Human Interaction and Emerging Technologies (IHIET 2025), Vol. 197, 2025, 160–170
https://doi.org/10.54941/ahfe1006709

How to Design an Operation-Specific LLM-Based Information System

Sven Hinrichsen, Robin Herbort, Dominik Green, and Benjamin Adrian

Ostwestfalen-Lippe University of Applied Sciences and Arts, Lemgo, 32657, Germany

ABSTRACT

The performance of large language models (LLMs) has improved significantly in recent years, with the result that they are now used in many companies in various industries. However, the design of a company-specific information system involving an LLM is associated with a large number of decisions. This leads to a high level of complexity in the design task. Against this background, companies need a structured approach that methodically supports the planning, development, implementation and long-term maintenance of LLM-based information systems so that domain- and company-specific requirements are taken into account as a result. This article therefore describes a method that supports the design, introduction and maintenance process of an LLM-based information system. The method consists of a process model and a list of design principles, which are also referred to as success factors. The process model developed is based on the proven six-stage REFA planning system. To identify and describe success factors, a systematic literature search was carried out. Based on an analysis of the contents of individual literature sources, success factors for the design of LLM-based information systems were identified. These success factors relate, for example, to the quality of the data provided, data security, user-centered system design and feedback mechanisms for improving information output.

Keywords: Large language model, Information system, Retrieval augmented generation

INTRODUCTION

The performance of large language models (LLMs) has improved considerably in recent years, so that these are now used in many companies in various sectors (Raiaan et al., 2024). Dommermuth et al. (2025), for example, describe how an AI chatbot was developed and introduced in a large industrial company. This bot provides users with trustworthy learning content. Ziche and Apruzzese (2024) explain how an LLM-based information system supports users in process modeling in the construction industry. In the software sector, such information systems, for instance, improve service processes and customer interaction (Buxmann et al., 2024). In the financial sector, for example, LLMs are used to analyze financial reports in order to obtain forecasts for individual key financial figures (Kim et al., 2024).

However, the design of a company-specific information system involving an LLM is associated with a large number of decisions. For example, the

selection of the LLM and the design of the company-specific database have a considerable influence on the quality of the information output of the system (Hafner & Hundertmark, 2024). Moreover, frequent updates of the LLM and the underlying database play a central role in ensuring a high level of efficiency and quality of information output in the long term (Annepaka & Pakray, 2024). Furthermore, LLMs and operational information can be linked via Retrieval-Augmented Generation (RAG). Also, prompt engineering, the design of the system input, has a major impact on the quality of the information generated by the system (Herbort et al., 2025). Further decisions have to be made regarding the design of system interfaces or the protection of personal data (HmbBfDI, 2024).

The large number of decisions involved in the design of LLM-based information systems leads to a high level of complexity in this task. Against this background, companies need a structured approach that methodically supports the planning, development, implementation and continuous maintenance of LLM-based information systems so that, as a result, domain- and company-specific requirements (Chen et al., 2024) are taken into account.

METHODS

The subject of this article is the development of a method that supports the user in developing, introducing and permanently establishing a company-specific LLM-based information system in a company. On the one hand, this method includes a process model which describes the essential development, implementation and further development phases of the information system. On the other hand, success factors are provided to the method user, which give orientation in the design of the information system. The success factors consist of design principles for LLM-based information systems.

To achieve this goal, a four-step procedure is chosen. In the first step, requirements for the method to be developed, consisting of a process model and design principles, are determined. In a second step, existing methods are identified based on a literature search and then evaluated with reference to the requirements established in the first step. In a third step, a process model is developed on the basis of the analysis results of the second step. In a fourth step, success factors for the design of LLM-based information systems are identified and described by means of a systematic literature review, using the PRISMA method (Page et al., 2021).

