



Defy. Deploy. Run.

Sales Intelligence 2.0: Harnessing the Transformative Power of Generative AI

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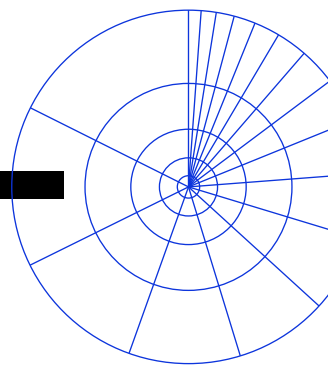


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1 GenAI: Transforming the Sales Intelligence Game

Generative AI (GenAI) is a technology that leverages advanced algorithms to autonomously create and produce new content, ideas, or solutions. It operates on the concept of unsupervised learning, where a model is trained on a large input dataset and uses this training to create (or 'generate') new, similar data. GenAI models have various applications, from creating images, video, text, and music to developing new ideas and strategies. This makes those models an attractive prospect for various industries, including banking.

The benefits of GenAI supersede those of classical machine learning. Where classical machine learning identifies patterns and makes predictions based on past data, GenAI goes a step further. It not just predicts but innovates, creating new data that follows the patterns identified in its training data, providing more flexible and creative solutions. Moreover, GenAI models are capable of understanding and capturing the underlying distribution of the data significantly better than conventional machine learning algorithms, allowing them to generate highly diverse and higher quality output.

GenAI's prowess in Sales Intelligence and Marketing Automation holds significant potential. At the core of Sales Intelligence is the understanding of present and the anticipation of future customer behaviour. The ultimate aim is to consistently meet client needs through tailored product offerings, precisely timed and delivered via the most effective channels. In the data-rich and intricate landscape of the banking industry, GenAI proves to be a valuable ally, playing a substantial role in achieving these goals.

While the creation of highly personalized experiences stands out as the primary application of GenAI in Sales Intelligence, the potential extends far beyond. GenAI finds diverse applications, from supporting database queries and code development to boost campaign implementation efficiency, to more creative endeavours such as generating innovative product or service ideas aligned with market trends and business goals.

Given the transformative impact of this technology, this whitepaper seeks to illustrate the developmental trajectory of GenAI models within Sales Intelligence departments of financial institutions, explain various related use cases, and outline crucial success factors to contemplate.

2 Development Journey of GenAI in Businesses

This chapter will discuss different stages of GenAI adoption in business contexts. It starts with simple-to-use browser-based interaction and moves on to more sophisticated methods of integration. Each segment offers valuable insights into the benefits, challenges, and prerequisites associated with the corresponding stage.

— **Browser Interaction: Users interact with GenAI chatbots on a case-by-case basis**

In its simplest form, GenAI can be employed as an out-of-the-box solution, separate from the corporate IT infrastructure. This kind of setup is hosted externally and interacts with users through a browser-based chatbot.

Using such a solution necessitates minimal technical expertise, making it widely accessible. It allows users to perform basic operations like generating or modifying texts and visuals or receive coding-related advice. The quality of results is intrinsically tied to the prompts used, hence, as users become more accustomed to the technology, expectedly, the quality of outputs will improve.

However, this adoption stage comes with a significant challenge. Users must be vigilant to avoid using sensitive data in the prompts, thus ensuring that no confidential information exits the corporation to the external GenAI solution provider. This necessitates comprehensive user training to maintain data privacy and security. Moreover, the process of extracting responses from the browser-based chatbot interface and transferring them to another application for further processing can be cumbersome.

— **API Interaction: Users provide data via standard interface**

The implementation of an API solution offers an immediate solution that merges seamlessly into the existing corporate landscape. This integration can be achieved through packages available in various programming languages. The benefits of adopting an API solution include expedited results and more efficiently streamlined prompts, which significantly mitigate the variance in the quality of responses. For optimum usage of the API solution, it is a prerequisite to incorporate the API into the currently established workflows.

