Macrothink Institute™

Business Management and Strategy
ISSN 2157-6068
2025, Vol. 16, No. 2

The Impact of Flexible Work Arrangement and Technology Integration on Work-Life Balance in Malaysia SMEs

Eng Joe Tan (Corresponding author)

University of East London

Women's Institute of Management (WIM), Wisma WIM, No. 7, Jalan Abang Haji Openg, Taman Tun Dr Ismail, 60000 Kuala Lumpur, Malaysia

Tel: +60193321237 E-mail: johntanej@gmail.com

Logama Doraisamy

University of East London

Women's Institute of Management (WIM), Wisma WIM, No. 7, Jalan Abang Haji Openg, Taman Tun Dr Ismail, 60000 Kuala Lumpur, Malaysia

Tel: +60133544676 E-mail: dlogama@yahoo.com

Received: April 20, 2025 Accepted: May 22, 2025 Published: May 23, 2025

doi:10.5296/bms.v16i2.22798 URL: https://doi.org/10.5296/bms.v16i2.22798

Abstract

The evolving landscape of work has transformed workplace practices, with flexible work arrangements (FWA) and technology integration (TI) emerging as essential tools for addressing modern employment challenges. This study examines the impact of FWA and TI on work-life balance (WLB) among employees in Malaysia's Small and Medium Enterprises (SMEs), which contribute nearly 40% to the nation's GDP. SMEs face challenges in adopting FWA and TI due to resource constraints, particularly in attracting and retaining younger employees who prioritize WLB.

Grounded in the Work-Life Border Theory and Technology Acceptance Model, this study explores how organizational flexibility and technology influence employees' ability to

balance personal and professional responsibilities. FWA includes flexible hours, remote work, and compressed workweeks, while TI focuses on tool access, effectiveness, and flexibility. WLB is measured by time balance, stress management, and satisfaction.

Using a quantitative research approach, data were collected from 575 SME employees, with 143 valid responses analyzed using SPSS software. Reliability analysis showed high internal consistency with Cronbach's alpha exceeding 0.8. Correlation analysis revealed moderate to strong positive relationships between variables, while regression analysis indicated FWA and TI collectively explain 58.5% of WLB variance. TI emerged as a stronger predictor, enhancing productivity, collaboration, and stress reduction. Flexible work arrangements, including flexible hours, remote work, and compressed workweeks, significantly improved balance between personal and professional responsibilities.

This study addresses gaps in WLB research in Malaysia's SMEs and offers actionable recommendations, including tailored FWA, strategic investment in cost-effective technology, and fostering a culture of work-life balance. By aligning workplace practices with employee needs, SMEs can enhance satisfaction and productivity, driving sustainable growth and competitiveness.

Keywords: flexible work arrangements, technology integration, work-life balance, small and medium enterprises, workplace flexibility, Malaysia

1. Introduction

1.1 Background

The evolving landscape of work has led to significant changes in workplace practices, with flexible work arrangements (FWA) and technology integration (TI) becoming essential tools for addressing the complexities of modern employment (Olawale et al., 2024). In the context of Malaysia SMEs, these trends hold particular relevance, as SMEs contribute 38% to the country's GDP, employ almost two-thirds of workforce and account for 96.9% of total business establishments (Yap, 2023). However, SMEs face unique challenges in managing emerging talent, especially across diverse generations with varying needs and expectations (Mer and Virdi, 2024). The younger workforce, particularly Gen Y and Gen Z, values work-life balance more than previous generations and prioritizes flexibility and autonomy in their careers (Dindar and Güzel, 2024). Similarly, the integration of digital tools into work processes is no longer a luxury but a necessity for ensuring efficiency and employee satisfaction (Bansal et al., 2023).

Flexible work arrangements—such as flexible hours, remote work, and compressed work weeks—enable employees to tailor their work schedules, fostering a balance between professional and personal responsibilities (Kossek and Kelliher, 2023). Meanwhile, technology integration supports these practices by providing tools for communication, task management, and administrative tasks (Vahdat, 2022). Despite the evident benefits, the

adoption of FWA and TI by SMEs remains inconsistent (Leso et al., 2023). This study investigates how these interventions impact work-life balance, aiming to provide actionable insights for Malaysia SMEs to retain talent and enhance employee well-being.

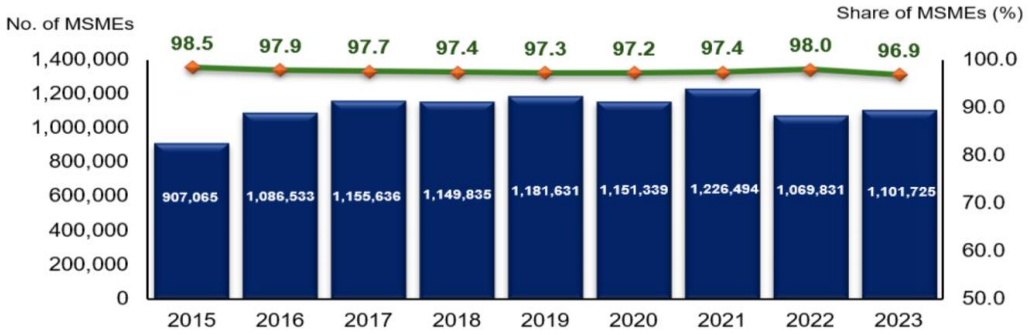

Figure 1. MSMEs accounted for 96.9% (1,101,725 firms) of overall establishments in Malaysia in 2023 (SME Corp, 2024)

1.2 Problem Statement

Malaysia SMEs are critical drivers of the nation's economic growth, yet they face increasing difficulty in attracting and retaining talent, particularly younger employees who prioritize work-life balance (Suprayitno, 2024). While larger organizations often implement FWA and invest in cutting-edge technologies, SMEs frequently lack the resources, awareness, or infrastructure to do the same (Chaudhary et al., 2023). This disparity results in challenges for SMEs in competing for skilled workers, ultimately affecting their operational performance and employee satisfaction (Ismail et al., 2021).