RESULTS

Identification of Requirements for the Method

A total of five main requirements were identified. Firstly, the method should contain a process model consisting of several steps that logically build on each other. This process model should provide the user with orientation and ensure the effectiveness and efficiency of the task execution. Secondly, the process model should support the entire life cycle of the LLM-based information system by integrating a further development phase even after

system implementation. This continuous updating of the LLM and the database is important so that the system permanently ensures a high quality of information output (Annepaka & Pakray, 2024). Thirdly, the process model or components of the model should be tested in practice. Fourthly, since LLM-based information systems are human-technology systems, the method should ensure a holistic view – including people, technology and organization – since ethical aspects and questions of data protection and usability can also play a role in the context of generative artificial intelligence. Fifthly, the method should support its users by taking into account LLM-specific design principles, also known as success factors.

Identification and Evaluation of Existing Methods

The selection of suitable methods and models for the design, implementation and further development of LLM-based information systems in companies is based on a literature search. Google Scholar and Web of Science were used as databases. As a result, the methods and process models CRISP-DM (Chapman et al., 2000), TDSP (Ericson et al., 2017), PAISE (Hasterok et al., 2021) and Enterprise AI Canvas (Kerzel, 2020) were identified. Models that do not consider LLM-specific content but are used by users to develop an LLM-based information system were also taken into account. The four models and methods were evaluated according to the requirements identified in the first step. The assessment results are shown in Table 1.

Table 1: Evaluation of existing methods.

No.	Requirements	Methods			
		CRISP-DM	TDSP	PAISE	Enterprise AI Canvas
1	Process model	X	X	X	(X)
2	Consideration of the system life cycle	-	(X)	X	-
3	Practical testing and relevance	X	X	(X)	(X)
4	Holistic view	-	-	(X)	(X)
5	LLM-specific design principles	-	(X)	-	-

Legend: X: Requirement fulfilled; (X): Requirement partially fulfilled; - Requirement not fulfilled.

For example, the CRISP-DM approach consists of a process model (requirement 1 fulfilled) that is considered established in operational practice for data-based projects (requirement 3 fulfilled). However, mechanisms for the further development of the information system are missing, so that the entire system life cycle is not taken into account (requirement 2 not fulfilled). This approach also focuses on the technical realization and not on a holistic view of an information system (requirement 4 not fulfilled). Furthermore, the approach does not consider LLM-specific content and design principles (requirement 5 not fulfilled).

Development of a Process Model

The process model developed on the one hand is based on the proven six-step REFA planning system (REFA, 2015) and the process model for selecting a low-code platform (Hinrichsen et al., 2023). On the other hand, it contains

elements of the models outlined in the previous section. Figure 1 shows an overview of the process model (Hinrichsen et al., 2025).

Stage 1	**Content**
Identify and evaluate use cases	1.1 Identify possible use cases 1.2 Describe the use cases 1.3 Assess the economic potential of the use cases ▶ Prioritized list of use cases for LLM-based information systems in the company ▶ Selection of a use case
Stage 2	**Content**
Analyze the initial situation and define the project framework	2.1 Analyze the initial situation 2.2 Define the project objectives 2.3 Delimit the project (within/outside the project framework) 2.4 Describe the process at macro level 2.5 Form the project team and clarify roles 2.6 Draw up the milestone plan ▶ Definition of the project
Stage 3	**Content**
Design LLM-based information system (basic planning)	3.1 Specify the requirements 3.2 Describe the process in detail 3.3 Define the architecture of the LLM-based information system ▶ Basic concept for the LLM-based information system
Stage 4	**Content**
Specify LLM-based information system (detailed planning)	4.1 Carry out make-or-buy decisions on software and infrastructure 4.2 Request offers and estimate costs 4.3 Check the usability and finalize the concept for the LLM-based information system 4.4 Perform an investment calculation ▶ Detailed concept for the LLM-based information system
Stage 5	**Content**
Realize LLM-based information system	5.1 Procure and program software and hardware 5.2 Prepare and provide data for LLM 5.3 Develop and test the prototype 5.4 Train the personnel and provide work documents 5.5 Execute a trial operation ▶ Implementation and trial operation of the information system
Stage 6	**Content**
Use and further develop LLM-based information system	6.1 Carry out performance review and generate final documentation 6.2 Hand over the information system to the process owner 6.3 Introduce a continuous improvement process ▶ Implementation and continuous further development of the system

Figure 1: Process model for the development of an LLM-based information system.

