Data Utilization Consulting Services Using Large Language Models

Stable and effective use of Large Language Models such as ChatGPT Supporting the advancement of customer support and internal knowledge utilization

In recent years, along with the rapid development of AI technology, data utilization has become an important factor that holds the key to strengthening competitiveness in business. In particular, Large Language Models (LLMs), which became a hot topic with the advent of ChatGPT, have become a powerful tool in effectively supporting corporate data analysis and decision making, thanks to their strong analytical and natural language processing capabilities. However, LLM use requires specialized knowledge and skills in natural language analysis, information security, and governance, and not all companies are in a position to fully utilize them. ABeam Consulting supports the safe and effective use of Large Language Models, the cutting edge of AI technology, with its unique methodology that leverages its accumulated knowledge of AI utilization and business innovation know-how.

Factors hindering corporate business LLM use

In addition to a lack of technical expertise and knowledge of data use, compliance issues such as security, privacy, bias, ethics, and regulation are also impediments to the safe and effective use of LLMs within companies. To avoid compliance issues, there are many cases where LLMs are uniformly prohibited. Unfortunately, this has resulted in the avoidance of AI technologies originally intended to increase the efficiency and effectiveness of business operations. In effect, the difficulty and risk associated with these technologies results in lost opportunities to improve productivity.

Use Cases for LLMs

Decision Support
Discover insights from large volumes of data and use them for decision-making

Customer Support
Analysis of inquiries from customers through email and chat

Knowledge Utilization
Utilize untapped sources of knowledge, such as data stored in paper and PDF formats

Solve problems with "Data Utilization Consulting" service

ABeam Consulting offers one-stop support for your large-scale language model utilization issues, from understanding the current business and data utilization status and holding utilization ideas workshops to considering and building the use and customization of the LLM best suited for your purposes, providing an execution platform, and providing compliance and other governance services for business utilization and operation.

Service Menu	Contents	Main Issues
LLM Utilization assessment	• Use case study for business utilization • New business ideation workshops held • PoC support using prompt engineering, etc.	• Purpose of LLM utilization • Data expected and required for use • Model and method suitability • Security and privacy • Expected effects and assumed costs
Customized LLM Construction	• Planning for company-wide utilization • Organizing operations based on LLMs • Architectural design, internal system integration • Data collection and model-building support • Evaluation, tuning, operation	• Consistency with business objectives • Data format and quantity feasibility • Optimal model building methods and architecture • Hardware and infrastructure alignment • Model accuracy • Model evaluation and improvement plan
AI Governance Consulting	• AI utilization risk analysis • AI governance formulation • Formulating rules and guidelines for AI utilization operations	• Identification of operations to utilize AI and risk identification • Following national and international AI regulations and ethics • AI development policy based on corporate philosophy • Standard workflow to implement policies at a practical level

Three Strengths of Data Utilization Consulting Services Using LLMs

ABeam Consulting can effectively and efficiently execute measures that leverage its knowledge of a wide range of industries and processes, in addition to its knowledge of large-scale language model utilization, through its extensive AI development experience and platform.

Strength 1	• **Extensive knowledge and experience in industry, process, and AI** Utilizing a wealth of industry knowledge and expertise cultivated over many years, our consultants h ave a broad perspective on changes in the external environment surrounding the industry. They promote new business and service planning and application to existing operations using LLMs with comprehensive industry-process-AI expertise.
Strength 2	• **Service delivery based on extensive experience in AI model development** We have accumulated know-how on how to proceed with the business use of LLMs. Based on our extensive experience in AI model development, we have realized business applications by approaching issues unique to LLM utilization while following the conventional AI development process.
Strength 3	• **Quick validation promotion through data analytics infrastructure** We utilize proven data analytics infrastructure for building AI models and validating with real data. Quickly set up the tools, libraries, and pre-configured security environment necessary for verification, reducing lead time.

Approaches to Implementing LLMs

1. At the beginning of this service, the Utilization Assessment phase, we will take a step-by-step approach to LLM implementation. In the first half, we first delve into recognizing issues and defining the expected results of LLM utilization. Then, we describe the policy for achieving the outcomes and the concept of evaluation indices and collect data to conduct a PoC using LLM. In the PoC phase, prompt design and model tuning will be considered based on the expected outcomes defined in the assessment phase.

2. Next, the response with the prompted or tuned model will be verified and evaluated, and the design and tuning will be repeated as necessary. Considerations will be made from the perspective of information security and governance. Even after implementation, we will help ensure effective operation by regularly measuring and analyzing the system's effectiveness and making necessary improvements.

3. In parallel, we will discuss and coordinate with relevant departments on governance and establish a system for safe and reliable operation.

LLM Utilization Assessment			POC		Introduction and Operation	
Issue / Issue goal setting	**Policy consideration**	**Data collection**	**Model tuning**	**Model evaluation**	**Production run**	**Operation**
• Ideation: Consideration of target business / utilization areas • Identifying value offerings • Goal-setting	• planning • model consideration • Policy tuning • Schedule • Target data • Evaluatio: Criteria examination • Service level setting • Accuracy measurement method • Cost effectiveness, etc.	• Preparation of PoC environmentexa • Data preparation • Organize the data you want to use • Digitization study • Baseline evaluation • Performance evaluation on generic models	• Prompt engineering • External data capture • Cooperation with other systems	• Checking output results • Evaluation of the entire service, including linked systems • Reexamination of tuning policy	• Production implementation and transition planning • Other system linkage study • Development and implementation	• Operation policy formulation • Establishment of operational standards and systems • Monitoring