Existing literature emphasizes the benefits of FWA and TI in improving employee satisfaction and productivity (Ninaus et al., 2021). However, research specific to their implementation in Malaysia SMEs remains limited. Questions about the practicality of adopting such measures, particularly in resource-constrained environments, remain largely unanswered (Abiodun et al., 2021). This study addresses this gap by exploring how FWA and TI collectively influence the work-life balance of employees in Malaysia SMEs.

1.3 Research Questions

The study research questions (RQ) are:

RQ1:	How does Flexible Work Arrangement impact Work-Life Balance among employees in Malaysia SMEs?
RQ2:	How does Technology Integration impact work-life balance among employees in Malaysia SMEs?
RQ3:	How do Flexible Work Arrangement and Technology Integration impact Work-Life Balance in Malaysia SMEs?

Figure 2. Study research questions

1.4 Research Objectives

This study objectives (RO) are:

RO1:	To examine the impact of Flexible Work Arrangement on Work-Life Balance among employees in Malaysia SMEs.
RO2:	To examine the impact of Technology Integration on Work-Life Balance among employees in Malaysia SMEs.
RO3:	To examine the impact of Flexible Work Arrangement and Technology Integration on Work-Life Balance among employees in Malaysia SMEs.

Figure 3. Study research objectives

1.5 Significant of Study

This study contributes to both academic literature and practical applications in the context of Malaysia SMEs. Academically, it fills a gap by providing empirical evidence on the impact of FWA and TI on work-life balance. Practically, it offers actionable recommendations for SME owners and managers to implement cost-effective strategies that align with employee expectations, particularly younger generations. Additionally, the findings can guide policymakers in creating supportive frameworks that enable SMEs to adopt flexible and technology-driven practices.

1.6 Scope of Study

The study focuses on employees working in SMEs across various industries in Malaysia. It examines the adoption and effectiveness of flexible work arrangements (FWA) and technology integration (TI) in influencing work-life balance. The target respondents include employees across different generations to account for diverse perspectives on workplace practices and balance.

1.7 Definition of Terms

Flexible work arrangements (FWA): Employment practices that allow employees to adjust their working hours, locations, or workload, including flexible hours, remote work, and compressed work weeks (Alsulami et al., 2022).

Technology integration (TI): The use of digital tools and platforms (e.g., communication tools, task management systems) to improve work processes and support flexibility (Han and Trimi, 2022).

Work-life balance (WLB): The ability to balance professional responsibilities with personal and family commitments, leading to reduced stress and improved satisfaction (Oyewobi et al., 2022).

Generations:

Generations	Year	Definition
 Baby boomers	1946–1964	Employees shaped by traditional workplace hierarchies and structures (Alferjany and Alias,2020).
 Generation X	1965–1980	Known for balancing pragmatic work ethics with evolving family responsibilities (Climek et al., 2024).
 Millenials	1981–1996	A generation prioritizing flexibility and meaningful work, influenced by constant digital connectivity (Singh et al., 2023).
 Gen Z	1997–2012	Highly tech-savvy and value-driven employees who expect innovative and flexible workplaces (Dreyer and Stojanová, 2023).

Figure 4. Definition of employees by generations (Jones, 2022)

2. Literature Review

2.1 Flexible Work Arrangements

Flexible work arrangements (FWA) are employment practices that enable employees to adjust their work schedules, locations, and workloads, offering greater autonomy to balance personal and professional responsibilities (Wahab et al., 2024). The growing adoption of FWA is driven by shifts in workforce expectations, particularly amongst younger generations, who value flexibility and work-life balance as key factors in job satisfaction (Brega et al., 2023). Common forms of FWA include flexible hours, remote work, and compressed work weeks. These practices are widely recognized for their ability to enhance employee well-being, engagement, and retention (Azeem & Kotey, 2023).

Flexible hours allow employees to determine their start and end times, enabling them to accommodate responsibilities such as caregiving, education, or healthcare (Kossek et al., 2021). This autonomy fosters a sense of control over one's schedule, reducing stress and improving job satisfaction (Ray and Pana, 2021). However, flexible hours can pose challenges in team-based environments, where misaligned schedules may hinder coordination and collaboration (Ewim et al., 2024). For example, employees with varying work hours may find it difficult to schedule meetings or meet deadlines that require collective input, resulting in inefficiencies and potential conflicts (Kramer et al., 2019).

Remote work, another integral component of FWA, gained prominence during the COVID-19

pandemic and continues to play a central role in modern workplace practices (Haque, 2023). By allowing employees to work from locations of their choice, remote work eliminates commuting time, reduces workplace stress, and enhances productivity (Ng et al., 2022). Despite these benefits, remote work is not without its drawbacks. Employees often report feelings of isolation, weakened team cohesion, and blurred boundaries between work and personal life, which can exacerbate stress and reduce engagement (Contreras et al., 2020). For SMEs in Malaysia, the challenges are more pronounced due to limited access to digital infrastructure and resources, making the adoption of remote work uneven and fragmented (Samsudin et al., 2024).

Compressed work weeks involve completing the required number of work hours in fewer days, providing employees with extended personal time for family, leisure, or self-care activities (Feeney and Stritch, 2019). Ab Wahab and Tatoglu (2020) found that compressed work weeks improve morale and reduce burnout amongst employees. However, compressed work weeks may not be feasible in industries requiring continuous operations, such as healthcare, retail, or manufacturing (Lukács and Antal, 2023). Longer workdays may also lead to employee fatigue, diminishing productivity and potentially affecting service quality (Bolino et al., 2021).

The work-family border theory (Clark, 2000) provides a framework for understanding the impact of FWA on work-life balance. Clark posits that employees manage the boundaries between work and personal life to reduce conflict and maintain harmony. FWA acts as a structural enabler, allowing employees to establish clear and manageable boundaries that enhance balance. However, the success of FWA depends on supportive organizational policies, effective communication, and the alignment of employee and employer expectations (William et al., 2021). In the context of Malaysia SMEs, where financial and structural constraints often limit flexibility, the implementation of FWA requires innovative approaches, such as hybrid models that balance operational needs with employee preferences (Ateeq, 2022).

