

Assignment #2
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Research Project

Faculty of Management
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Project title

**The Impact of Artificial Intelligence on the Development of
Administrative Performance in Saudi Government Entities**

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1.4. Research Questions

Based on the research problem and the main objective of this study, the following research questions were formulated to examine the relationship between artificial intelligence and administrative performance in Saudi government entities.

Main Research Question

What is the impact of artificial intelligence on the development of administrative performance in Saudi government entities?

Sub-Research Questions

1. How does intelligent process automation influence operational efficiency in Saudi government entities?
2. What is the effect of AI-supported decision-making on the quality and timeliness of administrative decisions?
3. How does predictive analytics contribute to planning, forecasting, and resource allocation?
4. To what extent does AI-enabled service delivery improve service quality and administrative responsiveness?
5. What is the overall impact of artificial intelligence capabilities on administrative performance in Saudi government entities?

1.5. Research Objectives

The main objective of this study is to assess the impact of artificial intelligence on the development of administrative performance in Saudi government entities.

Specific Objectives

1. To examine the role of intelligent process automation in improving operational efficiency.
2. To evaluate the effect of AI-supported decision-making on administrative decision quality and timeliness.
3. To analyze the contribution of predictive analytics to planning, forecasting, and resource allocation.
4. To investigate the effect of AI-enabled service delivery on service quality and responsiveness.
5. To determine the overall relationship between artificial intelligence capabilities and administrative performance in Saudi government entities.

1.6. Research Hypotheses

Based on the research objectives and previous literature, the following hypotheses are proposed:

H1: Intelligent process automation has a significant positive impact on operational efficiency.

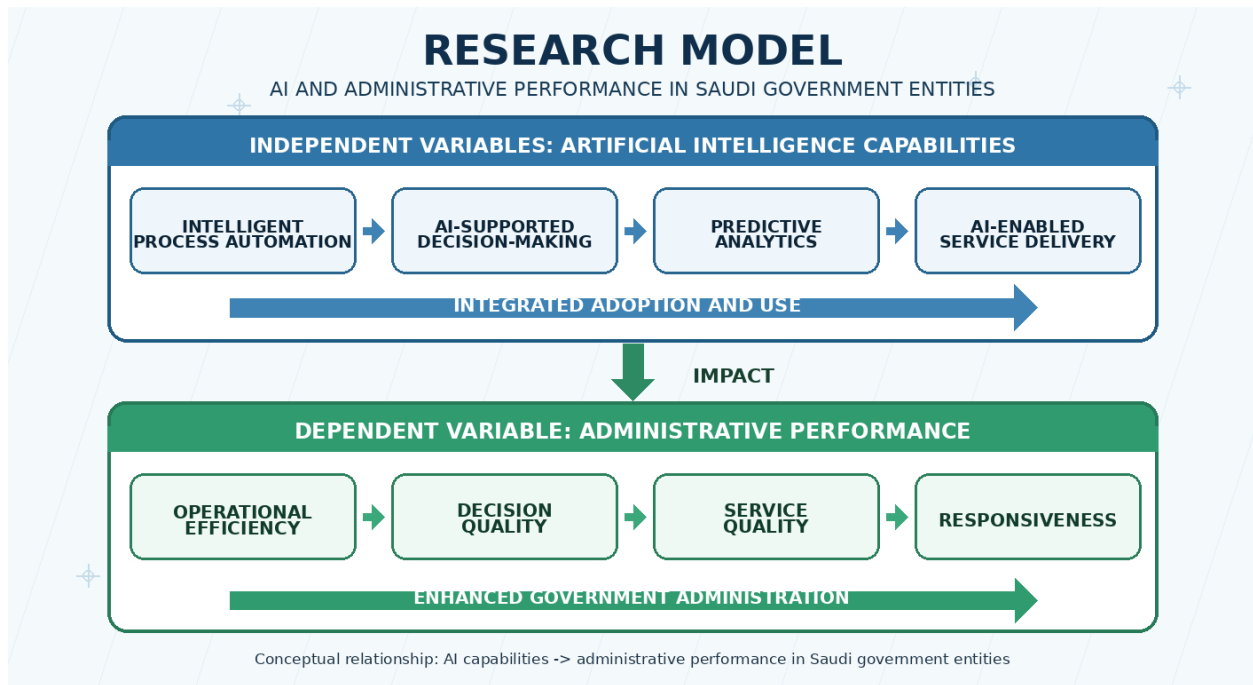
H2: AI-supported decision-making has a significant positive impact on administrative decision quality and timeliness.

H3: Predictive analytics has a significant positive impact on planning, forecasting, and resource allocation.

