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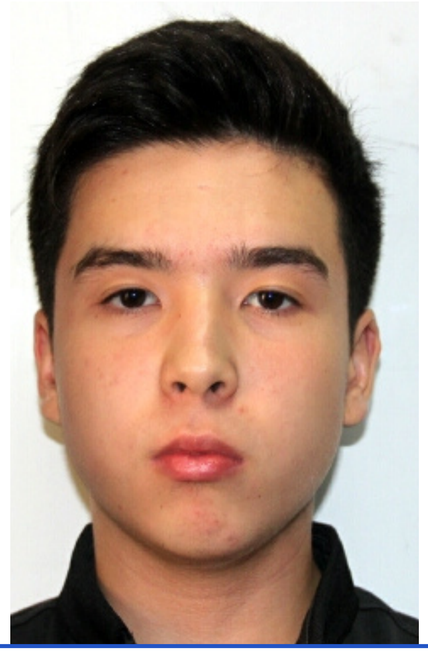

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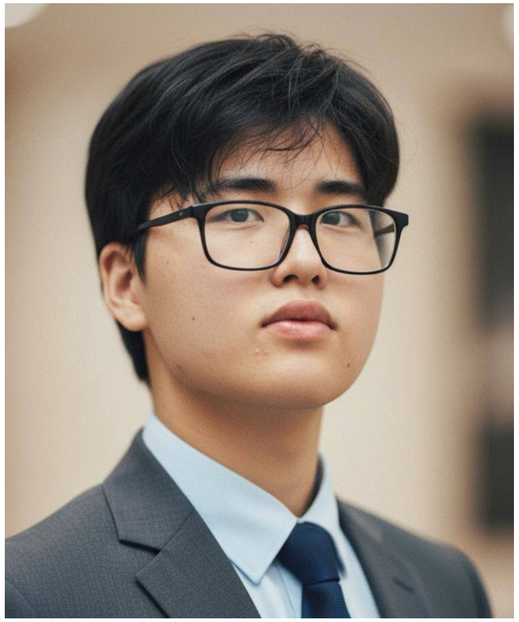

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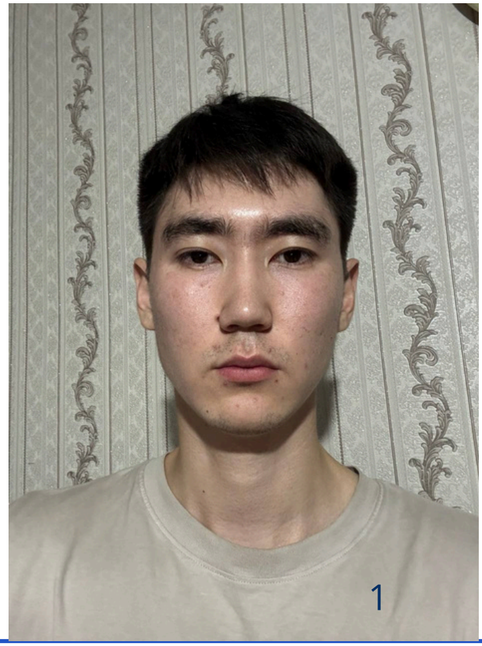

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The title of our study :

Assessing the Impact of ERP Systems on Customer Response Efficiency

What is ERP and why is it important?

- ERP is a system that integrates production, finance, HR, etc. into one platform.
- Centralized data and automation improve resource use and response time.
- About 63% of firms use ERP; cloud ERP enables real-time access.
- 76% of customers expect a response within a day

Background of the Research

- 1990s: ERP grew from MRP II/CIM, used by large firms (SAP, Oracle).
- 2000s: SMEs adopted ERP via cloud (Sage, Microsoft).
- Examples: bakery – inventory & demand; retailer – logistics & orders.
- Benefit: integrated data improves accuracy & speed.

Research Overview

- Objective: Analyze how ERP adoption affects customer response efficiency.
- Key KPIs: response time, order fulfillment lead time, and customer retention rate.
- Study tracks KPI changes before and after ERP–CRM integration.
- Examines both technical (cloud, API, analytics) and organizational (training, process redesign) factors.

Contributions and Implications

Theoretical: Provides an evidence-based explanation of the causal and conditional relationships between ERP adoption and customer-facing performance

Practical: Generates valuable insights that connect technical design with management practices, offering practical guidance for improving customer engagement in developing economies

Contextual: Addresses the gap in research by focusing on how ERP affects customer response efficiency specifically within emerging markets like Kazakhstan

Key Academic and Industry Studies

Zheng & Kim (2023): ERP systems increase customer satisfaction in China.