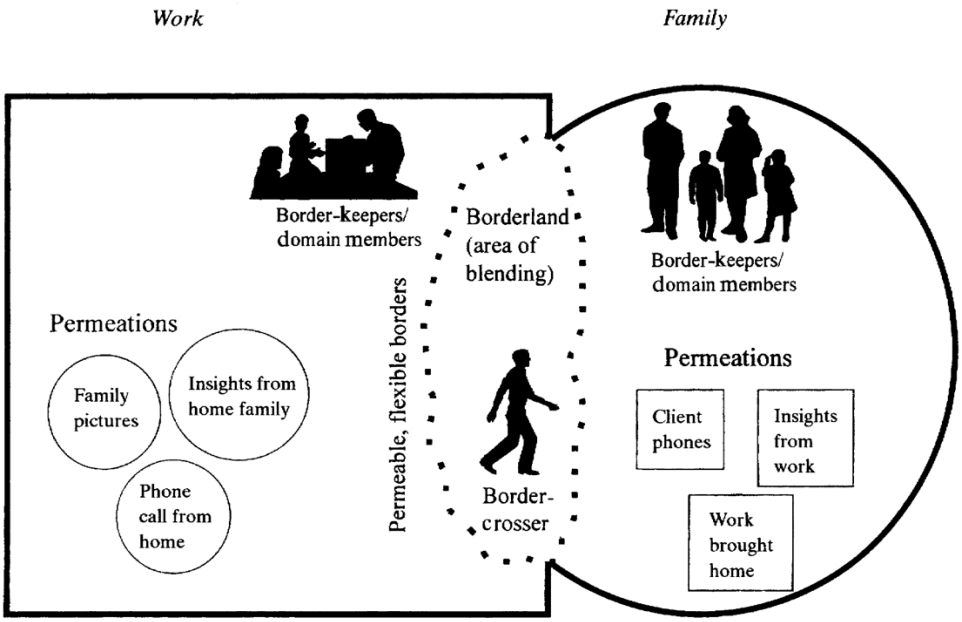

Figure 5. Work/Family border theory (Clark, 2000)

2.2 Technology Integration

Technology integration (TI) refers to the use of digital tools and platforms to streamline workflows, enhance communication, and enable flexible work practices (Mayasari et al., 2024). In the context of SMEs, TI is a critical enabler of FWA, providing the infrastructure and capabilities needed to support flexible schedules and remote work. Tools such as human resource management systems (HRMS), task management platforms (e.g., Trello, Asana), and communication tools (e.g., Microsoft Teams, Zoom) have become indispensable in modern workplaces (Touriano et al., 2023).

The technology acceptance model (TAM) (Davis, 1989) offers a theoretical lens to examine how employees adopt and use workplace technology. According to TAM, Perceived Usefulness and Perceived Ease of Use are key determinants of technology acceptance. In the context of SMEs, employees are more likely to embrace tools that simplify tasks, improve productivity, and enhance collaboration. For example, HRMS enables employees to manage leave applications, access payroll information, and monitor performance, reducing administrative burdens for both employees and HR departments (Wahyoedi et al., 2023).

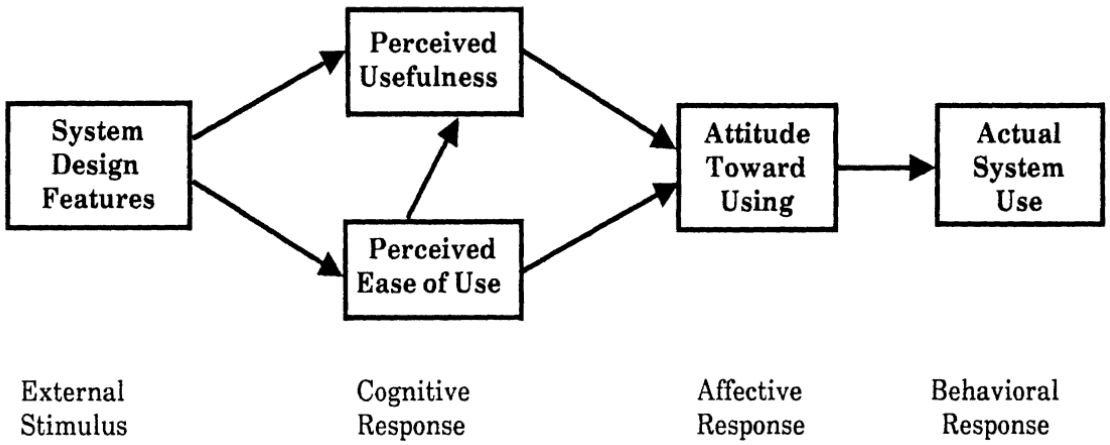

Figure 6. Technology acceptance model (Davis, 1989)

Access to technology is a crucial factor in enabling flexible work practices. Employees with access to appropriate digital tools can manage workloads effectively, collaborate with geographically dispersed teams, and adapt to changing work environments (Wu, 2022). However, many SMEs face barriers to providing such access, including budget constraints, limited IT expertise, and resistance to technological change (Hendrawan et al., 2024). These challenges are particularly acute in SMEs operating in traditional sectors, where the adoption of digital tools often lags behind industry trends (Faruque et al., 2024).

The effectiveness of technology is another important consideration. Digital tools must not only be accessible but also effective in meeting organizational and employee needs. For example, task management platforms help employees prioritize and organize tasks, improving time management and reducing stress. Similarly, communication tools like Slack and Zoom facilitate real-time collaboration, enhancing team cohesion and accountability (Burnett and Lisk, 2021). However, over-reliance on technology can lead to unintended consequences, such as increased stress from constant connectivity and difficulties in disconnecting from work during non-working hours (Vázquez et al., 2024).

Cloud computing has emerged as a transformative technology for SMEs, offering scalable and cost-effective solutions that eliminate the need for significant upfront investment in IT infrastructure (Attaran & Woods, 2019). By leveraging cloud-based tools, SMEs can access advanced functionalities, such as data storage, real-time analytics, and virtual collaboration, at a fraction of the cost of traditional systems (Chitra et al., 2025). Nevertheless, issues such as cybersecurity risks and data privacy concerns must be addressed to maximize the benefits of TI (Hasani et al., 2023).

