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The Moderating Role of Generation in the Intention to Adopt Business Intelligence Tools Among Filipino Decision-Makers in SMEs

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Abstract

Business Intelligence (BI) tools are essential in transforming data into actionable insights, aiding decision-making processes in SMEs across various industries. The study aims to fill a knowledge gap by examining generational differences in BI tool adoption intentions among Filipino decision-makers in SMEs. Specifically, it explores how generational differences affect attitudes, subjective norms, and perceived behavioral control regarding BI tool adoption, utilizing the Decomposed Theory of Planned Behavior (DTPB). A total of 111 responses were analyzed in the study. A descriptive analysis was conducted to establish a baseline understanding of Filipino decision-makers across demographics. PLS-SEM via SmartPLS4 was used to analyze the relationships among constructs. The measurement model evaluated reliability and validity using PLSc-SEM Algorithm, while the structural model tested the hypothesized relationships using PLSc-SEM Bootstrapping. The PLS-SEM analysis validated eight out of 15 hypotheses. It was found that generation moderates the relationship between Attitude towards BI Usage and the Intention to Adopt BI, but not the relationships involving Subjective Norms and Perceived Behavioral Control. The R-squared value for BI adoption intention was 0.887, indicating a significant influence of the independent variables. Generational direct effects were significant, showing a positive impact on BI adoption intention.

Keywords
Business Intelligence, Decomposed Theory of Planned Behavior, Moderation Effect Analysis, PLS-SEM

1. Introduction

Business Intelligence (BI) serves as a transformative framework that aggregates, converts, and presents information into actionable insights from various sources, thereby aiding the organizational decision-making processes navigating complex business scenarios (Nofal and Yusof, 2013; Singh and Samalia, 2014). The significance of BI within SMEs, particularly in wholesale and retail trade, service and manufacturing industry, is underscored by its role in providing scientific data on inventory levels, supply chain movements, consumer demand, and sales, all of which are crucial for making informed marketing and procurement decisions. The continuous development in the analytics of SMEs necessitates BI tools to effectively gather, measure, and report on the data generated in order to ensure the competitiveness and agility of the organization (Dhavale and Budhkar, 2019).

The adoption of BI emerges as a foundation in modern organizational innovation, promoting the dissemination of knowledge and decision-making processes (Heang and Mohan, 2017). Across industries and functions, BI tools are essential for decision-makers seeking up-to-date metrics on business performance, highlighting the need for BI adoption in current business operations (Dhavale and Budhkar, 2019). However, the success of BI implementation often hinges not only on organizational factors but also on individual characteristics and contextual influences. While numerous studies have explored organizational and technological factors shaping the intention to adopt BI (Owusu, 2017; Lautenbach et al. 2017), there is a knowledge gap in the literature regarding the role of generation in this process, highlighting the need for research that explores how generational differences shape the intention to adopt BI among decision-makers. While studies suggest that older generations may exhibit slower adoption rates of new technologies compared to younger generations, the intention of many elderly individuals to learn presents an opportunity to explore the generational dynamics within the domain of BI adoption intention (De Guzman and Diño, 2020; Heinz, et al., 2013). Moreover, there is a population gap in existing studies, as many of them have been conducted in locations with different socio-cultural contexts than the Philippines (Al-edenat and Alhawamdeh, 2022; Al AQasrawi and Alafi, 2022). Given that the Philippines ranks first in digital illiteracy (Abarca, 2023), with different socio-economic and technological landscapes, the results of existing studies may not necessarily generalize to the Filipino context. This necessitates an examination of the results of the existing studies in a Filipino setting.

