personalised learning platforms leverage data from learner interactions, such as assessment performance, engagement levels, and feedback, to create adaptive learning paths. These systems use AI to recommend tailored additional learning material, adjust difficulty, and provide real-time support.

This approach improves engagement, accelerates learning outcomes, and ensures each individual receives content aligned with their needs. For organisations, this can mean enhanced productivity and skill development while reducing training costs.

Example use case: Adaptive corporate training

Educators can increase the volume of self-assessment content by utilising AI to generate quiz questions from course materials. Learners can use AI chatbots as a 24-7 accessible tutor, answering questions and guiding employees to provide a more interactive and personalised upskilling experience.



4. Boosting call centre productivity

Call centres often struggle with high volumes of customer interactions, inconsistent quality of service, and inefficiencies in handling complex cases. Customer service workers face challenges in providing timely and accurate resolutions, and managers find it difficult to continuously review performance and offer real-time coaching.

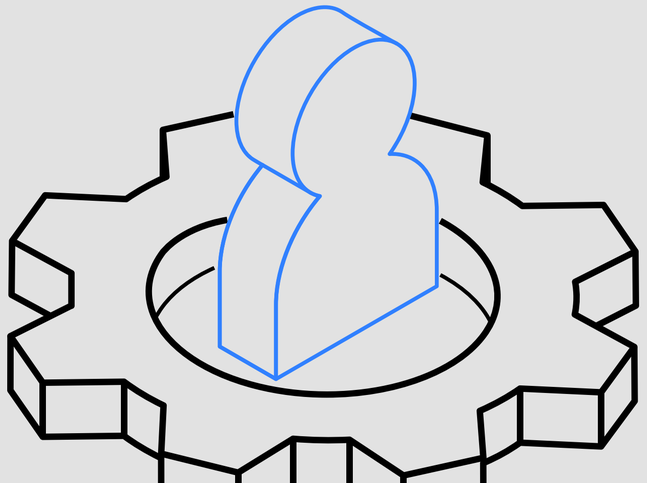
Generative AI and NLP, combined with traditional analytics, can be used to analyse transcripts to extract conversation topics and identify sentiment. Similar past cases can be identified and compared with, to suggest the next best actions or highlight areas for improvement in a call handler's response. Chatbots can handle routine inquiries, allowing agents to focus on more complex issues.

Additionally, AI-driven search engines or more advanced process-aligned AI agents enable customer support staff to quickly find relevant information and expedite issue resolution.

Therefore, AI solutions can streamline operations and improve performance, leading to both better customer and employee experiences. Real-time coaching and better resource allocation can reduce operational costs while enhancing service quality.

Example use case: Real-time next best action

AI analyses customer purchasing history to recommend the next best action for customer support staff based on context and past successful resolutions. For instance, when addressing a customer considering cancelling their service, customer support staff can be guided by AI to offer a tailored retention incentive based on the customer's history and preferences.



5. Proactive staffing with predictive analytics

Organisations in sectors such as retail and healthcare often struggle to maintain optimal staffing levels due to unpredictable employee absences, turnover, and seasonal fluctuating demand.

Inadequate staffing can lead to decreased service quality, increased operational costs, and employee burnout, while overstaffing results in unnecessary expenses. Accurately forecasting staffing needs is particularly challenging in dynamic environments like hospitals, where emergency influxes can vary significantly.

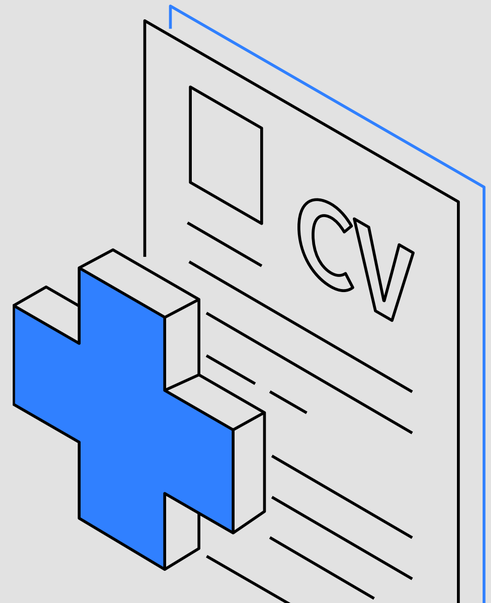
AI-powered predictive analytics can use historical and real-time data, including employee attendance records, seasonal trends, and external factors, to forecast staffing requirements. Machine learning algorithms can analyse patterns to predict employee turnover, leave, and absences, as well as demand surges.