The relationship between TI and FWA is synergistic. Technology acts as an enabler of flexibility, making it possible for employees to work remotely, adjust schedules, and manage workloads efficiently (Sun and Jung, 2024). For example, task automation reduces the time

spent on routine tasks, allowing employees to focus on more meaningful work. Similarly, digital tools mitigate the challenges of remote work, such as communication gaps and isolation, by providing platforms for seamless interaction. SMEs that integrate TI strategically can enhance employee well-being, improve operational efficiency, and remain competitive in a rapidly evolving labor market (Ejjami, 2024).

2.3 Work-Life Balance

Work-life balance (WLB) refers to an individual's capacity to effectively manage professional responsibilities alongside personal and family obligations, contributing to enhanced well-being and organizational performance (Mahmood and Khan, 2024). As a multidimensional construct, WLB encompasses time management, stress management, and satisfaction with work and life balance (Hasyim and Bakri, 2025). Each dimension highlights a different aspect of the balance that employees seek to achieve in their lives (Jaharuddin and Zainol, 2019).

Time management refers to the effective allocation of time between work commitments and familial obligations (Adisa et al., 2021). Employees with access to FWA and TI often report greater control over their schedules, enabling them to fulfill both professional and personal obligations without conflict (Shifrin and Michel, 2022). Flexible hours and remote work are particularly effective in improving time balance, as they allow employees to adjust their schedules to accommodate personal priorities (Ortiz-Bonnin et al., 2023). However, improper implementation of flexible working practices may lead to unintended outcomes, such as scheduling conflicts, diminished productivity, and erosion of team cohesion. This underscores the importance of establishing clear policies and fostering effective communication to address these challenges (Soga et al., 2022).

Stress management focuses on reducing the psychological and emotional pressures associated with competing demands (Aksoy, 2024). FWA, such as remote work and compressed schedules, minimizes stress by reducing commuting time and providing employees with greater autonomy (Thompson et al., 2022). Similarly, TI reduces stress by automating repetitive tasks and improving task organization (Attar et al., 2020). However, excessive reliance on technology or poorly defined boundaries between work and personal life can exacerbate stress, particularly when employees feel pressured to remain constantly connected (Singh et al., 2022).

Satisfaction with balance reflects an individual’s overall contentment with their ability to achieve harmony between work and life (Panda and Sahoo, 2021). Employees are more likely to express satisfaction when organizational culture align with their personal needs and values (Park and Doo, 2020). Clear communication, trust-based management, and accessible technological tools enhance satisfaction by addressing both professional and personal priorities (Uddin, 2021). For Malaysia SMEs, achieving WLB requires a cultural shift, moving away from rigid, traditional work structures to more adaptive and employee-centric

practices (Suki et al., 2024).

The work-family border theory (Clark, 2000) provides insights into how FWA and TI influence WLB. According to this theory, flexibility in work arrangements and the availability of enabling technologies help employees navigate the boundaries between work and personal life, reducing conflict and enhancing satisfaction. For SMEs, adopting these practices is critical to fostering a supportive environment that enhances employee well-being and productivity.

2.4 Conceptual Framework

The conceptual framework Figure 7 for this study examines the relationship between FWA, TI, and WLB. Flexible work arrangements (FWA) serve as the first independent variable, encompassing constructs such as flexible hours, remote work, and compressed work weeks. Technology integration (TI) is the second independent variable, with constructs including access to technology, effectiveness of tools, and their impact on flexibility. These constructs assess how digital tools enhance the feasibility and effectiveness of flexible work practices. Work-life balance (WLB) is the dependent variable, measured through constructs such as time balance, stress management, and satisfaction with balance.

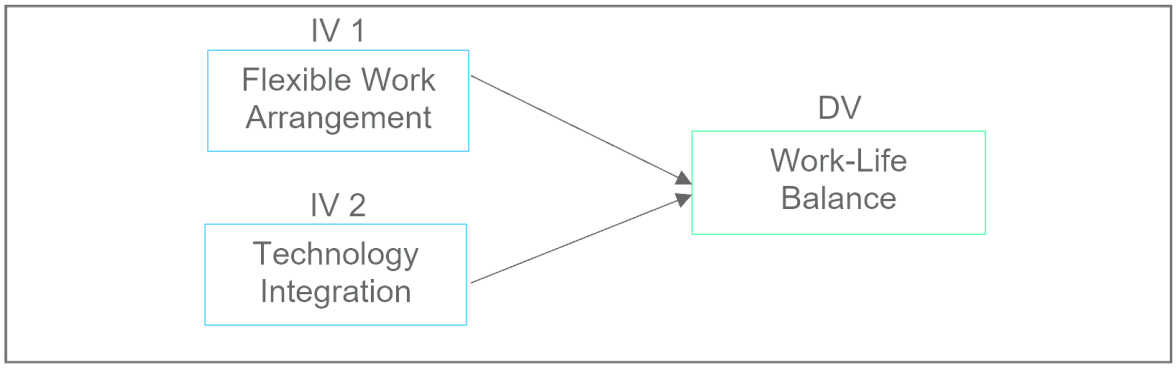

Figure 7. Conceptual Framework

2.5 Hypotheses Development

Based on the conceptual framework and insights from the literature, the following hypotheses are proposed:

H1:	There is a positive relationship between Flexible Work Arrangements and Work-Life Balance amongst employees in Malaysia SMEs.
H2:	There is a positive relationship between Technology Integration and Work-Life Balance amongst employees in Malaysia SMEs.
H3:	There is a positive relationship between Flexible Work Arrangements and Technology Integration in influencing Work-Life Balance amongst employees in Malaysia SMEs

Figure 8. Study research hypotheses

2.6 Chapter Conclusion

This chapter highlights how flexible work arrangements (FWA) and technology integration (TI) influence work-life balance (WLB), providing theoretical and practical insights for improving employee well-being in Malaysia SMEs.