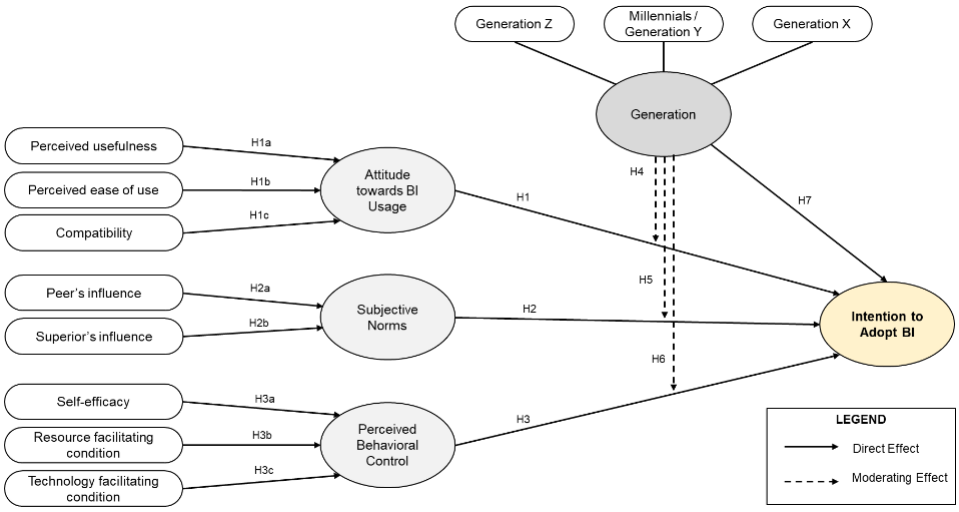

Figure 1. Conceptual Framework of the Study

Figure 1 presents the conceptual framework of the study, exploring the factors influencing the behavioral intention of Filipino decision-makers in SMEs to adopt Business Intelligence (BI) tools, drawing from the Decomposed Theory of Planned Behavior (DTPB) formulated by Taylor and Todd (1995), which emphasizes attitudes, subjective norms, and perceived behavioral control (Hou, 2013). This theory was selected over other well-known models, such as the Technology Acceptance Model (TAM) (Hou, 2013; Alshibly, 2020; Hou, 2018; Alsibhawi et al. 2023; Sandema-Sombe, 2019; Ahmed, 2021), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Alsibhawi et al., 2023; Cabrera-Sánchez and Villarejo-Ramos, 2020; Grublješič, 2019; Vasudeva, 2023; Cabrera-Sánchez and Villarejo-Ramos, 2019), and the Technology-Organization-Environment (TOE) framework (Lautenbach et al. 2017;

Bany Mohammad et al. 2022; Mavutha et al. 2023; Bhatiasevi and Naglis, 2018; Simon and Suarez, 2022) because of its superior explanatory and predictive power (Hou, 2013; Kanimozhi and Selvarani, 2019; Ali et al. 2021).

The study also examines the moderating role of generational differences (Generation X, Y, and Z) in adopting BI, recognizing that generational differences in upbringing, values, and work styles may influence this intention (De Guzman and Diño, 2020; Vasudeva, 2023).

1.1 Objectives

The primary goal of the study is to examine the moderating role of generation in the intention to adopt Business Intelligence (BI) tools among Filipino decision-makers in SMEs through the use of Partial Least Squares Structural Equation Modeling. Specifically, the study aims to answer the following questions:

1. What is the demographic profile of the respondents in terms of gender, generation, company size, and industry type?
2. How is the intention to adopt BI among Filipino decision-makers in SMEs influenced by the attitude towards BI usage, subjective norms, and perceived behavioral control?
3. How are the sub-variables under attitude towards BI usage (i.e., perceived usefulness, perceived ease of use, and compatibility), subjective norms (i.e., peer's influence and superior's influence), and perceived behavioral control (i.e., self-efficacy, resource facilitating condition, and technology facilitating condition) interrelated?
4. How does generation, as a moderating variable, influence the intention to adopt BI among Filipino decision-makers in SMEs?