— **In-house Context Sensitive Interaction: Enterprise GenAI leverages task specific data**

The in-house context sensitive enterprise solution fundamentally enhances the external API solution by retaining data on-premise. This unique corporate resolution taps into internal data, adding essential context to tasks, thereby sharpening its responses.

The substantial advantage from this approach lies in the leverage that confidential, internal data provides to the outcomes. This results in GenAI delivering outputs that are fully tailored and specific to the company's tasks at hand. Furthermore, this methodology profits from thorough integration within end-user workflows, achieved via complete process automation.

However, certain challenges could potentially arise, including the preservation of 'Chinese Walls', particularly when the AI model is utilized across various departments holding sensitive information. Another hurdle to optimally utilizing the in-house domain knowledge could be the quick and thoughtful crafting of prompts that lever the additional company specific context to achieve well-versed and domain specific results to the task at hand.

— **Fully Integrated Interaction: Enterprise GenAI enhances operations by harnessing knowledge across the organization**

The fully integrated enterprise GenAI solution significantly enhances operations by leveraging data from all corners of the corporation. This seamlessly integrated solution ensures that the complete context — including the business, customers, and operations — is considered during output generation and decision-making.

The primary advantage of this approach resides in its ability to adapt to specific tasks, utilizing industry and company-specific language for tailor-made solutions. In addition, the system is designed to make cross-task connections, allowing for holistic problem-solving.

Nevertheless, some challenges arise alongside the benefits. Preparing the model is a sizeable task that requires vector embeddings of all the company's data and suitable databases for this vector data. Enforcing internal data restrictions or 'Chinese walls' also poses a challenge, considering the model's inherent inclination to harness data from all departments, regardless of legal restrictions. Finally, the successful implementation of the GenAI model across different business operations will necessitate a highly skilled team of IT specialists, trained specifically to prepare, maintain, and work with GenAI models.

3 GenAI's Varied Use Cases in Sales Intelligence

In Sales Intelligence, GenAI shines brightest in content creation for personalized client approaches. Yet, upon closer inspection, a multitude of other potential use cases come to light. This chapter explores and clarifies some of the most promising application areas. Figure 1 provides an overview, pinpointing where each development stage delivers the highest marginal value.

