

BA (Hons) Leadership and Management

Skills for the Workplace

Module: Research Methods for Business

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Topic: Investigating the Effectiveness of Advanced Logistic Systems Within Existing Systems to Reduce Operational Complexities and Enhance Service

Reliability- A Case Study of Yodel

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Chapter One: Identification of business problem

1.1 Background of the study

Advanced logistic technology utilises IoT, robotics, blockchain technology and AI to foster the supply chain efficiency, sustainability and resilience (Lagorio et al., 2022). Diverse key innovations encompass real-time tracking through IoT sensors, warehouse robotics, route optimisation and predictive AI for demand forecasting. These kinds of technologies minimise labour costs and develop speed to affirm end-to-end visibility. Yodel is a UK-based parcel carrier organisation that was acquired by InPost in the year 2025 (Yodel, 2026). It was founded in 2010 and delivers millions of parcels across UK postcodes. This business also caters for e-commerce with different services such as next-day delivery and Click & Collect via diverse stores. The organisation mainly operates over 49 stores nationwide, returning and handling parcels for diverse retail sectors.

1.2 Problem statement

Yodel experiences important issues while integrating advanced logistics technologies into its existing operational systems. Despite its advantages, the organisation faces different issues while introducing these technologies in the business. The implementation is complicated due to high costs, legacy system constraints and data accuracy problems (Di Capua et al., 2023). These types of problems highlight operational inefficiencies in uncertainty and may not enhance service reliability. This organisation struggles to fully leverage technological advancements in mitigating complexities and fostering delivery performance. Such context highlights the requirement for a structured analysis of potential solutions.

1.3 Significance of the study

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This study is essential as it examines the process in which the company may effectively adopt various logistics technologies to develop service reliability. Exploring existing systems, diverse issues have been incorporated in this context. It is important to evaluate potential approaches that offer valuable insights into mitigating operational complexities in the business (Ferreira and Reis, 2023). The outcomes will benefit managers to make decisions and contribute to a wider supply chain management knowledge. Offering practical solutions may foster competitiveness and performance in the delivery sector.

Chapter Two: Research Aim and Questions

2.1 Aim

To investigate the effectiveness of advanced logistic technology within existing systems to reduce operational complexities and enhance service reliability at Yodel.

2.2 Objectives

To explore various advanced logistics technologies that Yodel has adopted within its existing systems to mitigate operational complexities and foster service reliability.

To analyse the challenges Yodel has experienced while introducing advanced logistics systems to reduce operational complexities and enhance service reliability within its existing approaches.

To evaluate some strategies that Yodel may adopt to mitigate the issues of advanced logistics technology, operational complexities and foster service reliability within its existing systems.

2.3 Questions

1. What are the various advanced logistics technologies that Yodel has adopted within its existing systems to mitigate operational complexities and foster service reliability?
2. What are the challenges Yodel has experienced while introducing advanced logistics systems to reduce operational complexities and enhance service reliability within its existing approaches?
3. What are some strategies that Yodel may adopt to mitigate the issues of advanced logistics technology, operational complexities and foster service reliability within its existing systems?

Chapter Three: Literature Review

3.1 Various advanced logistics technologies to mitigate operational complexities and foster service reliability

Organisations use various advanced logistics technologies to mitigate operational complexities and develop service reliability. According to Emiliana and Efawati (2025), this context offers real-time parcel tracking systems that foster consumer satisfaction and transparency. Utilising a quantitative approach, route optimisation software develops delivery efficiency through selecting optimal paths. Introducing Automated Guided vehicles and robotics arms enhances productivity and offers secure records of transactions. In addition, automated sorting systems in warehouses assist in speeding up parcel processing and reducing manual errors. Such action offers demand forecasting and maintains the operations effectively. Djaya (2025) has stated that data analytics tools are utilised to allocate resources properly. Evaluating diverse case studies, it is evident that implementing mobile applications for drivers supports communication and navigation. These technologies enable faster deliveries and improve accuracy in a competitive market.

3.2 Challenges while introducing advanced logistics systems to reduce operational complexities and enhance service reliability within its existing approaches

Despite its advantages, different issues have been incorporated while implementing advanced logistics systems. As per Ogunwole et al. (2023), integrating with legacy systems leads to operational disruptions and compatibility issues. Analysing secondary information, high maintenance and implementation costs highlight monetary pressure on the business. There is also a dependency on actual real-time information which may make it difficult to manage operations consistently. On the contrary, Caliskan et al. (2025) have mentioned that resistance to change among staff is another problem that needs significant training. In addition, technical glitches and

system failures may negatively influence the reliability of services. These challenges lead to uncertainty and limit the business's ability to utilise technology in reducing operational complexities.

3.3 Strategies to mitigate the issues of advanced logistics technology, operational complexities and foster service reliability within its existing systems

Determining issues, the company adopt several approaches to mitigate the problems. Findings from Adepoju et al. (2024) suggest that investing in compatible and scalable technology may ease integration with legacy systems. The information has been collected through a combination of surveys and interviews to collect real-time information. Offering comprehensive training programmes can mitigate resistance and develop system usage. The organisation may introduce various data management practices to affirm the reliability of information. On the other side, phased implementation and cost-benefit analysis assist in managing monetary threats. Maintenance and monitoring of regular systems can minimise technical failures. In addition, collaborating with different technology partners may foster operational efficiency and develop service reliability.

3.4 Theoretical Framework

According to Davis et al. (2024), the technology acceptance model is explained as a model that explains the process by which users accept and utilise new technologies. It posits that this context is determined by two factors including Perceived Ease of Use and Perceived usefulness. Aligning this technology helps in managing the advanced technology within the existing systems. Such action offers better insights and organisational settings in the competitive market.