Along with the research questions, this research aims to test the following hypotheses:

- H1: Attitude towards BI Usage positively affects Intention to Adopt BI.
    - H1a: Perceived usefulness positively affects the Attitude towards BI Usage.
    - H1b: Perceived ease of use positively affects the Attitude towards BI Usage.
    - H1c: Compatibility positively affects the Attitude towards BI Usage.
- H2: Subjective norms positively affect Intention to Adopt BI.
    - H2a: Peer's influence positively affects Subjective norms.
    - H2b: Superiors' influence positively affects Subjective norms.
- H3: Perceived Behavioral Control positively affects Intention to Adopt BI.
    - H3a: Self-efficacy positively affects Perceived Behavioral Control.
    - H3b: Resource facilitating condition positively affects Perceived Behavioral Control.
    - H3c: Technology facilitating condition positively affects Perceived Behavioral Control.
- H4: The positive relationship between Attitude towards BI Usage and Intention to Adopt BI is moderated by Generation.
- H5: The positive relationship between Subjective norms and Intention to Adopt BI is moderated by Generation.
- H6: The positive relationship between Perceived Behavioral Control and Intention to Adopt BI is moderated by Generation.
- H7: Generation positively affects Intention to Adopt BI.

2. Literature Review

The idea of Business Intelligence (BI) emerged from the 1950s, evolving from a technology known as decision support systems (DSS) to come up with decisions that would help them gain competitive advantage. Quick and proper decision-making is one of the competitive advantages of organizations where a decision-maker must need the relevant data in order to decide appropriately when and where necessary at all organizational levels, i.e., strategic, tactical, and operational levels (Heang and Mohan, 2017). In recent years, BI has significantly strengthened due to the advancements in technology, resulting in better storage capacity for data collection and improved electronic access of information, serving as a foundation for intelligent practices (Caseiro and Coelho, 2018). Business Intelligence tools are necessary for businesses to succeed in today's global markets (Dhavale and Budhkar, 2019). It accounts for the largest share of global business investment in information technology as discussed in the study of Ransbotham and Kiron (2017) as cited in Chen and Lin (2020). In the Philippines, there is an increasing demand for data-driven

decision-making and the companies are increasingly looking for BI software that can provide them with real-time data analysis.

Rapid technological advancements have reshaped customer behavior and introduced new opportunities and competition, emphasizing the need for organizations to continuously enhance their competitive advantage through innovation (Tamesberger, 2023; Winadi et al., 2018). Despite this, the event of a multi-generational workforce within organizations has been often excluded in existing studies (Yoon et al., 2017). Neglecting generational differences can decrease efficiency within a company and potentially result in higher employee turnover rates (Lewis and Wescott, 2017). Recognizing generations as dynamic constructs allows companies to better understand societal patterns and advancements, reducing complexity and aiding in effective categorization of generations and their characteristics (Tamesberger, 2023). Technology is one of the areas where the generations differ and have challenges, especially in the adaptation of newer technology (Fredericks, 2018). Initially, studies revealed that older generations exhibit slower adoption rates of new technologies compared to younger generations. However, some studies challenge this notion as there is no consistent evidence suggesting that the widespread availability of technology such as computers, smartphones, and tablets, have likely bridged the technological gap between generations (Amayah and Gedro, 2014). However, there is the need to study on how generations adapt to specific technologies such as BI tools as some technologies are easy to use while others are complex (De Guzman and Diño, 2020). It is important to strategically implement technology to reap its benefits and foster effective and productive organizations.

3. Methods

3.1 Research Design

The study aimed to explore the moderating effect of generational differences on the intention to adopt Business Intelligence (BI) tools among Filipino decision-makers in Small and Medium Enterprises (SMEs), using the Decomposed Theory of Planned Behavior (DTPB) as the theoretical framework. DTPB focuses on three key variables: attitude towards BI usage, subjective norms, and perceived behavioral control. A correlational research design was employed to assess how generational differences influenced BI adoption intention among Filipino SME decision-makers without manipulating variables.

The study used a quantitative approach to investigate this moderating role, incorporating descriptive statistics to provide a baseline understanding of the decision-makers. Inferential statistical analysis, primarily using Partial Least Squares Structural Equation Modeling (PLS-SEM), was then utilized to draw conclusions about the larger population of Filipino SME decision-makers, allowing for the testing of hypotheses and analysis of the relationships between variables.