Utilising these predictions can enhance staffing efficiency, reduce costs, and ensure high service quality by aligning workforce levels with actual demand. It minimises the impact of unexpected absences and optimises resource allocation, leading to improved operational performance and employee satisfaction. Businesses can proactively address staffing challenges, ensuring they are prepared to meet customer and patient needs without overextending their workforce.

Example use case: Predicting call centre staffing for a retail bank

During periods of expected high demand, such as major product launches or billing cycles, banks can leverage AI predictions to inform proactive scheduling of additional staff, to ensure faster response times.

Learn more about how BJSS has implemented this here.



6. Smart systems for employee query self-service

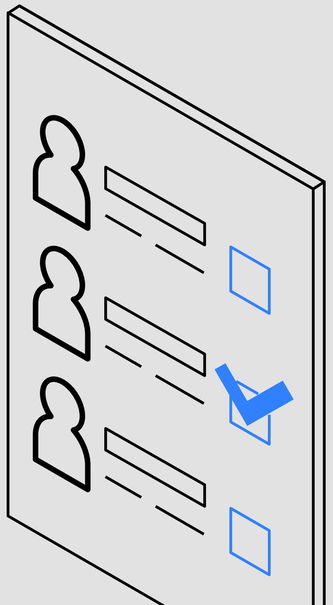
Employees often face delays and frustration when resolving day-to-day queries, such as payroll discrepancies or accessing HR-related information. Traditional systems can be difficult to navigate, leading to inefficiencies and reduced employee satisfaction.

NLP and generative AI can be used to develop AI-powered internal support systems, such as intelligent chatbots and self-service portals, used to answer common queries, flag discrepancies, and provide actionable insights. Data integration with existing HR systems ensures employees can retrieve relevant and accurate information quickly and efficiently.

Solutions like these empower employees with instant access to the information they need, reducing dependency on HR staff. It saves time, enhances user experience, and ensures quicker resolution of issues, leading to increased satisfaction and productivity across the organisation.

Example use case: Employee leave policy queries

An AI-powered chatbot integrated with people management systems can provide employees with instant, tailored answers to their policy-related questions. For example, it can inform employees if they qualify for specific types of leave, available remaining number of leave days, and guidance on the process of booking time off.



7. Optimised decision-making using operations research

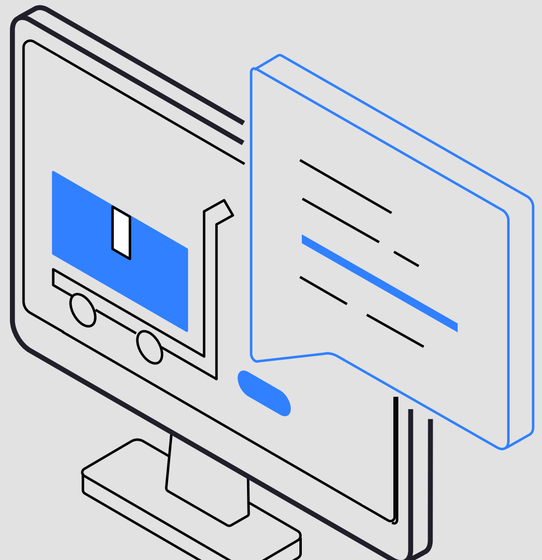
Many organisations struggle with inefficiencies in their operations, whether it's optimising workflows, managing resources, or improving service delivery. These inefficiencies lead to increased costs, operational delays, and diminished customer satisfaction.