3. Research Methodology

3.1 Research Design

This study employs a quantitative research design to examine the relationships between flexible work arrangements (FWA), technology integration (TI), and work-life balance (WLB) amongst employees in Malaysia SMEs. The research adopts a descriptive correlational approach to identify the extent to which FWA and TI influence WLB. By utilizing a structured survey questionnaire, the study collects numerical data that allows for statistical analysis of these relationships. This design is appropriate for addressing the research objectives and hypotheses, as it facilitates the testing of cause-effect relationships between variables in a systematic manner.

3.2 Population and Sampling

The population for this study comprises employees working in Malaysia SMEs across various service-oriented sectors, such as retail, IT, and professional services. These sectors were selected due to their adaptability to FWA and TI practices. Employees from diverse demographic backgrounds—including different age groups, job roles, and levels of experience—are targeted to ensure a comprehensive understanding of the factors influencing WLB.

A non-probability convenience sampling method is used to recruit participants. This technique was chosen due to its practicality in accessing a large pool of respondents within a limited timeframe. However, efforts will be made to ensure that the sample represents the broader SME workforce by including participants from different organizational levels and sectors.

3.3 Sample Size and Sampling Technique

The sample size is determined using Cochran's sampling techniques (Cochran, 1977), which accounts for the population size, margin of error, and confidence level. For this study, a sample size of 200 respondents is deemed sufficient to ensure generalizability of the findings, considering the SME population in Malaysia.

The sampling technique involves distributing the survey questionnaire through online platforms such as LinkedIn, WhatsApp, and email. These channels provide access to a wide range of participants, particularly in sectors with significant digital adoption. In addition, HR managers in SMEs will be contacted to facilitate data collection from their employees. A total of 575 questionnaire was distributed, however, only 143 questionnaire were collected and

deemed suitable for inclusion in the analysis.

3.4 Unit of Analysis

The unit of analysis in this study is individual employees working in SMEs. Each participant's responses are analyzed to assess their perceptions of FWA, TI, and WLB. By focusing on individual experiences, the study aims to identify patterns and insights that reflect the broader workforce trends in SMEs.

3.5 Measurement Instrument and Questionnaire Development

The primary data collection tool is a structured survey questionnaire developed based on existing validated scales from the literature. The questionnaire is divided into four sections:

1. Demographics: Includes questions about age, gender, education level, job role, and sector to ensure diversity amongst respondents.
2. Flexible work arrangements (FWA): Measures perceptions of flexible hours, remote work, and compressed work weeks.
3. Technology integration (TI): Assesses access to technology, effectiveness of tools, and their impact on flexible work practices.
4. Work-life balance (WLB): Evaluates time balance, stress management, and satisfaction with balance using items adapted from prior studies.

Each construct is operationalized with three indicators to capture its multidimensional nature. The questionnaire is designed to minimize respondent fatigue and ensure clarity by using simple and concise language and using 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

3.6 Validity and Reliability of Instrument

To ensure the validity and reliability of the questionnaire, several measures were implemented. Content validity was established by reviewing the questionnaire with a panel of experts, including academics and practitioners, to confirm that the items adequately reflected the constructs of FWA, TI, and WLB. Construct validity was tested through exploratory factor analysis, which grouped items into their respective constructs to verify their alignment. Reliability was assessed using Cronbach's alpha, with a threshold of 0.7 or higher indicating acceptable internal consistency. A pilot study was conducted to further refine the instrument and enhance its reliability, allowing for the identification and resolution of any ambiguities or inconsistencies in the questionnaire.

3.7 Pilot Study

A pilot study involving 30 participants is conducted to pre-test the questionnaire. The objectives of the pilot study are to:

- Identify any ambiguities or inconsistencies in the questionnaire.

- Assess the time required for completion.
- Test the reliability of the constructs using Cronbach's alpha.

Feedback from pilot study participants is used to revise the questionnaire, ensuring that it is user-friendly and comprehensible. The pilot study also provides an opportunity to evaluate the effectiveness of the data collection procedure.

3.8 Data Collection Procedure

The data collection process was conducted over a four-week period using an online survey platform such as Google Forms. The procedure began with inviting potential participants through emails, LinkedIn posts, and professional networking platforms. Participants were provided with a detailed explanation of the study's purpose, ensuring informed consent before they proceeded to complete the survey. The survey link was distributed widely, and periodic reminders were sent to encourage participation. Responses were monitored in real time to identify incomplete submissions, which were excluded from the analysis. Ethical considerations, including participant anonymity and data confidentiality, were strictly adhered to throughout the data collection process.

3.9 Plan for Data Analysis

The data collected from the survey was analyzed using statistical package for the social sciences (SPSS) software. Descriptive statistics were used to summarize demographic characteristics and provide an overview of the data. Reliability analysis was conducted to test the internal consistency of each construct using Cronbach's alpha (Cronbach, 1951). Correlation analysis was performed to examine the relationships between FWA, TI, and WLB, identifying significant associations. To test the hypotheses, multiple regression analysis was conducted to determine the individual and combined effects of the independent variables (FWA and TI) on the dependent variable (WLB). Additional diagnostic tests, such as normality and multicollinearity, were performed to ensure the robustness of the findings. The results were interpreted in the context of the research objectives, providing actionable insights for SMEs to implement effective workplace practices.

3.10 Chapter Conclusion

This chapter outlines the research methodology employed to examine the relationships between FWA, TI, and WLB. By adopting a quantitative design, using validated instruments, and employing rigorous data analysis techniques, the study aims to provide reliable and generalizable insights into the factors influencing work-life balance in Malaysia SMEs. The methodology ensures that the research is conducted ethically and systematically, contributing to the academic and practical understanding of these critical issues.

4. Data Analysis

4.1 Survey Response Rate

Table 1. Survey Response Rate

Questionnaire Distributed	Questionnaire Collected / Received	Response Rate %
575	143	24.9%

To gather insights into the impact of flexible work arrangements (FWA) and technology integration (TI) on work-life balance (WLB) amongst SME employees, the survey was distributed to 575 individuals via personal networks and messaging platforms like WhatsApp. A total of 143 completed questionnaires were returned, resulting in a response rate of 24.9% (Table 1).