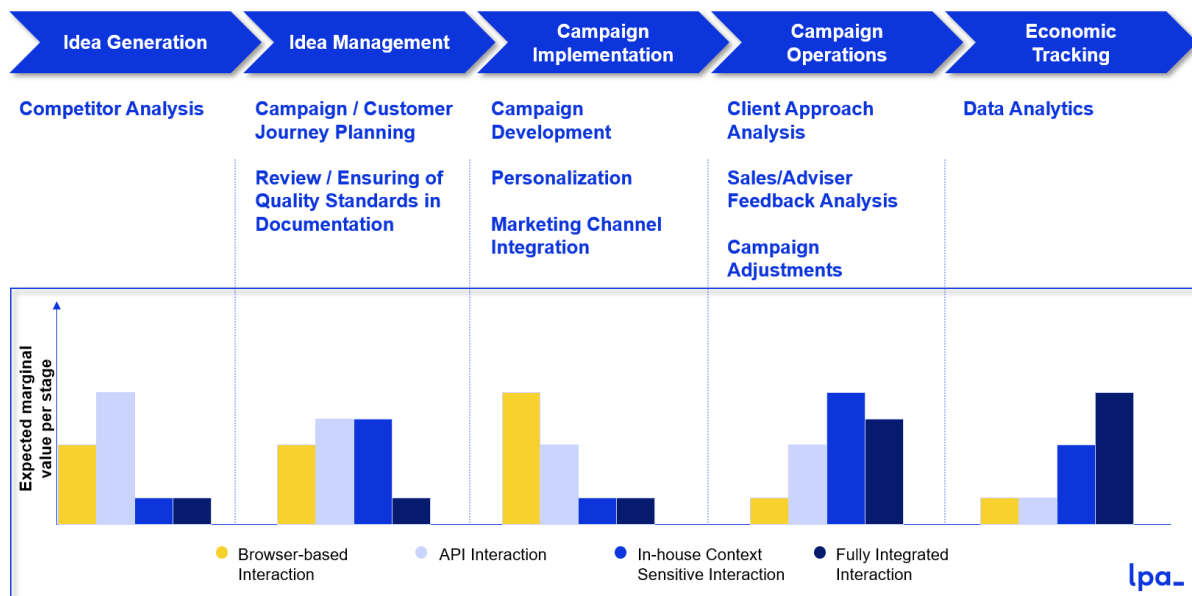


Figure 1. Marginal value of each adoption stage across the Sales Intelligence Lifecycle.

— Idea Generation & Management: Catalysing the creation and conceptual design of innovative marketing ideas

The integration of GenAI into the marketing strategy of a bank can significantly enhance the process of ideation by providing an even more dynamic and data-driven approach. Through regularly monitoring competitor websites, GenAI can systematically analyse vast datasets, extracting nuanced patterns and insights that may go unnoticed through manual examination. By posing questions like, "What emerging trends in security savings plans are prevalent in the market?" or "How can we refine our client approach based on evolving industry standards?" marketers can leverage GenAI to receive comprehensive and timely answers. This proactive approach allows the marketing department to stay ahead of the curve, adapting strategies based on real-time information rather than reactive adjustments. Furthermore, GenAI's capability to sift through competitor reports, industry publications, and media content accelerates the identification of emerging sales trends and key focal points.

In addition, GenAI may act as a strategic ally in shaping targeted campaigns, helping the bank connect with its audience in a more effective manner. For example, when planning a customer journey, marketers can leverage GenAI to help predict which channels a specific target audience is most likely to use, and how best to approach these intended clients. Moreover, it is capable of generating suggestions to address possible client objections. While this could already be done manually, GenAI makes this task significantly less laborious and thus applicable to real-world scenarios with many clients and channels.

In terms of documentation and quality checks, GenAI further showcases its utility. When GenAI understands the context and benefit of already implemented

campaigns, it can assess the innovative potential of new marketing ideas in comparison. This can be an effective means to reduce cannibalization effects between different campaigns that often emerge over time. Moreover, GenAI can play a vital role through rapidly assessing whether a new idea aligns with the company's general standards and best practices. If discrepancies are found, it may readily suggest appropriate adjustments, thereby ensuring the campaign maintains a consistent quality level. This functionality of GenAI not only aids in maintaining standards but also lessens the workload of marketers.

- **Campaign Implementation: Streamlined coding, hyper-personalization, and seamless integration of speech-based channels**

During campaign implementation, GenAI is capable of generating code directly from the campaign documentation, assisting in debugging code and documenting campaigns based on the implemented code in a user-friendly text format.

In addition, GenAI can be an invaluable tool for creating highly personalized content for each marketing channel, such as the text of an email or the teaser in the online banking portal or mobile app. This extends beyond generating unique messaging and visual content; GenAI enables content customization at the individual client level, e.g., by considering unique personality traits.

Moreover, GenAI simplifies the implementation of additional speech-based channels, e.g., chatbots, and their integration into existing Sales Intelligence set-ups. Armed with comprehensive business context, it can ensure precise communication with clients, addressing basic queries and freeing up employees for more value-adding tasks. In scenarios where chatbots operate within logged-in areas, access to individual customer data can enhance the overall customer experience.

- **Campaign Operations: Efficient analysis of client interactions, feedback, and implementation of campaign optimizations**

Analysing client interactions is paramount for the success of Sales Intelligence strategies. In today's digital landscape, text analysis emerges as a crucial tool for pinpointing success factors in customer communication, particularly in contexts like call centres. Text analysis yields valuable outcomes, such as identifying patterns in customer or banking advisers' feedback, which can inform measures for enhancing both customer experiences and overall business results. However, the challenge lies in the labour-intensive nature of these analyses, particularly within large corporations with extensive call centres.