By mathematically modelling processes and applying optimisation algorithms, we can determine the most effective values of decision variables for improved efficiency. This enables scenario planning and modelling to enhance decision making and avoid costly trial and error approaches - yielding more optimal results and enabling proactive adjustments.

Process optimisation can reduce operational costs, improve service delivery, and enhance customer satisfaction. Using data insights, organisations can eliminate bottlenecks, allocate resources efficiently, and achieve greater operational reliability.

Example use case: Inventory management optimisation

AI models are used to optimise inventory management in retail and manufacturing sectors. By analysing historical sales data, supply chain patterns, and demand fluctuations, AI algorithms predict stock levels needed to avoid both overstocking and stockouts. This helps businesses maintain efficient inventory, reduce storage costs, and ensure product availability.



8. Automating brand compliance

Maintaining brand consistency across digital channels can be challenging, especially as content and images are frequently updated. Misaligned or outdated content can lead to a disjointed customer experience and damage brand reputation.

Computer vision, generative AI, and NLP can be used to analyse website content, marketing materials, social media posts, and product packaging, ensuring that images and text align with brand guidelines. These systems can automatically flag inconsistencies in visual elements or text, providing real-time feedback to maintain brand consistency.

By utilising AI-driven content screening tools, businesses can expedite the brand compliance review process, ensuring consistent messaging, and reducing the risk of brand damaging errors.

Example use case: Website content and image compliance

AI-powered tools can review a company's website to ensure all content is up-to-date and aligned with brand guidelines, flagging any images, layouts or text that do not meet predefined standards.

9. Improved accessibility of documents

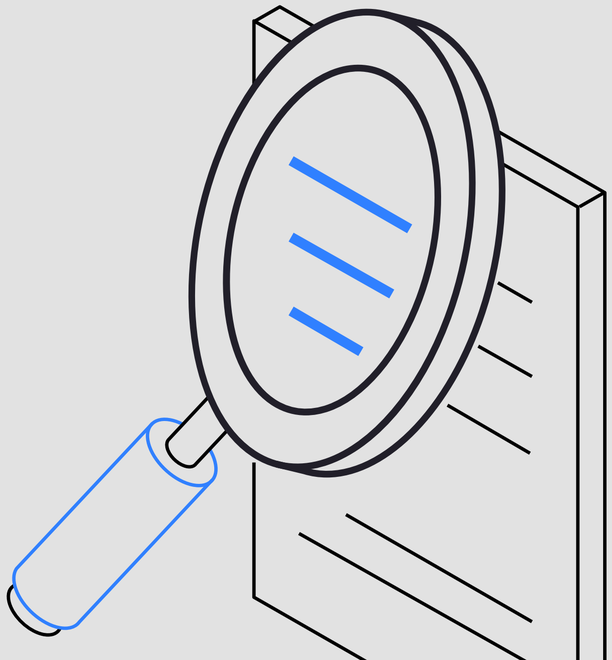
Making digital content accessible to all users, including those with visual impairments or learning disabilities, is a significant challenge. Traditional documents and images may not be usable for individuals who rely on assistive technologies, leading to exclusion and reduced engagement.

Generative AI can be used to transform text into easy-to-read formats or generate alternative text for images, making it accessible for people with various disabilities or those with low-level English reading abilities.

By leveraging AI for accessibility, organisations can ensure their content is inclusive, improving customer satisfaction and compliance with accessibility standards, while expanding their reach to a wider audience.

Example use case: Converting documents and generating alt text

AI tools can convert complex documents into easy-to-read formats, simplifying text and ensuring accessibility for users with cognitive disabilities. Similarly, the system can automatically generate alternative text for images, providing descriptions for visually impaired users, ensuring they can fully engage with the content.