3.2 Research Respondents

The study employed the 10-times rule method to determine the required sample size, a technique commonly used in Partial Least Squares Structural Equation Modeling (PLS-SEM). According to Hair et al. (2021), the sample size should be at least 10 times the largest number of formative indicators used to measure a single construct. In this study, the largest number of formative indicators was five, setting the minimum sample size at 50 respondents.

Table 1. Demographic Profile of the Respondents (n=111)

Categories	Frequency	%
Gender		
Male	48	43%
Female	63	57%
Generation		
Generation X (1965-1980)	26	23%
Generation Y (1981-1995)	48	43%
Generation Z (1996-2012)	37	33%
Company Size		
Small (Asset Size of Php3,000,001 – Php15,000,000)	51	46%
Medium (Asset Size of Php15,000,001 – Php100,000,000)	60	54%
Type of Industry		
Wholesale and Retail Trade	35	32%
Service	51	46%
Manufacturing	25	23%

The researchers initially gathered 128 responses out of 145 distributed surveys, achieving an 88% response rate. Of these, 116 responses were complete and valid. After screening for outliers and disqualifying incomplete or invalid responses, the final sample size was 111 respondents, ensuring data quality and alignment with the study's requirements. The profile of the respondents by their demographics is presented in Table 1.

3.3 Research Instruments

The research instrument employed in this study is a modified standardized questionnaire designed to gather comprehensive data on the factors that influence BI adoption and the moderating role of generation on the intent to adopt BI. The survey questionnaire scale aims to measure the intention of Filipino decision-makers to adopt BI, influenced by these variables (Attitude towards BI usage, Subjective Norms, and Perceived Behavioral Control). The survey questionnaire was divided into four main sections: (1) Informed Consent Agreement, (2) Qualifier Questions, (3) Demographic Profile of the Respondents, and (4) Standardized Scale. Additionally, for the convenience of the respondents as well as the researchers, the data collection was done through Google Forms and physical questionnaires which were distributed via email and office to the participating respondents. Part 4 was composed of sixty (60) total indicator items with five (5) indicator items per construct, particularly the main variables (i.e., Attitude towards BI usage, Subjective Norms and Perceived Behavioral Control), its sub-variables (i.e., Perceived Usefulness, Perceived Ease of Use, Compatibility, Peer's Influence, Superior's Influence, Self-Efficacy, Resource Facilitating Condition and Technology Facilitating Condition), and Intention to Adopt BI. The constructs were measured using a 7-point Likert scale.

3.4 Research Procedures

The researchers gathered information from various government agencies for their target respondents and administered the questionnaire using purposive sampling. A descriptive analysis compared respondent demographics, utilizing Likert scales (1=strongly disagree; 7=strongly agree) to calculate response frequencies and determine the distribution of opinions across demographic groups. Median scores were calculated to assess overall stances per construct.

To evaluate relationships among constructs and test hypotheses, PLS-SEM was employed using SmartPLS4 due to normality concerns with the data. The analysis followed a two-stage process: the first stage involved the measurement model, assessing internal consistency reliability (Cronbach's alpha and composite reliability), convergent validity (factor/outer loadings and AVE values), and discriminant validity (cross-loadings, Fornell-Larcker criterion, and HTMT ratio).

The second stage, the structural model examined hypothesized relationships using path coefficients, standard deviation, t-statistics, and p-values, along with the model's predictive power (R-square) and effect size (f-square). These calculations used PLSc-SEM Bootstrapping with 5,000 subsamples, following Hair et al. (2016) recommendations.

4. Results and Discussion

4.1 Descriptive Analysis

The analysis revealed that Filipino decision-makers generally have positive perceptions of Business Intelligence (BI) tools across several constructs. Their moderately positive attitude toward BI usage indicates that they see these tools as beneficial for their work and are likely inclined to adopt them in their decision-making processes. Moreover, Filipino decision-makers perceive moderate levels of influence from peers, superiors, and subjective norms regarding BI adoption. Although these influences are not strongly persuasive, they collectively play a discernible role in shaping attitudes and behaviors toward BI implementation among Filipino decision-makers.