The first stage of the model involves the identification and selection of possible use cases for an LLM-based information system. This stage aims to identify business processes that can be optimized or (partially) automated

through the use of an LLM. When assessing the suitability of individual use cases, criteria such as those discussed by Kourani et al. (2024) should be used (e.g. availability of text-based descriptions, repetitive nature of the process). The result is a list of described and prioritized use cases after passing through the first stage. Prioritization is primarily based on an estimate of the respective economic potential. For the highest prioritized use case, an LLM-based information system is designed in the subsequent stages of the process model.

As the task of designing and introducing an LLM-based information system is highly complex, this task is organized as a project. As part of the second stage of the process model, the project framework is therefore defined in the form of a "project charter". The components of the project charter are shown in Figure 1 (see points 2.1 to 2.6). In the third stage of the process model, the requirements for the information system to be designed are determined in detail. According to Mock et al. (2024), trustworthiness, compliance with regulatory specifications and the protection of sensitive data are fundamental requirements. Based on the requirements, a basic concept is developed in the third stage of the process model, which particularly focuses on a description of the system architecture and thereby addresses the LLM selection, data sources and interfaces, among other things (Moujahid et al., 2024). The fourth stage involves the detailed planning of the LLM-based information system. Make-or-buy decisions are carried out and offers are requested. In addition, the usability of the concept is verified. Finally, an investment calculation has to be executed to ensure the economic viability of the investment project. In the fifth stage, the practical implementation of the LLM-based information system is carried out by procuring resources, performing programming work, preparing data and training employees. The prototype system then has to be tested until it is considered suitable for use. Finally, the sixth stage involves the usage and continuous further development of the system. Further development can be performed, for instance, through the integration of feedback loops (Lee et al., 2023).

Identification and Description of Success Factors

The design of a company-specific information system involving an LLM is accompanied by a large number of decisions in different fields of action. Therefore, success factors for the design of such a system were searched in a systematic literature review. This was done using the PRISMA method (Page et al., 2021). By using the four search strings listed below, a total of 112 literature sources were identified within the Web of Science database.

1. "Key factors" AND "large language models"
2. "Design principles" AND "large language models"
3. "Experiences" AND "large language models" AND "implementation"
4. "Experiences" AND "large language models" AND "integration."

After screening the 112 references, five articles remained in which success factors for the design of LLM-based information systems are described. After reviewing the primary references for the five identified articles and a

subsequent additional literature search, further nine articles relevant to the research question were found. A qualitative content analysis according to Mayring (2000) was carried out on the 14 references through an inductive category formation. Based on the category formation, 20 success factors for the design of LLM-based information systems were identified. The success factors relate, for example, to the quality of the data provided, data security, user-centered system design or feedback mechanisms for improving information output. Table 2 shows an overview of the identified success factors. The configuration of the information system is addressed by success factors 1 through 12, whereas factors 13 to 20 relate to the input and output of information.

Table 2: Success factors for the development of an LLM-based information system.

