

# **"An Examination of the Factors Influencing Digital Transformation and e-Government Adoption in the Public Sector: A Case Study of Saudi Arabia's Vision 2030."**

## **Introduction**

This chapter presents the statistical analysis and discussion of the findings derived from the collected data. It begins by providing a profile of the research sample, followed by an assessment of the validity and reliability of the research instruments. Subsequently, it presents descriptive statistics for the key research variables to answer the research questions. The chapter then proceeds to test the hypotheses, connecting the results with the existing literature. It concludes by summarizing the main findings and their implications.

## **Sample Profile (Descriptive Statistics)**

Present the demographic characteristics of your survey respondents. This section provides a clear picture of the sample's composition. Use tables and charts to illustrate the data.

**Gender:** Frequency and percentage distribution of male and female respondents.

**Age:** Frequency and percentage distribution across different age groups (e.g., 20-30, 31-40, etc.).

**Educational Level:** Distribution of respondents based on their highest level of education (e.g., bachelor's, master's, PhD).

**Job Position/Role:** Breakdown of respondents' roles within the public sector (e.g., administrator, manager, IT specialist).

**Years of Experience:** Distribution of respondents based on their years of experience in the public sector.

## **Validity and Reliability Tests**

This section demonstrates the rigor of your research by ensuring the quality of your measurement tools.

**Reliability Analysis:** Use Cronbach's alpha ( $\alpha$ )

**) to assess the internal consistency of your questionnaire scales. A value of  $\alpha > 0.7$**

**is generally considered acceptable. Report the alpha value for each construct (e.g., perceived usefulness, technical infrastructure, etc.) and interpret what it means.**

**Validity Analysis: Discuss the types of validity you assessed.**

**Content Validity: How did experts or a pilot study ensure the questions were relevant and comprehensive?**

**Construct Validity: If you used factor analysis (e.g., Exploratory Factor Analysis or Confirmatory Factor Analysis), present the results to show how the items loaded onto their respective constructs.**

**Descriptive Statistics for Research Variables**

**This part answers your research questions by summarizing the key variables. Use means, standard deviations, and frequency distributions.**

**Factors Influencing Digital Transformation:**

**Technical Infrastructure: Present the mean scores for variables related to the availability and quality of technology.**

**Human Capital: Report the mean scores for factors like employee skills, training, and digital literacy.**

**Leadership and Management Support: Summarize the average scores for leadership commitment and strategic vision.**

**Regulatory Framework: Present the mean scores for questions related to government policies and regulations.**

**e-Government Adoption:**

**Present the mean scores for variables measuring the level of e-government service usage and satisfaction among public sector employees and citizens (if applicable). Use a scale interpretation (e.g., a mean score of 4.5 on a 5-point scale indicates a high level of agreement).**

## **Testing Hypotheses**

**This is the core of your analysis where you test the relationships between your variables. Use inferential statistics.**

**State each hypothesis clearly.**

**Choose the appropriate statistical test:**

**Correlation Analysis (e.g., Pearson's  $r$ ): To test the strength and direction of the linear relationship between variables (e.g., Is there a relationship between leadership support and e-government adoption?).**

**Regression Analysis (e.g., Multiple Linear Regression): To determine which factors are the strongest predictors of e-government adoption. For example, a regression model could test which variables (technical infrastructure, human capital, etc.) significantly influence the level of e-government adoption.**

**Present the results: Include the test statistics, p-values, and an interpretation of whether the null hypothesis is accepted or rejected. For regression, report the R-squared value and the beta coefficients to show the strength and direction of the predictors.**

## **Connect the Results with Literature**

**This section is crucial for demonstrating the academic contribution of your work.**

**Discuss how your findings align with or differ from existing research.**

**If your results support the literature, cite the studies that had similar findings. For example, "The finding that strong leadership is a significant predictor of digital transformation is consistent with the work of [Author, Year]."**

**If your results contradict previous studies, offer possible explanations for the discrepancy. This could be due to the unique context of Saudi Arabia's Vision 2030, the specific public sector entity studied, or the time frame of the research.**

**Explain the implications of your findings within the context of Saudi Arabia's Vision 2030. For instance, discuss how the results on human capital development can inform future training initiatives or**

how findings on technical infrastructure can justify further investment.

### **Conclusion**

Summarize the key findings of the chapter. Reiterate the main results of the descriptive statistics and hypothesis testing. Emphasize the most significant findings and their contribution to the understanding of digital transformation and e-government adoption in the public sector of Saudi Arabia. Avoid introducing new information.

### **References**

Add any new sources cited in this chapter to your reference list. Ensure the formatting is consistent with your chosen citation style (e.g., APA, Harvard).