10. Coding standards assistant

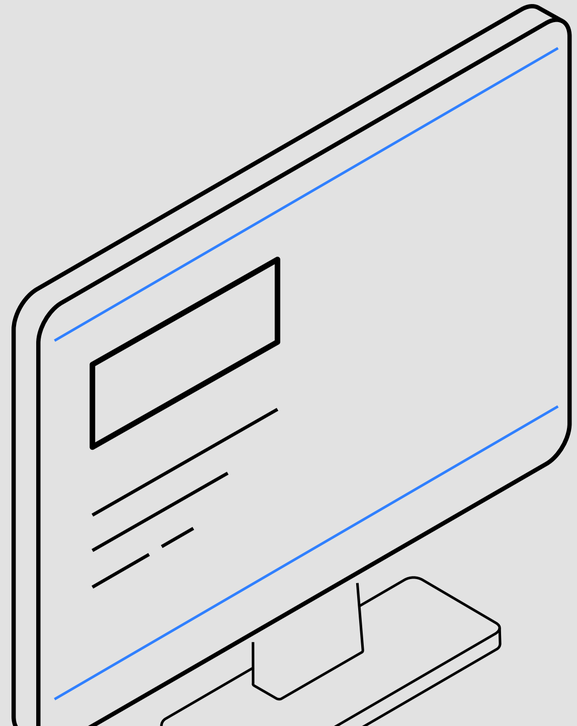
Code documentation can be time-consuming and often lacks consistency, leading to inefficiencies and confusion in development teams and increasing time to onboard new team members. For legacy code, documentation may not be captured at all, requiring developers to spend considerable time reviewing code to understand it.

Generative AI can be used to identify patterns in code and provide readable, structured documentation with tailored formatting.

AI-driven documentation can save time, enhance team collaboration, and ensure that all team members have up-to-date information. This streamlines development workflows, improves productivity, and ensures better task allocation and clarity.

Example use case: AI-generated code documentation

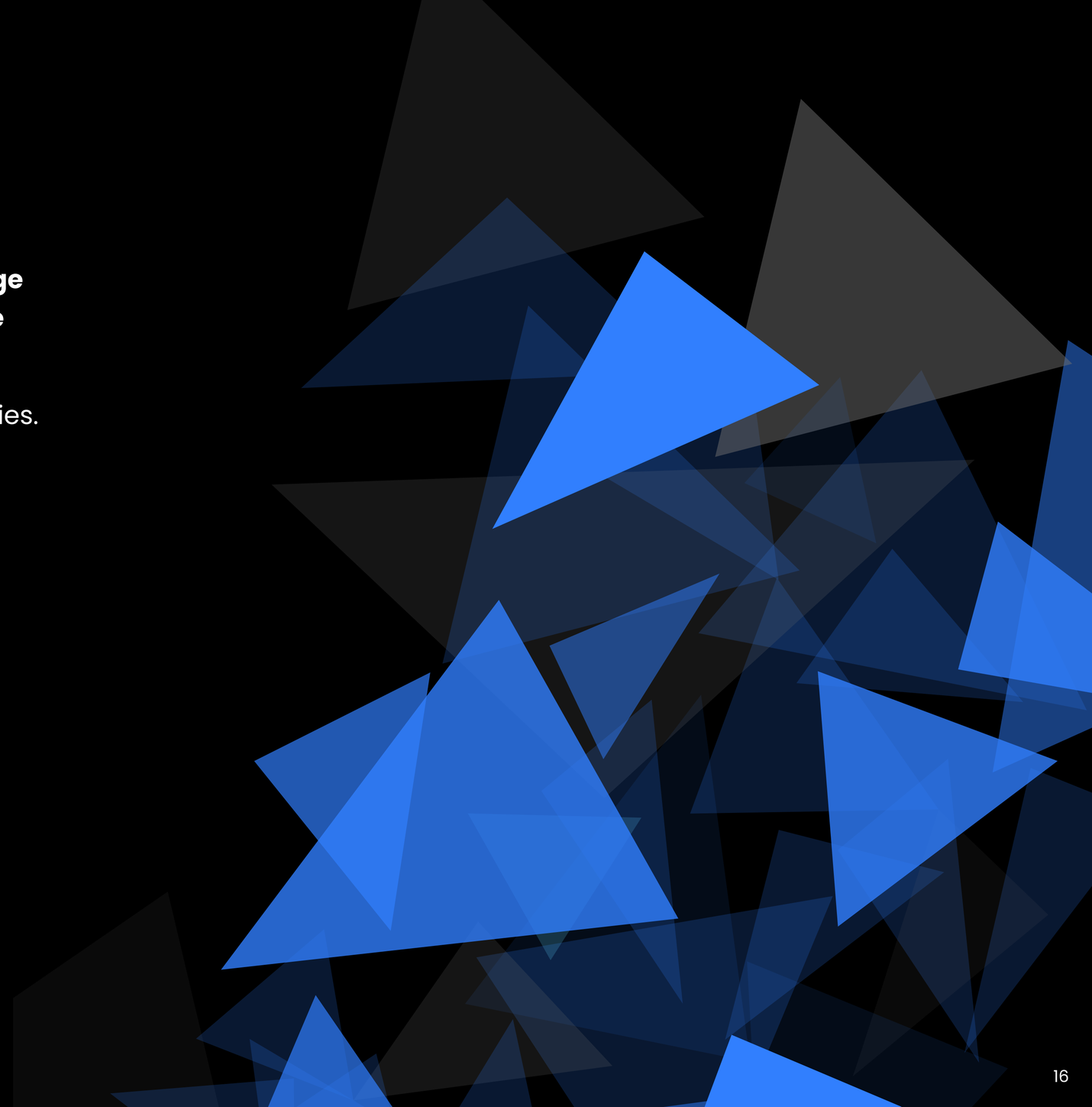
AI can be used to generate documentation from a code base, including code structure, comments and explanations, and enhance as needed.