In this scenario, GenAI leverages its advanced technological capabilities to streamline the process. It assists by generating automated summaries of free-text feedback, significantly reducing the time and resources required for analysis. GenAI discerns sentiment and identifies themes and patterns in these textual extracts, enabling Sales Intelligence departments to handle inquiries with context-

specific precision. For instance, marketers can gain insights like "Which campaign within the securities product group received the most positive sentiment based on the aggregate banking advisers' feedback?".

Moreover, GenAI's prowess extends beyond text analysis; it is also crucial for dynamically adjusting campaigns in response to feedback. If equipped with knowledge about the campaign implementation, GenAI can swiftly implement necessary changes across campaigns based on the campaign manager's instructions and in accordance with company-wide guidelines—all through textual inputs. This ensures that marketing campaigns maintain consistency, effectiveness, and alignment with the company's overarching vision and objectives.

— **Economic Tracking: Extracting insights through low-/ no-code application of data analytics**

In monitoring the economic impact of intelligent sales approaches, GenAI plays a crucial role in detecting and resolving data issues like duplicates, missing values, and inconsistencies. It aids in translating textual data queries into code (e.g., SQL or Python) and supports in the debugging process. For sporadic analyses, GenAI can propose suitable visualization options and seamlessly incorporate them into relevant reports. Notably, the latest versions of some renowned LLMs include a code-interpreter functionality, enabling immediate interpretation of code with direct presentation of results (tables, diagrams, etc.) to the user.

— **Implementation in existing MarTech tools**

Several MarTech tools have begun integrating GenAI to cover one or more of the above use cases into their offerings. For instance, SAS, a leading provider of Marketing Automation platforms, exemplifies this integration with a range of use cases.

In the first use case, GenAI is utilized for retargeting clients with personal and product-related content. This involves web tracking within the logged-in area, including links to marketing image material. Content is generated via GenAI based on already consumed image material. This material is then combined with internal information on purchase probabilities, affinities, etc. to produce new, highly personalized content. The relevance here lies in the provision of the right content at the right time and retargeting with material that might not have previously existed in image material at hand (e.g., combining the last viewed products in one picture). Additionally, the refinement of prompts for retargeting can be achieved through A-B-0 tests.

The second use case regards campaign creation where the customer segmentation analysis is done based on basic input on the campaign (e.g., target product etc.). The context can be given via prompts, and the prompt engineering must come directly from the bank or an external consultancy. System data can be

included, and form adjustments can even be made by the user. Currently, only common GenAI models are being used, but all available Long-Short-Term-Memory (LSTM) models could be used potentially.

A third use case is essentially a combination of the first two. The connection of other systems is orchestrated by SAS with multi-channel application being utilized.

In summary, Generative AI provides a comprehensive suite of tools that enhance Sales Intelligence by streamlining the campaign process from idea generation to economic tracking. These capabilities optimize sales efforts, improving outcomes and offering financial institutions a considerable competitive advantage.

4 Unveiling Key Factors for Successful GenAI Deployment

— Data Safety and Users' Effectiveness

To maximize the safety and effectiveness of using GenAI, special requirements for the users need to be considered.

The public availability of some GenAI models allows employees to utilize it on their private devices to aid their corporate tasks. However, this could be potentially harmful if a user provides an excessive amount of contextual information in the prompts. Presently, OpenAI leverages traffic with its GUI to train its future models, a process that leaves data unprotected. Despite the technical barriers installed by a company's IT department to prevent substantial data leaks, awareness of these dangers should be raised amongst users. Therefore, incorporating GenAI into the company's existing data security training or creating a new one to address this issue is vital. In addition, by utilizing enterprise-grade APIs like Azure OpenAI Service, OpenAI API, and possibly Hugging Face, businesses can ensure a high degree of data protection.