No.	Success Factor	Explanation	Reference(s)
1	Integration into existing systems	The integration of LLMs into existing IT systems requires careful adaptation to existing processes, data structures and security requirements in order to ensure seamless interactions.	Uygun et al., 2024; Annamaa, 2024; Singh, 2025
2	Integration of domain-specific knowledge and superordinate company-specific guidelines	The design of LLM-based information systems requires cooperation between the relevant specialist department (domain-specific knowledge) and the IT department. In addition, superordinate guidelines are required that describe how such systems have to be designed in the company. These guidelines have to be communicated to users and IT developers via training courses.	Chakladar, 2024; Chen et al., 2024
3	Sufficient IT infrastructure	The availability of a robust computing infrastructure to handle complex LLM operations should be ensured in order to minimize waiting times between information input and output.	Chen & Zacharias, 2024; Petroşanu et al., 2023; Singh, 2025; Chakladar, 2024
4	Tasks-specific use of LLMs	Specifying the tasks that the LLM has to perform can improve the quality of the output. The specification can be made, for example, by integrating own documents with the help of RAG.	Chen & Zacharias, 2024; Annamaa, 2024
5	Selection of the LLM	The selection of the LLM has a major influence on the quality of the information output. The latest version of an LLM should be used.	Herbort et al., 2025; Singh, 2025
6.	Use of RAG as a tool for LLMs	The use of RAG is recommended to avoid hallucinations in the output of an LLM. This method enables the integration of company-specific data, which can increase the relevance and quality of the generated content.	Schelhorn et al., 2024; Herbort et al., 2025
7	Resource-saving use of LLMs	The LLM system should offer a way to transparently show the consequences of use (e.g. energy consumption).	Oelen et al., 2024; Singh, 2025

Continued

Table 2: Continued

No.	Success Factor	Explanation	Reference(s)
8	Database management	Compared to other types of databases, the use of vector databases to provide company data saves both computing time and effort for user queries to the LLM. In addition, it should be possible to expand vector databases dynamically.	Uygun et al., 2024
9	User-centered design of the use of LLMs	User-centered design aims to meet the criteria of software ergonomics. The focus here is on ensuring that the task is easy to understand, the system is quick to use and can be adapted to the available technical possibilities and user requirements.	Chen & Zacharias, 2024; Oelen et al., 2024; Annamaa, 2024
10	Transparent use of LLMs	The use of LLMs in a system should be clearly labeled to inform the user that the output may need to be checked for consistency.	Freire, 2023; Chakladar, 2024
11	Data security in using LLMs	The security of linking company data with language models is of major importance, as this is crucial for user acceptance and confidence in such systems.	Freire, 2023; Oelen et al., 2024
12	Monitoring of the system	After implementation, the LLM has to be updated regularly by integrating new data or updating existing data. By means of monitoring, the performance has to be supervised and the quality of the information output has to be checked.	Singh, 2025
13	Quality of input data	The quality and relevance of entered data (input) is crucial for consistent LLM output. The data includes training data from the LLM, prompt input and data provided using RAG.	Chen & Zacharias, 2024; Herbort et al., 2025; Uygun et al., 2024; Singh, 2025; Chakladar, 2024
14	Prompt engineering	Information quality can be significantly increased by using prompt engineering (method of information input).	Herbort et al., 2025; Chen et al., 2024
15	Indication of the result quality in responses	If the LLM detects uncertainties regarding the quality of the output, it should inform the user that it is advisable to check it.	Chen & Zacharias, 2024
16	Provision of explanations regarding the derivation of results by the LLM	The explanation on how an output of the LLM is derived enables the user to understand the result and thus ensure the reproducibility of the answer.	Chen & Zacharias, 2024; Chiang et al., 2023
17	Provision of verification mechanisms	The LLM system should provide verification and review processes in which experts evaluate outputs.	Chen et al., 2024; Brachman et al., 2024; Lee et al., 2023
18	Request and use of user feedback	The integration of user feedback into the LLM system can increase the information quality of the output.	Oelen et al., 2024; Freire, 2023; Delaflor, 2024; Lee et al., 2023; Chiang et al., 2023
19	Use of LLMs to identify helpful contacts	If a user recognizes an incorrect output generated by an LLM and reports it back to the LLM, the system should automatically create a suggestion for the involvement of expert personnel so that the user can obtain the required information in this way.	Chen & Zacharias, 2024

Continued

Table 2: Continued

No.	Success Factor	Explanation	Reference(s)
20	Error management	The LLM system should provide a way to react to errors. This system response can include a full error correction, a selection of suggested corrections or a new generation of the output.	Oelen et al., 2024

DISCUSSION

Due to the increasing importance of LLM-based information systems, methodical support is required for the design and introduction of these systems. This support is provided on the one hand by the process model presented in this article and on the other hand by a list of success factors that should be considered during system design and implementation. In the next step, the method has to be tested in practice and further developed. The development and introduction of LLM-based information systems is a dynamically evolving field. The list of success factors in this article should therefore regularly be reviewed, updated and enhanced.