AI in action

BJSS has extensively partnered with Microsoft across sectors such as energy, healthcare, government, and retail, to leverage AI, deliver innovative and efficient solutions, and meet diverse business needs.

The following examples are a few highlights of BJSS' AI capabilities.



Detecting illegal wildlife trafficking at borders

A BJSS case study

BJSS collaborated on Project SEEKER, a partnership between Heathrow Airport, Microsoft, UK Border Force, and Smiths Detection, with the aim of combatting illegal wildlife trafficking of elephant ivory, rhino horn, and other high-value products that also cause huge decline in certain species.

With an estimated value of approximately £20 billion annually, illegal wildlife trade ranks as the fourth largest global illicit trade but only 10% of such cases are ever brought to light.

Previous systems failed to detect many illegal animal products, identifying a need for new technology to tackle to issue of illegal wildlife trade.

Project SEEKER relied on computer vision and was built using Microsoft Azure AI Custom Vision, and a series of algorithms trained to detect illegal wildlife goods. The platform was deployed on Azure Stack Edge to ensure real-time actionable insights and automatically alerts enforcement agencies when an illegal wildlife item is detected.

With a more than 70% successful detection rate, this innovative technology offers the UK an opportunity to hugely reduce the import of illegal animal products and the data captured by authorities will provide valuable insight to the source of the smuggling, its routes and destinations.

Read the full case study **here**.

Accelerating high-volume document review

A BJSS case study

In the legal world, document review can take months – even years – depending on the complexity of a case, while accounting for 73% of legal fees.

Clients are demanding faster and more efficient legal solutions to speed up the time in which cases are heard, while reducing the number of billable hours.

With the use of AI more commonplace in many sectors – including law – the legal firm was keen to understand how the technology could automate time intensive processes.

BJSS recognised the potential of AI to automate time-intensive processes and developed a bespoke solution using Microsoft Azure Cognitive Search and Text Analytics to index legal documents, extract key information, and provide a user-friendly interface for search and retrieval – a first for the law firm.

Due to handling highly-sensitive commercial data, BJSS built a secure application with authentication for access management of the files, and easier navigation of the complex document repositories.

In just six weeks, BJSS created a tool that had the potential to save the law firm £500,000 per year, streamline document review time, and highlight key data points for legal processes.

Creating a happiness dashboard for Retail Trust

A BJSS case study

After finding that retailers lacked actionable insights into the wellbeing of their employees, Retail Trust and BJSS began working together to leverage the charity's huge data sources to assess employee happiness, and better position retailers to use the right services to foster greater wellbeing for their workforce.

The project initially began as a traditional data science project however, the release of OpenAI's ChatGPT saw the project pivot, as the BJSS team understood the power that generative AI could bring.