While IT security training and enterprise-ready solutions help prevent unintended data breaches, they fall short in ensuring the efficient use of GenAI tools. To maximize GenAI's effectiveness, users should adopt a team leader perspective over a subject expert approach, recognizing the iterative nature required to achieve desired results. Large Language Models (LLMs) are not flawless solutions that produce optimal results on the first attempt; instead, they function more like team members or trainees, allowing room for errors similar to regular colleagues. Users must also discern which tasks GenAI can effectively manage, and which are better suited for alternative solutions.

Increasing the probability of achieving the desired outcome from GenAI involves several novel prompt engineering techniques, which are more an art than science. This entails instructing the model to assume the role of an expert, thinking step by step, iterating the results, using the model to critique previous results, and suggesting a prompt for subsequent iterations. The model can also be used to generate "few-shot" examples or present an outline of the desired format with instructional details to fill placeholders.

— **Hallucination, Context Size and Legal Considerations**

Furthermore, additional challenges arise from the underlying mechanisms of GenAI models. Addressing these challenges effectively is crucial to ensure optimal utilization and derive maximum value.

One such challenge is that of hallucination, where the model confidently states facts that are not accurate. This problem can be effectively addressed by only relying on factual statements by providing the required information in the context. Also, if hallucination is an issue, one should progress to the in-house (stage 3) and fully integrated interaction (stage 4) where factual context is provided.

In addition, context size presents a significant challenge, where preserving extensive context is crucial but currently poses problems. Only a handful of models can manage large context sizes, and their performance tends to decline with increased scale. To tackle this issue, employing a vector database is the solution. This involves converting text or a brief paragraph into a machine-readable vector that captures its meaning. The resulting vector can be efficiently stored and searched in a dedicated database, enriching the prompt context with pertinent paragraphs. Notable examples of this solution include Pinecone, Elastic, Weaviate, FAISS, and Chroma DB.

Lastly, legal risks stemming from intellectual property infringement arise, given that models are frequently trained on copyrighted content. To mitigate these risks, it is prudent to opt for models exclusively utilizing properly licensed data from their creators or content governed by open-source licenses.

5 Strategic Early Adoption for Maximizing Full Potential

The significant potential that Generative AI holds in Sales Intelligence cannot be overlooked. The capabilities of GenAI stand to revolutionize the banking industry's sales and marketing operations in an unprecedented manner. With advantages such as game-changing predictive analysis, targeted advertisement, and hyper-personalization at scale, GenAI can immensely increase a bank's efficiency and profitability.

Nonetheless, there are challenges that GenAI-driven Sales Intelligence faces. These include issues relating to data privacy, security risks, integration of GenAI with existing platforms, upskilling workforce to understand and work with GenAI, and overcoming scepticism about this technology.

Financial institutions that intend to be early adopters and leaders in GenAI technology should consider a systematic and strategic approach that includes a thorough evaluation of their current systems and capabilities. This should be followed by identification of Sales Intelligence areas where GenAI can make a significant impact, investment in necessary infrastructure, and training of staff. Established companies such as larger banks or asset managers should also consider partnering with tech firms to acquire the technical expertise and skill required to operate GenAI systems.

Being a leader in advisory and consultancy with a focused edge on financial services and technology, LPA is uniquely equipped to assist financial institutions during these crucial next steps. We can guide companies on their GenAI journey in several ways - assisting with strategic planning, providing tech evaluation and acquisition support, creating a road map for implementation, and offering targeted training programs for staff. Leveraging our deep know-how of technology and banking processes, we are well poised to help companies overcome the existing challenges, uncover the true potential of GenAI, and ultimately, be at the forefront of the AI revolution in the industry.

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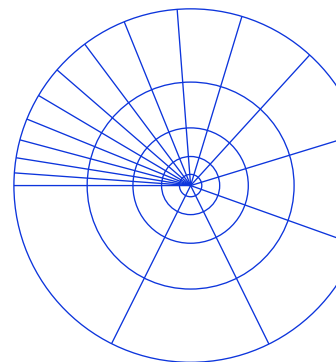
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