H4: AI-enabled service delivery has a significant positive impact on service quality and administrative responsiveness.

H5: Artificial intelligence capabilities collectively have a significant positive impact on administrative performance in Saudi government entities.

1.7. Research Model



1.8. Proposed Application Setting and Spatial Scope

The scope of this study will focus on examining the impact of artificial intelligence on the development of administrative performance in Saudi government entities. The study will specifically investigate intelligent process automation, AI-supported decision-making, predictive analytics, and AI-enabled service delivery, and their relationship with operational efficiency, decision quality, service quality, and responsiveness.

From the subject perspective, the research will concentrate on administrative uses of AI rather than technical system design. It will examine how employees and managers perceive the contribution of AI capabilities to daily procedures, managerial decisions, planning activities, resource allocation, and service delivery.

From the population perspective, the study will target administrative and supervisory employees in selected Saudi government entities. These participants are relevant because

they are involved in administrative processes and are positioned to evaluate changes in work speed, decision support, service quality, and organizational responsiveness.

From the time perspective, the study will be conducted during 2026. Data collection and analysis will be completed within the academic project period, and the findings will reflect participants' perceptions and organizational conditions during that timeframe.

From the geographical perspective, the study will be limited to Riyadh, Saudi Arabia. Riyadh is selected because it is the national administrative center and includes a large concentration of ministries, authorities, and other government entities involved in digital transformation and AI adoption.

Overall, the study will be limited to the defined variables, population, location, and timeframe. It will not evaluate the technical accuracy of individual AI models or disclose sensitive operational data. Its purpose is to provide an administrative assessment of how AI capabilities contribute to performance development in the selected government context.

1.9. Expected Research Methodology

This study will adopt a quantitative research approach to examine the impact of artificial intelligence on administrative performance in Saudi government entities. The quantitative method is appropriate because it allows the researcher to measure perceptions of AI use, compare dimensions, test the proposed hypotheses, and estimate the strength and direction of relationships between the study variables using statistical analysis.

The research design will follow a descriptive and analytical approach. The independent variable will be artificial intelligence capabilities, represented by intelligent process automation, AI-supported decision-making, predictive analytics, and AI-enabled service delivery. The dependent variable will be administrative performance, represented by operational efficiency, decision quality and timeliness, service quality, and responsiveness.

Data will be collected through a structured questionnaire developed from relevant literature on AI in government, digital transformation, and administrative performance. The questionnaire will contain demographic questions and multiple items for each study dimension, measured using a five-point Likert scale ranging from strongly disagree to strongly agree. The instrument will be reviewed for content clarity and tested for reliability before the main analysis.

The target population will include administrative and supervisory employees working in selected Saudi government entities in Riyadh. Participants should have sufficient knowledge of their entity's administrative processes or experience with digital and AI-supported systems. A suitable non-probability sampling technique will be used to reach respondents who can provide informed assessments, while the final sample size will be determined according to statistical requirements and access conditions.

After data collection, the responses will be analyzed using appropriate statistical software. Descriptive statistics will summarize respondent characteristics and the level of each study variable. Reliability analysis will assess internal consistency, correlation analysis will examine associations, and multiple regression analysis will test the individual and collective effects of the AI dimensions on administrative performance. Statistical significance will be evaluated at the accepted level of 0.05.

1.10. Proposed Project Plan

This research will be organized into five main chapters in order to present the study in a systematic and logical manner.

Chapter One: Introduction

This chapter will present the research background, research problem, theoretical and practical gaps, research significance, research questions, research objectives, and

hypotheses. It will also include the research model, methodology, scope of the study, and the suggested project structure.

Chapter Two: Literature Review

This chapter will review the concepts of artificial intelligence, AI capabilities in public administration, administrative performance, and digital government. It will discuss relevant theories and previous studies concerning automation, decision support, predictive analytics, service delivery, organizational readiness, skills, governance, and the relationship between AI and administrative outcomes.

Chapter Three: Research Methodology

This chapter will explain the research design, quantitative approach, study population, sampling method, questionnaire development, validity and reliability procedures, ethical considerations, data-collection process, and statistical methods used to test the hypotheses.

Chapter Four: Data Analysis and Results

This chapter will present the characteristics of the respondents, descriptive statistics for the study variables, reliability results, correlation analysis, regression analysis, and hypothesis-testing results. Tables and figures will be used to present the findings clearly.

Chapter Five: Discussion and Conclusion

This chapter will interpret the results in relation to the research questions and previous literature. It will present the main conclusions, recommendations for Saudi government entities, limitations of the study, and suggestions for future research on responsible AI and administrative performance.

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