Leveraging leading solutions from Microsoft Azure and Databricks, BJSS developed a fully-automated insights system utilising Microsoft OpenAI and a data platform using Databricks, allowing for the inclusion of survey and interaction data from retailers, retail colleagues and other sources.

This data was presented to retailers, allowing them to understand their data and the financial and social impact on their business. This information and insight enabled retailers to customise their approach to employee wellbeing.

In 13 months, the fully generative AI-powered happiness dashboard was built and launched in collaboration with nine retail partners, enabling retailers to gain clear insights into workforce wellbeing, and employee interaction with support services.

Read the full case study **here**.

Delivering use cases: What it takes to make AI a reality

With over 30 years of experience as a technology consultancy, and an AI practice established long before the recent surge in AI adoption, BJSS has built strong foundations in data, cloud, and the essential elements surrounding AI. These core capabilities are critical to the successful implementation and adoption of AI, ensuring that businesses are well-equipped to harness its full potential.

Selecting the right AI use case

Choosing the right AI use case is critical for maximising business impact. The BJSS AI labs process ensures a value-driven approach, starting with a deep understanding of your business objectives and challenges. We collaborate with stakeholders to identify high-value opportunities where AI can deliver measurable results.

By prioritising feasibility and ROI, we focus on use cases that align with strategic goals, using a structured approach ensuring AI adoption that addresses real needs, reduces risk, and drives meaningful transformation.

The role of data readiness in AI success

It is well known that data is the lifeblood of AI and as such data readiness is essential for successful AI adoption at scale. Many organisations struggle to utilise their data effectively due to accessibility issues and poor data management practices. To realise AI's potential, businesses must prioritise data management strategies and ensure data is accessible and well-structured. Doing this on a robust cloud infrastructure has proven to be much easier.

Since data and AI are inherently connected, focusing on improving data maturity provides a solid foundation for achieving organisational goals and driving meaningful outcomes through AI-driven insights and solutions.

Improving data governance through people, processes, and technology

BJSS has extensive experience in building data governance capabilities for leading organisations. This approach includes assessing the current state by understanding team needs, identifying key roles, interviewing stakeholders, and cataloguing data assets.

Implementation involves identifying data champions, establishing data governance frameworks, integrating data silos, and deploying effective tooling, such as Microsoft Purview.

BJSS also focuses on raising data and AI literacy, providing mentorship, and setting up communities of practice. Monitoring and continuous improvement are integral, with KPI tracking for data quality, team performance, and risk management.

The Data Governance Assessment Framework gives you guidance on how to evaluate data governance across people, processes, and technology, with continuous tracking and benchmarking for effectiveness over time.

The guide covers:

- The role of data governance
- How data governance allows you to meet business objectives and regulatory compliance
- How to overcome the challenges impacting effective data governance
- Data governance strategies and how to implement them your organisation
- Building data governance capability
- The benefits of data governance to your organisation

Data governance and AI governance are interconnected, as both foster innovation through the integration of comprehensive technological frameworks and tools. Effective data governance fosters trust, dismantles silos, reduces delays, and automates approval processes. These elements are crucial for the successful implementation of AI governance.

Download the eBook here

AI governance

AI governance involves establishing policies, frameworks, and practices for responsible and compliant AI adoption that integrate with existing governance programmes. This structure ensures compliance with regulatory requirements and international standards while aligning operationally with established IT, data protection, cybersecurity governance, and risk management frameworks.

Key activities include defining responsible AI operating principles, mitigating biases, ensuring explainability, and maintaining safety, privacy, and security. Additionally, AI governance facilitates responsible AI guidelines, AI risk management processes, and a change management plan to support awareness and education, ensuring the responsible use and adoption of AI within an organisation's culture.

Our eBook, Responsible AI: A comprehensive guide to governance, provides an overview of AI governance, policies, frameworks, and practices that should guide AI development at conception and beyond.

The guide covers:

- Implementing AI in your business
- Responsible AI - What does the ethical use of AI mean for your organisation?
- AI and corporate digital responsibility (CDR)
- AI governance and powering responsible AI
- Does AI governance have an impact on innovation?
- What does it take to successfully deploy governance?