ACKNOWLEDGMENT

This article was created as part of the KIPRO project. The project is funded by the Bundeswehr Centre for Digitalization and Technology Research (dtec.bw) with grants from the European Union (NextGenerationEU).

REFERENCES

Annamaa, S. (2024) "Chatbots in Software Release Optimization: Case Study". https://urn.fi/URN:NBN:fi:jyu-202412197913

Annepaka, Y., Pakray, P. (2024) "Large language models: a survey of their development, capabilities, and applications", in: Knowledge and Information Systems – An International Journal, Wu, X., Cook, D., Tao, D. (Eds). Springer Nature. https://doi.org/10.1007/s10115-024-02310-4

Brachman, M., El-Ashry, A., Dugan, C., Geyer, W. (2024) "How Knowledge Workers Use and Want to Use LLMs in an Enterprise Context", in: Extended Abstracts of the CHI Conference on Human Factors in Computing Systems, Association for Computing Machinery, Mueller, F. F., Kyburz, P., William-son, J. R., Sas, C. (Eds), proceedings of the CHI '24: CHI Conference on Human Factors in Computing Systems New York, NY. Association for Computing Machinery, pp. 1–8. https://doi.org/10.1145/3613905.3650841

Buxmann, P., Glauben, A., Hendriks, P. (2024) "Die Nutzung von ChatGPT in Unternehmen: Ein Fallbeispiel zur Neugestaltung von Serviceprozessen." in: HMD – Praxis der Wirtschaftsinformatik Volume 6. https://doi.org/10.1365/s40702-024-01053-8

Chakladar, R. D. (2024) "Best Practices for Implementing Large Language Models at Scale". International Journal of Core Engineering & Management. https://doi.org/10-2024-current-issue/

Chapman, P., Clinton, J., Kerber, R., Khabaza, T., Reinartz, T., Shearer, C., Wirth, R. (2000) "CRISP-DM 1.0 – Step-by-step data mining guide". SPSS Inc.

Chen, B., Zhang, Z., Langrene, N., Zhu, S. (2024) "Unleashing the potentials of prompt engineering in Large Language Models: A comprehensive review". https://doi.org/10.48550/arXiv.2310.14735

Chen, J., Zacharias, J. (2024) "Design Principles for Collaborative Generative AI Systems in Software Development", in: Design Science Research for a Resilient Future, Mandviwalla, M., Söllner, M., Tuunanen, T. (Eds). Volume 14621. Proceedings of the International Conference on Design Science Research in Information Systems and Technology DESRIST. Lecture Notes in Computer Science, Springer, Cham, pp. 341 -354 https://doi.org/10.1007/978-3-031-61175-9_23

Chiang, C. H., Lee, H. Y. (2023) "A Closer Look into Automatic Evaluation Using Large Language Models". https://doi.org/10.48550/arXiv.2310.05657

Delaflor, M., Toxtli, C., Gendron, C., Li, W., Solorzano, C. (2024) "ReActIn: Infusing Human Feedback into Intermediate Prompting Steps of Large Language Model", in: Human Interaction and Emerging Technologies (2024), Ahram, T., Taiar, R. (Eds). Volume 120. Proceedings of the Artificial Intelligence and Future Applications. AHFE International Conference. AHFE Open Access, AHFE International, USA. http://doi.org/10.54941/ahfe1004597

Dommermuth, M., Riesch, L., Guedria. (2025) "Menschenzentrierter KI-Chatbot zur individuellen Bereitstellung vertrauenswürdiger Lerninhalte", in: Arbeit 5.0: Menschzentrierte Innovationen für die Zukunft der Arbeit Kompetenzmodell für die Einführung, Verbreitung und Anwendung von digitalen und KI-gestützten Prozessen und Technologien, Volume 43. Proceedings of Arbeitswissenschaftlichen Kongress 2025, pp. 963–968. https://doi.org/10.61063/FK2025

Ericson, G., Rohm, W. A., Martens, J., Sharkey, K., Casey, C., Harvey, B., Schonning, N. (November 13, 2017) What is the Team Data Science Process? Microsoft Learn Website: https://learn.microsoft.com/en-us/azure/architecture/data-science-process/overview.