The survey distribution process faced some logistical challenges, including restrictions on WhatsApp usage due to spam alerts, which temporarily blocked the account used for outreach. Despite these setbacks, proactive efforts were made to clarify the survey's relevance to potential respondents, emphasizing that all individuals receiving a salary from an SME—regardless of their job role—were eligible to participate. This clarification was particularly important as some recipients initially questioned their eligibility.

The response rate reflects a combination of interest in the research topic and challenges inherent in reaching a broad audience through personal contacts. While the distribution method ensured access to a diverse pool of respondents across industries and job roles, future studies could benefit from more formal distribution channels, such as employer partnerships or email campaigns, to enhance participation and mitigate logistical issues.

4.2 Respondent Profile / Demographic Analysis

Table 2. Demographic Profile

Demographic		Frequency	Percentage %
Age Group	1997-2012 (Gen Z)	16	11.2%
	1981-1996 (Gen Y)	75	52.4%
	1965-1980 (Gen X)	50	35.0%
	1946-1964 (Baby Boomer)	2	1.4%
Gender	Male	86	60.1%
	Female	57	39.9%
Job	Management	31	21.7%
	Administration	12	8.4%
	Operations	10	7.0%
	Sales/Marketing	39	27.3%
	Customer Service	1	0.7%
	Finance/Account	9	6.3%
	Human Resources	6	4.2%
	Creative/Design	3	2.1%
	Logistics/Supply Chain	6	4.2%

	Technician	4	2.8%
	IT	14	9.8%
	Others	8	5.6%
Industry	Manufacturing	18	12.6%
	Services	99	69.2%
	Construction	13	9.1%
	Agriculture	7	4.9%
	Mining & Quarrying	6	4.2%

The demographic analysis of the survey respondents provides valuable insights into the diversity of the sample population, reflecting a broad range of age groups, genders, job roles, and industries. This analysis ensures a comprehensive understanding of the impact of flexible work arrangements (FWA) and technology integration (TI) on work-life balance (WLB) amongst employees in Malaysia SMEs.

Age Groups: The majority of respondents belong to Gen Y (1981–1996), accounting for 52.4% of the sample, followed by Gen X (1965–1980) at 35.0%, and Gen Z (1997–2012) at 11.2%. Baby Boomers (1946–1964) make up only 1.4%, reflecting the declining workforce participation of older generations in SMEs. This distribution highlights the predominance of younger employees, who are often more attuned to flexibility and technology adoption in the workplace.

Gender: A higher proportion of respondents are male (60.1%), compared to female (39.9%), indicating potential gender imbalances in certain SME sectors. The gender split provides a basis for exploring whether perceptions of FWA, TI, and WLB differ across genders.

Job Roles: Respondents represent a wide range of job roles, with the largest group being Sales/Marketing (27.3%), followed by Management (21.7%) and IT (9.8%). Less-represented roles include Customer Service (0.7%) and Creative/Design (2.1%). This diversity ensures that the survey captures varied perspectives on workplace practices and challenges.

Industry: The majority of respondents are employed in the services sector (69.2%), consistent with the dominance of services in Malaysia's SME landscape. Other sectors include manufacturing (12.6%), construction (9.1%), agriculture (4.9%), and mining & quarrying (4.2%). The distribution reflects the sectoral composition of SMEs, providing a contextual basis for analyzing the applicability of FWA and TI across industries.

The demographic diversity of the sample enhances the study's validity and ensures that the findings are representative of SME employees in Malaysia. This comprehensive profile forms a robust foundation for subsequent analyses of FWA, TI, and WLB.

4.3 Descriptive Analysis

This section presents the descriptive analysis of survey responses for the three main variables: Flexible Work Arrangement (FWA), Technology Integration (TI), and Work-Life Balance (WLB). The analysis includes mean and standard deviation values for each item, offering insights into respondents' perceptions and experiences.

4.3.1 Mean and Standard Deviation of Flexible Work Arrangement

Table 3. Mean and standard deviation of items for FWA

No.	Independent Variable 1: FWA	Mean	Standard Deviation
1	I have the flexibility to choose my start and end times for work.	3.7063	1.40839
2	I can adjust my work schedule to accommodate personal responsibilities.	3.7273	1.29017
3	Flexible hours help me balance my work and personal commitments effectively.	4.1748	1.08974
4	I have the option to work remotely when needed.	3.9161	1.21896
5	I feel as productive working remotely as I am in the office.	3.6364	1.19001
6	Remote work reduces commuting stress and helps me manage my time better.	4.0140	1.11321
7	I prefer to complete my weekly hours in fewer days (e.g., 4-day weeks).	3.9510	1.20052
8	Compressed work weeks give me more time for personal and family activities.	4.1329	1.08276
9	Compressed work weeks do not affect my work performance.	3.9371	1.16412

Table 3 illustrates the mean and standard deviation of FWA items. Amongst the nine items, the highest-rated statement was “Flexible hours help me balance my work and personal commitments effectively” (M = 4.17, SD = 1.09). This indicates that respondents highly value the role of flexible hours in managing their dual responsibilities. Similarly, “Compressed work weeks give me more time for personal and family activities” also scored high (M = 4.13, SD = 1.08), reflecting the appeal of compressed schedules for balancing work and life.

Conversely, “I feel as productive working remotely as I am in the office” had the lowest mean (M = 3.64, SD = 1.19). This finding suggests that while remote work is appreciated for reducing commuting stress (M = 4.01, SD = 1.11), some respondents may perceive challenges in maintaining productivity outside the traditional office environment. Overall, the responses highlight that FWA practices are generally effective but may require adjustments to optimize remote work productivity.