Huang (2009): ERP improves the efficiency of large companies in the long term.

Zaitar (2009): ERP reduces costs and enhances service quality in Morocco.

Industry data: ERP–CRM integration decreases customer response time by 30–40%.

Comparing Viewpoints

Positive: ERP reduces costs and improves speed.

Negative: small firms see limited benefits.

Conditional: success depends on quality and support.

Human factor: employee engagement is key.

Research Gaps

- Geographical: Few studies in emerging regions (e.g., Central Asia).
- Metric: Little data on ERP impact on service KPIs.
- Integration: Limited research on tech & org factors together.
- Data: Need more focus on data quality and integration effects.

How the Research Fills the Gaps

- Uses a mixed methodology — quantitative KPIs and interviews.
- Measures actual performance indicators before and after ERP implementation.
- Considers the specific context of developing countries (Kazakhstan and Central Asia).
- Analyzes both technical and organizational factors.

Problem Statement

- **Rising Expectations:** Customers expect faster service (e.g., 76% of global clients anticipate a 24-hour response), increasing pressure on businesses.

- **Implementation Barriers:** Companies face significant obstacles, including high costs, technical complications, insufficient staff training, and system integration problems.

- **Effectiveness Gap:** There is a gap between the theoretical benefits of ERP and the actual impact on operational efficiency and customer satisfaction within the local Kazakhstani environment.
- **Uncertainty:** It is unclear which technical and organizational factors are essential for the success of ERP projects in improving customer service

Research Questions

- How does ERP implementation affect response time and order fulfillment across different industries?
- Which technical configurations (cloud, API, AI) produce the best results?
- Which organizational practices (training, data management, process restructuring) are essential for long-term success?

Research Objectives

Study how ERP integration with CRM and organizational factors (training, data quality, process changes) affect these metrics.

Analyze changes in key customer service metrics (response time, first-contact resolution, satisfaction) after ERP implementation.

Develop recommendations to improve ERP use for customer service efficiency in Kazakhstani SMBs.

Study Scope

Focus: ERP systems’ impact on customer service efficiency.

Sectors: Manufacturing, retail, and service industries.

Region: Kazakhstan and wider Central Asia (rising ERP use).

Timeframe: Modern ERP tech — cloud and AI-enabled systems.

Exclusions: Firms without ERP or outdated non-integrated systems.

Hypotheses

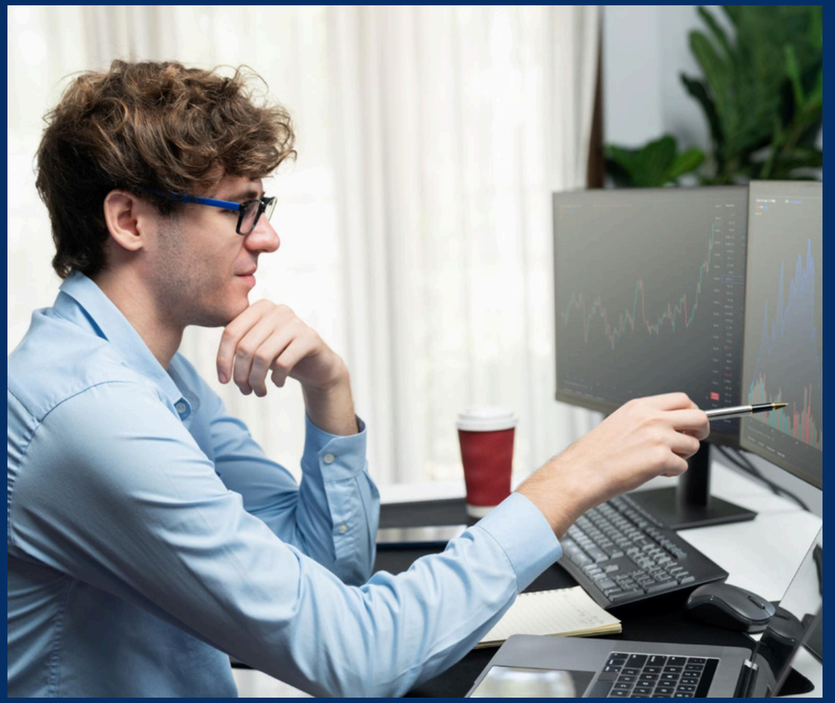
- H1: ERP adoption significantly reduces the time needed to respond to customers.
- H2: Integrating ERP with CRM systems improves the resolution rate of customer issues.
- H3: Cloud-based ERP platforms enable faster and more flexible customer responses.
- H4: Proper training and strong data management increase overall service efficiency.