Freire, S. K., Foosherian, M., Wang, C., Niforatos, E. (2023) "Harnessing Large Language Models for Cognitive Assistants in Factories", proceedings of the 5th International Conference on Conversational User Interfaces. Association for Computing Machinery, New York, NY. https://doi.org/10.1145/3571884.3604313

Hafner, N., Hundertmark, S. (2024) "Large Language Models im Kundendialog – Chancen, Risiken, Ausblicke", in: Kundendialog Management – Wertstiftende Kundendialoge in Zeiten der digitalen Automation. Hafner, N., Hundertmark, S. (Eds). pp. 239–248. https://doi.org/10.1007/978-3-658-42851-8_16

Hasterok, C., Stompe, J., Pfrommer, J., Usländer, T., Ziehn, J., Weber, M., Riedel, T. (2021) "PAISE® - Das Vorgehensmodell für KI-Engineering". Karlsruhe: Fraunhofer IOSB. http://doi.org/10.24406/publica-fhg-301357

Herbort, R., Green, D., Hinrichsen, S. (2025) "Automatic Creation of Assembly Instructions by Using Retrieval Augmented Generation", in: Intelligent Human Systems Integration (2025): Integrating People and Intelligent Systems, Ahram, T., Karwowski, W., Martino, C., Bucchianico, G. D., Maselli, V. (Eds). Volume 160. Proceedings of the AHFE International Conference. AHFE Open Access, USA. https://doi.org/10.54941/ahfe1005883

Hinrichsen, S., Nikolenko, A., Becker, K., Adrian, B. (2023) "How to select and implement a suitable Low-Code Development Platform", in: Human Systems Engineering and Design (IHSED 2023): Future Trends and Applications, Karwowski, W. et al. (Eds) Volume 112. Proceedings of the IHSED: Future Trends and Applications, AHFE. http://doi.org/10.54941/ahfe1004155

Hinrichsen, S., Herbort, R., Green, D., Adrian, B. (2025) "Vorgehensmodell zur Entwicklung und Implementierung von LLM-basierten Informationssystemen", in: Gesellschaft für Arbeitswissenschaft e. V. (Eds). Volume 71. Proceedings of the Kongress der Gesellschaft für Arbeitswissenschaft. Aachen. GfA-Press pp. 642–647.

HmbBfDI (July 15, 2024) Large Language Models und personenbezogene Daten. Hamburgische Beauftragte für Datenschutz und Informationsfreiheit Website: https://datenschutz-hamburg.de/news/hamburger-thesen-zum-personenbezug-in-large-language-models.

Kerzel, U. (2020) Enterprise AI Canvas Integrating Artificial Intelligence into Business, An International Journal Volume 35, No. 1. https://doi.org/10.1080/08839514.2020.1826146

Kim, A. G., Nikolaev, V. V. (2024) Context-Based Interpretation of Financial Information, Journal of Accounting Research. https://doi.org/10.1111/1475-679X.12593

Kourani, H., Berti, A., Schuster, D., van der Aalst, W. M. P. (2024) "Process Modeling with Large Language Models", in: Enterprise, Business-Process and Information Systems Modeling, van der Aa, H., Bork, D., Schmidt, R., Sturm, A. (Eds). Volume 511. Proceedings of the BPMDS and EMMSAD Conference. Limassol. Springer Nature, pp. 229–244. https://doi.org/10.1007/978-3-031-61007-3

Lee, D., Whang, T., Lee, C., Lim, H. (2023) "Towards Reliable and Fluent Large Language Models: Incorporating Feedback Learning Loops in QA Systems". https://doi.org/10.48550/arXiv.2309.06384