4.3.2 Mean and Standard Deviation of Technology Integration

Table 4. Mean and standard deviation of items for TI

No.	Independent Variable 2: TI	Mean	Standard Deviation
1	My organization provides sufficient technological tools to support my work processes.	3.9650	0.99585
2	I have access to the necessary tools to manage work tasks effectively.	4.0350	0.87543
3	Lack of access to workplace technology disrupts my ability to balance work and personal responsibilities.	3.9231	1.04865
4	The tools provided by my organization help me manage my work responsibilities efficiently.	3.9441	0.97703
5	My organization’s technology reduces time spent on routine tasks, enabling better time management.	3.9510	1.00931
6	Workplace technology improves my ability to collaborate with colleagues while maintaining flexibility in my schedule.	4.1049	0.89374
7	Technology supports my ability to work remotely	4.1678	0.83906

	without compromising productivity or boundaries.		
8	My organization's tools enable me to align work hours with personal needs effectively.	4.0699	0.88533
9	Technology makes it easier to adapt my work schedule, improving my overall work-life balance.	4.1189	0.95305

The descriptive statistics for TI, as shown in Table 4, reveal consistently high ratings across items, indicating strong agreement regarding the role of technology in enhancing workplace flexibility and efficiency. The statement "Technology makes it easier to adapt my work schedule, improving my overall work-life balance" received the highest rating (M = 4.12, SD = 0.95), demonstrating the critical role of technology in supporting flexible work practices.

Similarly, "Technology supports my ability to work remotely without compromising productivity or boundaries" scored high (M = 4.16, SD = 0.83), emphasizing its importance in facilitating remote work. The relatively lower rating for "Lack of access to workplace technology disrupts my ability to balance work and personal responsibilities" (M = 3.92, SD = 1.04) indicates that most respondents have access to adequate technological tools, which reduces disruptions to work-life balance.

These findings suggest that technology integration is a key enabler of workplace flexibility, particularly in remote work scenarios, and that SMEs largely succeed in providing necessary technological resources to employees.

4.3.3 Mean and Standard Deviation of Work-Life Balance

Table 5. Mean and standard deviation of items for WLB

No.	Dependent Variable: WLB	Mean	Standard Deviation
1	Flexible work arrangement and technology integration improve my ability to balance time between work and personal responsibilities.	4.2587	0.84515
2	I can allocate sufficient time to both my work and personal commitments with flexible work arrangement and technology integration.	4.1049	0.95470
3	Flexible arrangements and technology help me maintain a healthy time balance.	4.2378	0.86365
4	I can manage stress arising from work and family commitments due to flexible work arrangement and technology integration.	4.1818	0.86916
5	Flexible arrangements and technology reduce stress caused by competing demands.	4.0699	0.99753
6	I feel less stressed due to the work-life balance practices in my organization.	3.8601	1.12338
7	I am satisfied with the work-life balance practices in my organization.	3.8462	1.09614
8	My organization's implementation of flexible work arrangement and technology integration supports my efforts to achieve work-life balance.	3.7692	1.16094
9	I believe my work-life balance will improve with enhanced flexible work arrangement and technology integration policies.	4.1818	0.85280

Table 5 summarizes the descriptive statistics for WLB items. The highest-rated statement, "Flexible work arrangement and technology integration improve my ability to balance time between work and personal responsibilities" (M = 4.26, SD = 0.84), underscores the significant role of both FWA and TI in achieving time balance. Other high ratings include "Flexible arrangements and technology help me maintain a healthy time balance" (M = 4.23, SD = 0.86) and "I can manage stress arising from work and family commitments due to flexible work arrangement and technology integration" (M = 4.18, SD = 0.86).

However, satisfaction-related items, such as "I am satisfied with the work-life balance practices in my organization" (M = 3.84, SD = 1.09), received slightly lower ratings, suggesting areas for improvement in organizational policies. Overall, the responses highlight that while FWA and TI significantly enhance time balance and stress management, organizations may need to better align policies to fully satisfy employee expectations.

4.4 Normality Analysis

4.4.1 Normality Test

Table 6. Skewness and Kurtosis Test

Variable	Skewness value -3 < s < +3		Kurtosis value -10 < k < +10	
	Statistic [+/- 3]	Std.error	Statisitc [+/- 10]	Std.error
Flexible Work Arrangement	-0.864	0.203	0.714	0.403
Technology Integration	-0.479	0.203	0.415	0.403
Work-Life Balance	-0.732	0.203	0.378	0.403

To determine whether the data is suitable for analysis, normality was assessed by looking at skewness and kurtosis values. Skewness checks if the data is evenly distributed or if it leans more to one side. Kurtosis looks at how "sharp" or "flat" the peak of the data is compared to a normal, bell-shaped curve.

The skewness values for all variables fall within the acceptable range of -3 to +3, indicating that the data is not overly skewed. For instance, flexible work arrangement (FWA) has a skewness of -0.864, showing a slight lean toward higher ratings. Similarly, technology integration (TI) and work-life balance (WLB) have skewness values of -0.479 and -0.732, respectively, which also indicate a slight tendency toward positive responses.

The kurtosis values for all variables are within the acceptable range of -10 to +10, meaning the data is neither too flat nor too peaked. For example, FWA has a kurtosis value of 0.714, which suggests a normal shape. TI and WLB also show values of 0.415 and 0.378, confirming a balanced distribution.

Overall, the results show that the data is well-distributed and suitable for further statistical analysis, such as correlation and regression.

4.4.2 Multicollinearity

Table 7. Collinearity Statistics

Model	Collinearity Statistics	
	Tolerance ≥ **0.1**	VIF ≤ **5 OR** ≤ **10**
FWA	0.732	1.366
TI	0.732	1.366

Multicollinearity was assessed to ensure that the independent variables, flexible work arrangement (FWA) and technology integration (TI), do not overlap significantly in explaining the dependent variable, work-life balance (WLB). Table 7 shows the **tolerance** values for both variables at **0.732**, exceeding the minimum threshold of **0.1**, and the **variance inflation factor (VIF)** values at **1.366**, well below the acceptable limit of **5 or 10**. These results confirm the absence of multicollinearity, indicating that FWA and TI are distinct predictors of WLB and can be included together in regression analysis without compromising the validity of the results.