Overall, data and AI work together by ensuring data readiness and governance, developing robust AI models and frameworks, and scaling AI solutions through effective data operations and strategic planning.

Download the eBook here

Choosing the right approach

BJSS specialises in selecting the right AI approach to meet your needs — whether leveraging off-the-shelf tools, customising foundational models, developing tailored AI solutions, or any combination of the three.

We deliver intelligent solutions that improve our clients' efficiency and delight their customers, responsibly from idea to production.

Commodity AI

Off-the-shelf AI tools, services, or models that can be quickly leveraged without customisation.

Examples:

Azure AI Foundry
Azure AI Search
ChatGPT

Foundational AI

Commodity AI with customisation, e.g. fine-tuned using new data.

Example:

Azure OpenAI

Applied AI

Custom-developed AI systems specifically tailored to meet the unique requirements of a particular organisation or problem.

Example:

Care Fertility's Temporal Convolutional Neural Network

Practical AI delivery

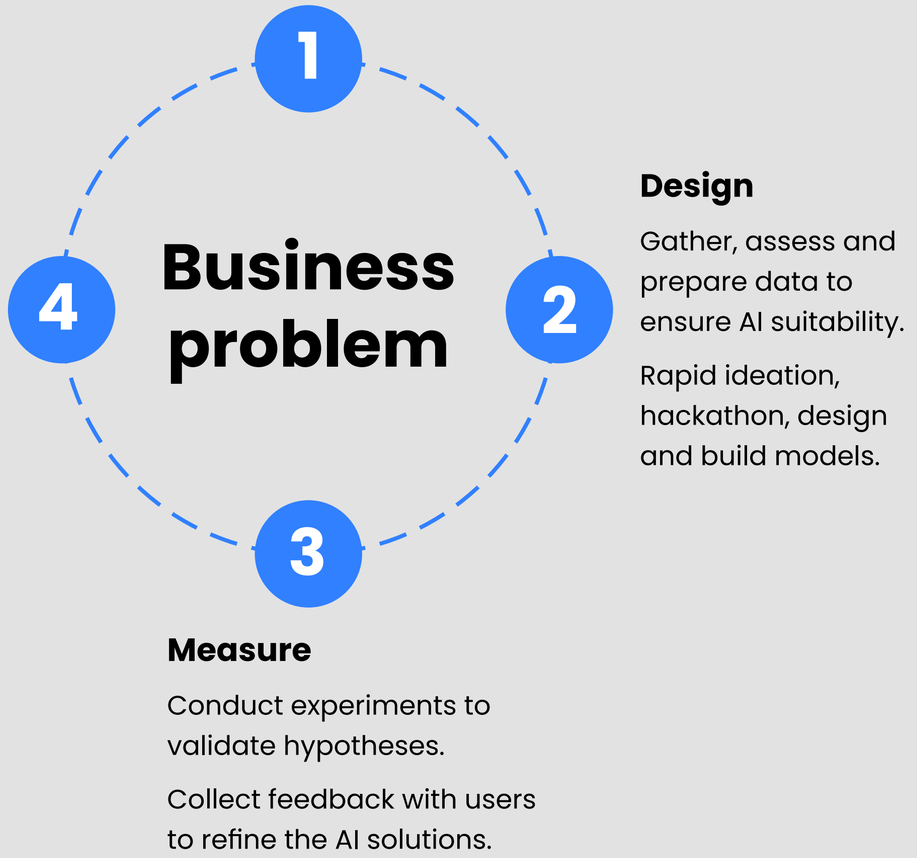
A Lean AI approach uses rapid experimentation and testing to quickly determine feasibility, iteratively converge on user-centred, fit-for-purpose solutions, and deliver practical AI use cases that solve business problems, drive innovation, and accelerate time to value.

BJSS understands the bigger vision, including user needs and business context to drive the desired outcomes and solutions.