In addition, Filipino decision-makers generally possess a moderate level of confidence in their ability to effectively utilize BI tools. While their assurance is not overwhelmingly high, this level of self-efficacy reflects a reasonable belief in their capacity to navigate and employ BI technologies. This finding highlights a foundational confidence among Filipino decision-makers that could be further strengthened through targeted training and support initiatives. Likely, decision-makers perceive adequate resources available to support the use of BI tools in their professional environments. This positive perception is crucial for the successful adoption and utilization of BI initiatives. Moreover, Filipino decision-makers generally perceive favorable conditions regarding the technological aspects of implementing BI tools. This suggests that they acknowledge the compatibility and ease of integration of BI technology with existing tools and software, reflecting a positive outlook on technological facilitators for BI adoption. Additionally, decision-makers feel a moderate level of control over their ability to effectively adopt and utilize BI. This reflects a sense of confidence and perceived capability in navigating BI tools to support their decision-making processes. Finally, with Intention to Adopt BI, Filipino decision-makers are significantly inclined to embrace and implement BI tools, highlighting a proactive willingness to integrate these technologies into their operational strategies. In the comparative analysis of the constructs across generation, the younger generations (Y and Z) expressed a stronger intention to adopt BI systems compared to Generation X who have a neutral stance.

4.2 Internal Consistency Reliability

The initial PLSc-SEM Algorithm run revealed acceptable Cronbach's alpha values for all constructs; however, composite reliability values ranged from 0.917 to 0.974, exceeding 0.95. To resolve this, indicators with semantic similarities were systematically removed until further deletions resulted in minimal changes to the composite reliability values. The indicators deleted included PU3, PU4, PEOU3, PEOU4, COM2, COM5, ATU3, ATU4, PI3, PI4, PI5, SI3, SI4, SI5, SN3, SN4, SE1, SE2, RFC1, RFC2, TFC4, TFC5, PBC1, PBC2, IABI4, and IABI5, leading to a revised measurement model presented in Figure 2. Final results indicated that Cronbach's alpha values ranged from 0.892 to 0.958, while composite reliability ranged from 0.899 to 0.960. With all constructs achieving a minimum Cronbach's alpha of 0.7 and the majority of composite reliability values within the recommended range, the internal consistency reliability for the measurement model is established.

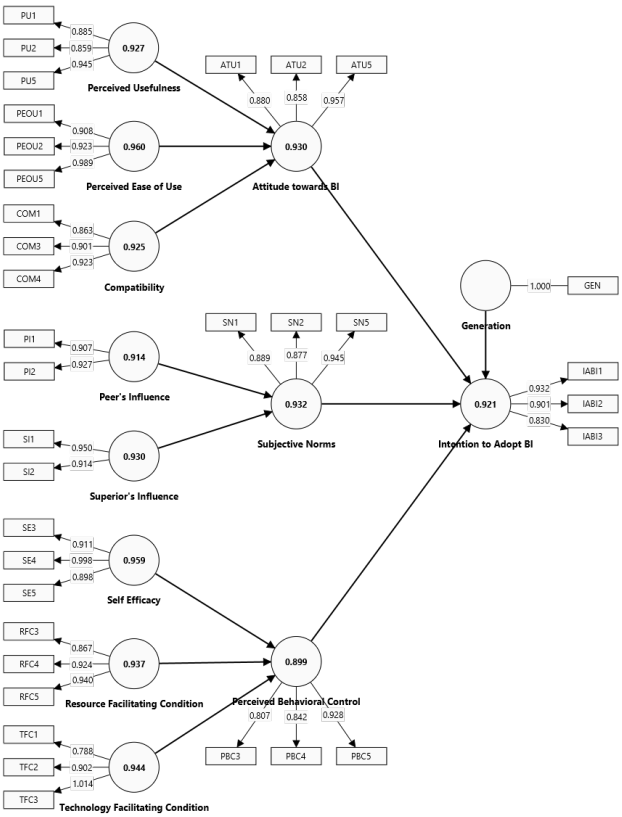

Figure 2. Revised measurement model of the study

4.3 Convergent Validity

The factor/outer loadings all surpass the recommended minimum value of 0.708, with most of the indicators exhibiting loadings beyond 0.85. Additionally, the AVE values of the constructs are above 0.5, all ranging between 0.740 to 0.885. Considering that both the factor/outer loadings and AVE meet their respective required values, convergent validity of the measurement model is affirmed.