Conceptual Framework

- Independent Variables**:** ERP implementation parameters, including its integration with CRM, the implementation model (cloud vs. on-premise), process reengineering, and investment in training and data management
- Dependent Variables**:** Customer service performance indicators such as average response time, share of inquiries resolved, customer satisfaction, and customer retention.
- Moderators / Mediators: Factors that may strengthen or weaken the impact, including industry characteristics, company size, and the level of technological infrastructure

Methodology

- Design: Mixed approach (quantitative + qualitative).
- Quantitative: Comparison of KPIs before and after ERP implementation.
- Qualitative: Interviews with IT specialists and customer service staff.
- Rationale: Combining numbers and context provides a complete picture.



Data Collection Methods

In this study will use both surveys and interviews.

Surveys will include short, close-ended questions for IT managers and customer service staff to gather measurable data on response speed, efficiency, and customer satisfaction.

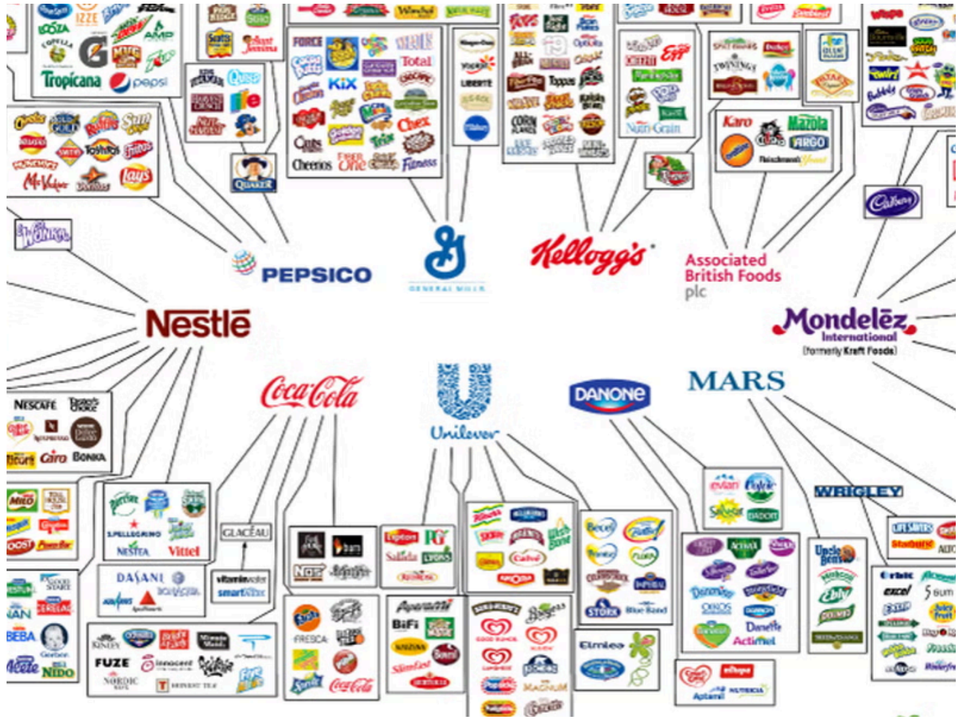
Interviews with project managers and IT specialists will provide deeper insights into the challenges and advantages of ERP implementation.

Data Sources and Plan

- Case Organizations: Several firms (retail, manufacturing, services) with recent ERP implementations.
- Data Collection: Gather pre- and post-ERP performance data to measure changes.
- When & Where: Focus on main business units during ERP go-live periods.
- Participants: IT and customer service teams provide interviews and data access.

Sample Size

- 5–10 companies across various industries and sizes.
- 3–5 interviews per company (~20–30 total participants).
- Thousands of customer interaction data points analyzed.
- Sample size ensures both diversity and feasibility for reliable results.



Data Analysis Techniques

- **Software:** Quantitative data will be analyzed using the Statistical Package for the Social Sciences (SPSS)

- **Statistical Methods:**
  - **Descriptive Statistics:** Frequencies, averages, and standard deviations will be used to summarize respondent demographics and key variables.
  - **Correlation Analysis:** Will be conducted to examine the relationship between specific ERP functions and customer response metrics
  - **Regression Analysis:** Will be used to test the research hypotheses and determine the extent to which ERP implementation improves customer performance

Research Limitations

- Small sample and convenient sampling reduce generalizability.
- Focus on major cities may limit regional representativeness.
- Possible bias from self-reported data.
- Time limitations and external disruptions may affect results.