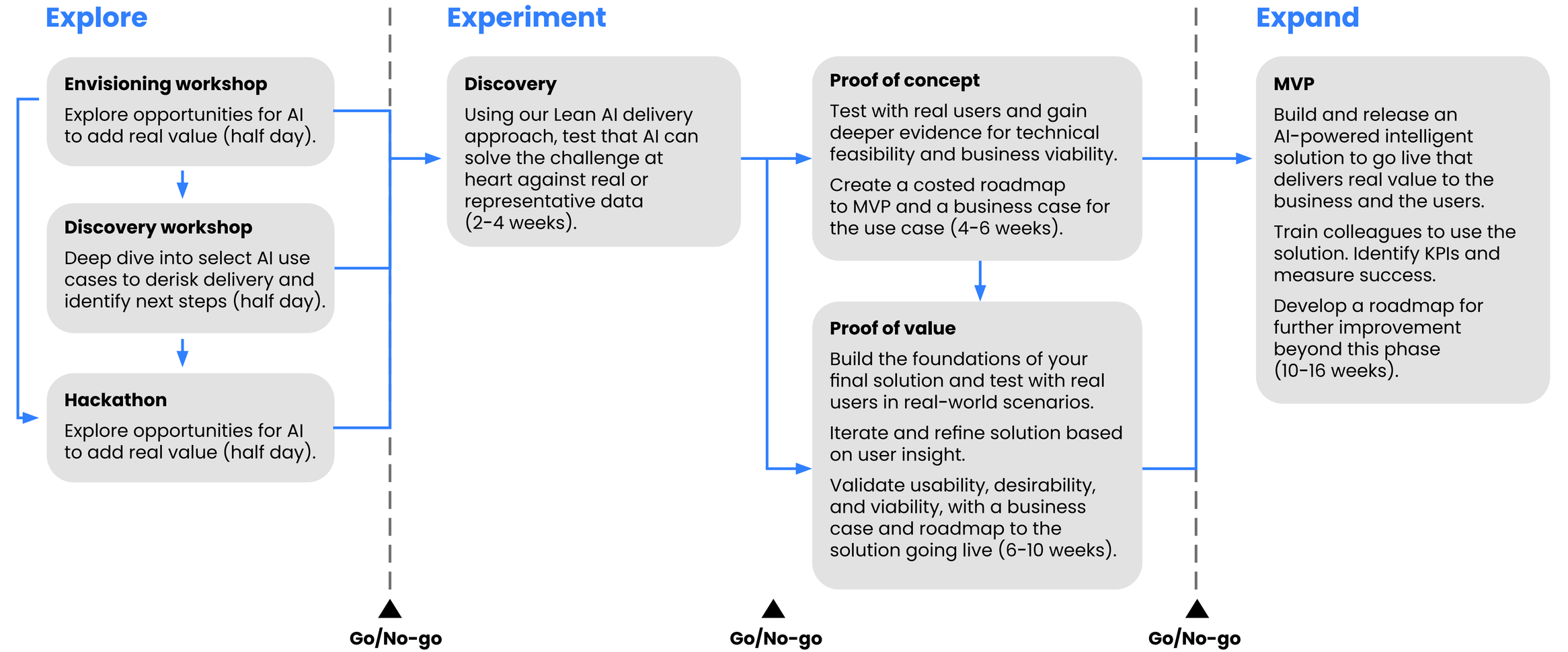
The continuous validation of hypotheses and adjustment of development direct promotes more efficient resource use, reduces the risk of developing irrelevant solutions and increases the likelihood of deploying successful AI projects.

Core benefits:

- Strategic clarity
- Cost efficiency
- Data-driven decisions
- Future readiness
- Faster innovation
- User experience



BJSS AI delivery pathways



Let’s shape your AI success story together

Let BJSS guide you to a future where AI is more than an advantage — it’s the foundation of your success. With end-to-end AI services that help organisations unlock value at every stage, from strategy and implementation to optimisation.

With a focus on helping you achieve operational excellence, deliver exceptional customer experiences, and make smarter decisions, BJSS is here to support you. Whether you’re starting your AI journey or scaling your existing solutions, we’ll help you drive transformation and achieve long-term growth.

Get in touch