4.4 Discriminant Validity

Traditionally, the assessment of discriminant validity relied on two metrics: cross-loadings and the Fornell-Larcker criterion. As suggested by Hair et al. (2016), the indicator's outer loading on the associated construct should be higher than any cross-loading to affirm discriminant validity. To establish discriminant validity, the square root of AVE should be greater than any other correlation for Fornell-Larcker criterion (Hair, 2016). The results of the study revealed that all indicators exhibit higher values on their intended constructs compared with other constructs.

Despite these findings, Henseler et al. (2015) argue that both cross-loadings and the Fornell-Larcker criterion can be unreliable for assessing discriminant validity, suggesting the heterotrait-monotrait ratio (HTMT) as an alternative, which compares the average correlations of indicators between different constructs (heterotrait) to those of indicators within the same construct (monotrait). Results show that all values are below the 0.90 threshold. With the cross-loadings, Fornell-Larcker criterion, and HTMT meeting their individual criteria, the discriminant validity for the measurement model is established.

4.5 Inner Model Collinearity Assessment

Following the measurement model assessment is the evaluation of the structural model, including the inner model collinearity, relationships among the constructs under study, and the explanatory and the effect size of the model. Figure 3 illustrates the structural model of the study alongside the results from the PLSc-SEM Bootstrapping run. The

inner model values represent the path coefficients and p-values, while the R-square values for each construct are also provided.

To assess multicollinearity, the Variance Inflation Factor (VIF) is used, where VIF values greater than 5 indicate critical levels of collinearity (Hair et al., 2016). The results show that VIF values for all paths are below 5.0, indicating a low risk of multicollinearity among these independent variables. Particularly, all paths leading to the Intention to Adopt BI construct have VIF values below 3.3, which is considered safe (Kock, 2017).

4.6 Direct Relationships

H1a evaluates whether the PU significantly and positively affects the ATU. The results reveal that PU has a significant positive impact on ATU with a path coefficient of 0.490 ($p = 0.001$). This finding supports the hypothesis that individuals who perceive a BI tool as useful are more likely to develop a positive attitude towards using it. H1b assesses whether the PEOU positively affects the ATU. The results show that this hypothesis is not supported ($\beta = -0.006$, $p = 0.962$), suggesting that ease of use may not be a significant factor in shaping attitudes towards BI use. H1c, which states that there is a positive influence of COM on ATU, is supported ($\beta = 0.421$, $p = 0.006$). This implies that individuals who perceive BI as compatible with their existing work practices are more likely to hold a positive attitude towards its adoption. H1, predicting a positive effect of ATU on IABI, is supported ($\beta = 0.384$, $p = 0.000$). This confirms that a positive attitude towards BI usage significantly strengthens the intention to adopt these tools.

The study also examined the effects of the Personal Influence (PI) and Social Influence (SI) constructs on Subjective Norms (SN). The findings support H2a, revealing that PI has a significant positive effect on SN ($\beta = 0.613$, $p = 0.000$), while H2b is not supported as SI shows no significant impact ($\beta = 0.210$, $p = 0.059$). This indicates that peer pressure may be a stronger influence on subjective norms than the influence of superiors. Additionally, H2, which posits that SN positively affects Intention to Adopt BI (IABI), is not supported overall ($\beta = 0.091$, $p = 0.442$), suggesting that subjective norms do not significantly impact an individual's intention to adopt BI.