Mayring, P. (2000) "Qualitative Inhaltsanalyse", in: Qualitative Forschung. Ein Handbuch, Flick, U., Kardorff, E.v., Steinke, I. (Eds). Volume 53, pp. 468–475. https://doi.org/10.1007/s11577-001-0131-1

Mock, M., Schmidt, S., Müller, F. B., Görge, R., Schmitz, A., Haedecke, E., Voss, A., Hecker, D., Poretschkin, M. (2024) Vertrauenswürdige KI-Anwendungen mit Foundation-Modellen entwickeln, Fraunhofer IAIS. https://doi.org/10.24406/publica-2475

Moujahid, H., Boutahar, K., El Gannour, O., Saleh, S., Cherradi, B., El Abbassi, A. (2024) "A Scoping Review of Large Language Models: Architecture and Applications". Proceedings of the 2024 4th International Conference on Innovative Research in Applied Science, Engineering and Technology (IRASET), FEZ, Morocco. https://doi.org/10.1109/IRASET60544.2024.10549006

Oelen, A., Auer, S. (2024) "Leveraging Large Language Models for Realizing Truly Intelligent User Interfaces", in: Extended Abstracts of the CHI Conference on Human Factors in Computing Systems, Association for Computing Machinery, Mueller, F. F., Kyburz, P., Williamson, J. R., Sas, C. (Eds). Proceedings of the CHI'24: CHI Conference on Human Factors in Computing Systems New York, NY. Association for Computing Machinery, pp. 1–8. https://doi.org/10.1145/3613905.3650949

Page, M. J. et al. (2021) The PRISMA 2020 statement: An updated guideline for reporting systematic reviews, The BMJ Volume 372, No. 71. https://doi.org/10.1136/bmj.n71

Petroşanu, D., Pîrjan, A., Tăbuşcă, A. (2023) Tracing the Influence of Large Language Models across the Most Impactful Scientific Works, Electronics Volume 12, No. 4957. https://doi.org/10.3390/electronics12244957

Raiaan, M. A. K., Mukta, S. H., Fatema, K., Fahad, N. M., Sakib, S., Mim, M. M. J., Ahmad, J., Ali, M. E., Azam, S. (2024) A Review on Large Language Models: Architectures, Applications, Taxonomies, Open Issues and Challenges, IEEE Access, Volume 12. https://doi.org/10.1109/ACCESS.2024.3365742

REFA (2015) "REFA-Planungssystematik", in: REFA Bundesverband e. V.: Industrial Engineering – Standardmethoden zur Prozesssteigerung und Prozessoptimierung. Volume 2. Darmstadt.

Schelhorn, T. C., Gnewuch, U., Maedche, A. (2024) "Designing a Large Language Model Based Open Data Assistant for Effective Use", in: Design Science Research for a Resilient Future, Mandviwalla, M., Söllner, M., Tuunanen, T. (Eds). Volume 14621. Proceedings of the DESRIST: International Conference on Design Science Research in Information Systems and Technology, Trollhättan. Springer Cham, pp. 398–411. https://doi.org/10.1007/978-3-031-61175-9_27

Singh, S. (2025) "Systems Engineering of Large Language Models for Enterprise Applications". Preprints. https://doi.org/10.20944/preprints202501.0715.v1

Uygun, Y., Momodu, V. (2024) Local large language models to simplify requirement engineering documents in the automotive industry, Production & Manufacturing Research Volume 12, No. 1. https://doi.org/10.1080/21693277.2024.2375296

Ziche, C., Apruzzese, G. (2024) "LLM4PM: A case study on using Large Language Models for Process Modeling in Enterprise Organizations", in: Business Process Management: Blockchain, Robotic Process Automation, Central and Eastern European, Educators and Industry Forum, Di Ciccio, C. et al. (Eds). Volume 527. Proceedings of the BPM Conference 2024, Krakow. Springer Nature, pp. 472–483. https://doi.org/10.1007/978-3-031-70445-1_35