3.5 Gap in literature

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Emiliana and Efawati (2025) have stated various technologies of logistics that help to minimise operational complexities. However, a limited number of systems have been explored by authors. Any specific organisation-related information has not been found in the literature. A limited number of challenges have been incorporated which lacks evidences from specific cases. According to Adepoju et al. (2024), this study also limits the effectiveness of diverse strategies as any practical implications have not been determined.

Chapter Four: Methodology

4.1 Research Philosophy

Taking the help of Saunders' research onion, a set of assumptions or principles, researchers get an approximate idea to conduct the study, and those assumptions and beliefs are known as research philosophy (Saunders et al., 2019). It can answer questions such as the matter of reality, the strategy of gathering knowledge and the method of using them to solve the problem. Mainly, three kinds of philosophy are there, such as interpretivism, positivism and pragmatism. For this research, the first type will be chosen. This philosophy will cooperate to provide meaningful insights with enriched data. It will also allow adjustment at the time of the research process on the basis of findings.

4.2 Research Approach

A comprehensive strategy which can guide in assembling relevant information and analysing it is known as a research approach. This can answer whether the study tests the existing theoretical frameworks or builds a new one. Among the abductive, deductive and inductive approaches of the study, the inductive approach will be selected (Adams, 2007). With the incorporation of this approach, ample flexibility will be gained in the process of the study. It will also be very helpful to capture real-life context. Different patterns will be explored, leading to innovative outcomes to a great extent.

4.3 Research Method

The research method refers to some specific procedures and techniques that are used in collecting and analysing data. There are three methods of the study, and those are the mono method, mixed method and multi method. The mono method will be very supportive in making the complete design of the research straightforward and easier to understand (Crowther and Lancaster, 2009).

Due to this reason, it will be selected in this case and will also assist the researcher to concentrate on deep research through improving consistency.

4.4 Research Strategy

The framework that effectively guides the critics to carry out any study is known as research strategy. It gives clear data about the resources and organises them to get the best outcome at the end of the study. Some strategies are case study, quantitative survey, qualitative interviews, action research and observation. Here, in order to make an in-depth analysis, a case study strategy will be chosen. It will help to make a strategic alignment with the real-world settings with the utmost precision (Cooper and Schindler, 2014). The complicated issues of the real-world business environment, such as operational complications and service reliability, will be described more precisely through such a research strategy.

4.5 Data collection methods

Data collection is a systematic tactic of gathering important data from relevant sources to answer the research questions and achieve the objective of the research. Here, secondary qualitative data will be chosen to ensure the success of this study. This will help to explore various established topics. Sources such as academic journals, books, online accessible databases such as Google Scholar, and industry reports will be utilised to complete this study. Through using them, the researcher will get a scope to access a range of sources.

4.6 Data analysis

The meticulous process of organising the collected data and analysing it to identify relationships and patterns for meaningful insights is known as data analysis. Theme-centred analysis will be chosen here as it is very suitable for the secondary research. While such analysis will be engaged in the study, it will help to organise a large volume of data to a great extent. This will focus on

subjectivity and support to generate new perspectives through the study (Squires, 2023). Furthermore, for its cost-effectiveness, it will be an effective attribute to maintain consistency in results and support various research objectives to a great extent.

4.7 Research Ethics

The researcher has to acknowledge all the sources of secondary data. It will use correct referencing and citation and must not copy the text directly from any sources without citation. It will also maintain the integrity of data and accuracy from reliable and authentic sources. This study will also avoid misinterpretation and bias, which influence the data interpretation significantly. The copyright law of the country has to be maintained while utilising any books and journals, and permission has to be sought while required (Gov.UK, 2026).

4.8 Research reliability and validity

The reliability of this study will be maintained through using credible sources and the incorporation of a systematic thematic analysis process. It will maintain the transparency in the procedures of the research. Depending on a well-documented secondary source, it will ensure the stability of the data (Walliman 2004). On a different note, contextual interpretation of data helps avoid misinterpretation. Adopting the inductive approach will ensure that findings are original and grounded. It will also establish a clear relation between findings and research objectives to a great extent.

Chapter Five: Relevance of Business and Real-world Implications

5.1 Recommendations for the organisation in decision-making

This research will deliver in-depth insights into the impact of advanced logistical systems to overcome various major operational bottlenecks. It will support evidence-based decision-making that can be used in analysing secondary data and real-world insights. The study will enhance the effectiveness of technology such as tracking system and automation. This will also improve the reliability of service through highlighting the gaps in operational practices and current delivery.

5.2 Discussing potential recommendations and innovations that may emerge from the findings

After conducting the findings, the adoption of an AI-driven route optimisation system can emerge. This system can reduce the delivery delay and various inefficiencies in the logistics system (Lukic Vujadinovic et al., 2024). On a different note, strategies like investment in employee training and integration of predictive analysis may emerge with in-depth insight. There is a huge chance that IT infrastructure and system integration can be strengthened to avoid technological disruption.

5.3 Contribution of the project to business research

The study will develop practical knowledge of applying theoretical concepts to real-world problems of business. It will increase the understanding of different methods of qualitative research, namely, the thematic analysis. Interpreting complex business challenges associated with operations and logistics will be another contribution of this study to business research.

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Appendix 1: Gantt Chart

Features	Weeks											
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
Selection of research topic												
Developing the aim and Objectives												
Literature Review												
Selection of methodology for data collection												
Finding and Analysis												
Discussion												
Conclusion and Recommendations												
Final Submission												