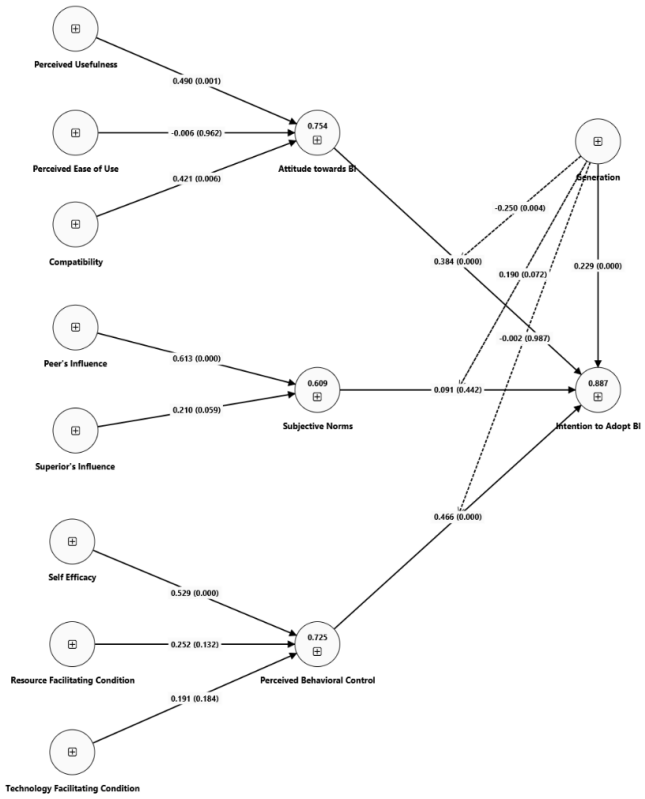

Figure 3. Structural Model of the Study

Table 2. Path Coefficients for Direct Relationships

Hypotheses	VIF	Path Coefficient	Standard Deviation	t-Statistics	p-Values	Decision
H1a: PU -> ATU	3.445	0.490	0.142	3.452	0.001	Supported
H1b: PEOU -> ATU	2.743	-0.006	0.121	0.047	0.962	Not Supported
H1c: COM -> ATU	4.161	0.421	0.154	2.727	0.006	Supported
H1: ATU -> IABI	1.735	0.384	0.077	4.970	0.000	Supported
H2a: PI -> SN	2.181	0.613	0.116	5.292	0.000	Supported
H2b: SI -> SN	2.181	0.210	0.111	1.890	0.059	Not Supported
H2: SN -> IABI	2.662	0.091	0.118	0.768	0.442	Not Supported
H3a: SE -> PBC	1.549	0.529	0.101	5.257	0.000	Supported
H3b: RFC -> PBC	3.604	0.252	0.167	1.507	0.132	Not Supported
H3c: TFC -> PBC	3.282	0.191	0.144	1.329	0.184	Not Supported
H3: PBC -> IABI	2.884	0.466	0.128	3.633	0.000	Supported
H7: GEN -> IABI	1.203	0.229	0.060	3.820	0.000	Supported

In terms of Self-Efficacy (SE), H3a is supported ($\beta = 0.529$, $p = 0.000$), indicating that higher self-efficacy in using BI is associated with greater perceived behavioral control (PBC) regarding its adoption. However, H3b and H3c, which predict positive effects of Resource Facilitating Condition (RFC) and Technology Facilitating Condition (TFC) on PBC, are not supported ($\beta = 0.252$, $p = 0.132$; $\beta = 0.191$, $p = 0.184$), suggesting that while self-efficacy is crucial, resource and technology availability may not significantly influence perceived behavioral control. H3, proposing that PBC positively influences IABI, is supported ($\beta = 0.466$, $p = 0.000$), confirming that perceived behavioral control does affect intentions to adopt BI. Finally, H7 was formulated to investigate the potential influence of GEN on the IABI. The results supported H7 ($\beta = 0.229$, $p = 0.000$), indicating a statistically significant positive relationship between GEN and IABI. With the generation variable being coded ordinally (1 representing Generation X, 2 for Generation Y, and 3 for Generation Z), the results indicate that there is increased intention to adopt BI among younger generations. The findings also indicate that the independent variables in the model, namely: Attitude Towards Use (ATU), Subjective Norms (SN), and Perceived Behavioral Control (PBC), collectively explain 88.7% of the variance in Intention to Adopt BI (IABI).

4.7 Moderation Analysis

The results support H4, indicating a significant moderating effect of GEN on the relationship between attitude towards BI usage (ATU) and intention to adopt BI (IABI) ($\beta = -0.25$, $p = 0.004$). This suggests that the influence of a positive attitude on the intention to adopt BI varies by generation. However, H5 and H6, which proposed moderating effects of GEN on subjective norms (SN) and PBC with IABI, were not supported ($\beta = 0.19$, $p = 0.072$; $\beta = -0.002$, $p = 0.987$), indicating similar impacts across generations.

Table 3. VIF, Path Coefficient, and F-Square of Moderated Relationships

Hypotheses	VIF	Path Coefficient	Standard Deviation	t-Statistics	p-Values	Decision	f-Square	Effect Size
H4: GEN x ATU -> IABI	1.700	-0.25	0.087	2.872	0.004	Supported	0.368	Large
H5: GEN x SN -> IABI	2.403	0.19	0.105	1.802	0.072	Not Supported	0.132	Small
H6: GEN x PBC -> IABI	2.540	-0.002	0.111	0.017	0.987	Not Supported	0.000	Negligible

5. Conclusion

This research explores the moderating effect of generation on the intention to adopt Business Intelligence (BI) tools among decision-makers in Small and Medium Enterprises (SMEs). Key findings indicate support for the positive influence of perceived usefulness and compatibility on attitudes toward BI, as well as the impact of peer influence on subjective norms and self-efficacy on perceived behavioral control. However, only attitudes towards BI usage and

perceived behavioral control significantly influenced the intention to adopt BI. Importantly, generation moderated the relationship between attitudes toward BI usage and the intention to adopt BI, while not affecting the relationships involving subjective norms and perceived behavioral control. The final research model is visually represented in Figure 4.

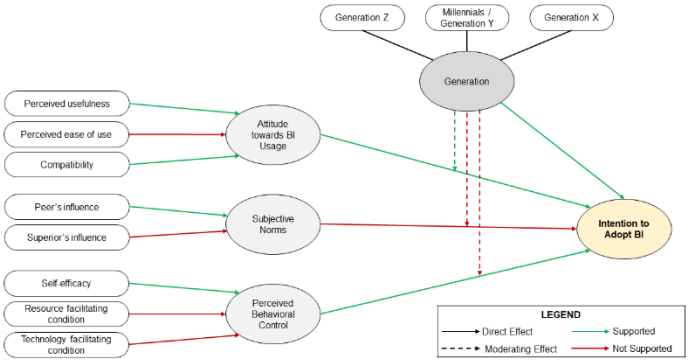

Figure 4. Final research model of the study

6. Implications

Future research should expand the framework by incorporating additional moderating demographic variables, such as gender, company size, and industry type, as well as the position or scope of work. The study's focus on specific industries limits its applicability, suggesting the need for similar investigations in diverse contexts. Conducting longitudinal studies with broader scopes and larger sample sizes could enhance reliability and generalizability. A comparative analysis using Structural Equation Modeling (SEM) across generations could reveal which generation is more likely to adopt BI. Finally, as some hypotheses were unsupported and contradicted previous studies, a deeper analysis of these inconsistencies within the same population is warranted.

Organizations can leverage these insights to craft targeted strategies. For younger generations, highlighting the innovative aspects of BI and its potential for data-driven decisions can enhance adoption, supported by user-friendly interfaces and gamified training programs. Conversely, for older decision-makers, it is essential to address technology-related anxieties by focusing on BI's practical benefits, such as streamlined tasks and improved decision-making accuracy. Ongoing support, like intergenerational mentoring programs where younger, tech-savvy employees assist older decision-makers, can further bridge generational gaps.

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