4.5 Correlation Analysis

Table 8. Correlation Analysis

Variables	FWA	TI	WLB
FWA	1.000		
TI	0.518**	1.000	
WLB	0.562**	0.735**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis was conducted to examine the strength and direction of the relationships between Flexible work arrangement (FWA), Technology integration (TI), and Work-life balance (WLB). Table 8 presents the results, showing significant positive correlations at the 0.01 level (2-tailed) for all variable pairings.

The correlation between FWA and WLB is r = 0.562, indicating a moderate positive relationship. This suggests that employees who experience greater workplace flexibility are more likely to report an improved balance between their professional and personal lives.

The correlation between TI and WLB is r = 0.735, reflecting a strong positive relationship. This implies that the integration of technology plays a significant role in enhancing employees' ability to manage work and life responsibilities effectively. The strong association highlights technology's importance in streamlining processes, reducing stress, and enabling flexible work practices.

The correlation between FWA and TI is r = 0.518, indicating a moderate positive relationship.

This demonstrates that technology often complements flexible work arrangements, reinforcing their collective impact on WLB.

Overall, the results confirm that both FWA and TI are positively associated with WLB. The findings align with the research objectives and provide empirical evidence supporting the importance of these workplace practices in SMEs.

4.6 Reliability Analysis

Table 9: Reliability Analysis (Pilot : 30 Samples)

Variables	No. of Items	Cronbach's Alpha
Flexible Work Arrangement	9	0.787
Technology Integration	9	0.766
Work Life Balance	9	0.858

Table 10. Reliability Analysis (Full: 143 Samples, Rephrased questions)

Variables	No. of Items	Cronbach's Alpha
Flexible Work Arrangement	9	0.831
Technology Integration	9	0.856
Work Life Balance	9	0.889

Model	R	R Square (R^2)	Adjusted R Square
1	0.765[a]	0.585	0.579

a. Predictors: Flexible Work Arrangement, Technology Integration

Reliability analysis was conducted to evaluate the internal consistency of the survey instrument, using Cronbach's Alpha as the measure. A pilot test with 30 samples was conducted initially, followed by the full survey with 143 responses, incorporating rephrased questions for clarity and comprehensiveness. Tables 9 and 10 summarize the results.

In the pilot study, Cronbach's Alpha values were 0.787 for Flexible Work Arrangement (FWA), 0.766 for Technology Integration (TI), and 0.858 for Work-Life Balance (WLB). These values indicate acceptable to excellent reliability, confirming that the constructs measured were consistent and well-structured.

The full dataset revealed improved reliability scores across all variables after rephrasing the questions to enhance clarity and precision. The Cronbach's Alpha values increased to 0.831 for FWA, 0.856 for TI, and 0.889 for WLB. These values surpass the widely accepted threshold of 0.7, signifying high internal consistency for all constructs.

The improved reliability in the full dataset indicates that the instrument effectively captures the dimensions of FWA, TI, and WLB, minimizing measurement errors. The strong reliability supports the validity of subsequent analyses, including correlation and regression.

Overall, the reliability analysis validates the robustness of the survey instrument, confirming

its appropriateness for assessing the relationships between FWA, TI, and WLB in the context of Malaysia SMEs. This ensures that the findings derived from the data are reliable and reflective of employees' perceptions and experiences.

4.7 Multiple Regression Analysis

Table 11. Analysis on Coefficient of Determination (R^2)

Table 12. ANOVA[a]

Model	F	Sig.
1	98.675	<.001[b]

Multiple regression analysis was conducted to determine the predictive power of Flexible work arrangement (FWA) and Technology integration (TI) on Work-life balance (WLB). This analysis evaluates how well the independent variables (FWA and TI) collectively explain variations in the dependent variable (WLB).

The coefficient of determination (R^2) presented in Table 11 indicates that the regression model explains 58.5% of the variance in WLB, with an adjusted R^2 of 0.579. This suggests that FWA and TI collectively have a substantial impact on employees' work-life balance. The model's statistical significance is confirmed by the ANOVA results, with an F-value of 98.675 and a p-value < 0.001, demonstrating that the regression model is a good fit for the data.

a. Dependent Variable: WLB

b. Predictors: TI, FWA

Table 13. Regression Analysis of Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.459	0.259		1.769	0.079
	FWA	0.226	0.058	0.248	3.896	<.001
	TI	0.673	0.071	0.607	9.532	<.001

a. Dependent Variable: WLB

Table 13 provides further insights into the individual contributions of FWA and TI. The unstandardized coefficient (B) for FWA is 0.226, indicating that for every unit increase in FWA, WLB increases by 0.226 units, holding other factors constant. Similarly, TI has a higher unstandardized coefficient of 0.673, reflecting its stronger influence on WLB. The standardized coefficients (Beta) also confirm this, with TI (0.607) having a larger impact than FWA (0.248). Both predictors are statistically significant ($p < 0.001$).

The positive and significant coefficients indicate that both FWA and TI contribute to enhancing WLB, with TI playing a more prominent role. This finding highlights the importance of integrating technology to support flexible work practices, as it enables better time management, collaboration, and stress reduction, which are critical for achieving work-life balance.

Table 14. Hypothesis Testing Result

No.	Hypotheses Constructed	Results
H1:	There is a positive relationship between Flexible Work Arrangements and Work-Life Balance amongst employees in Malaysia SMEs.	Accepted (p-value <0.05)
H2:	There is a positive relationship between Technology Integration and Work-Life Balance amongst employees in Malaysia SMEs.	Accepted (p-value <0.05)
H3:	There is a positive relationship between Flexible Work Arrangements and Technology Integration in influencing Work-Life Balance amongst employees in Malaysia SMEs	Accepted (p-value <0.05)

Overall, the regression analysis confirms the acceptance of all three hypotheses, demonstrating that Flexible Work Arrangements and Technology Integration significantly influence Work-Life Balance among employees in Malaysian SMEs. Moreover, they underscore the synergistic relationship between these variables, emphasizing their collective importance in fostering a supportive work environment for SME employees. These insights provide valuable guidance for SMEs aiming to improve employee retention and productivity by prioritizing flexible policies and technological advancements. Organizations are encouraged to adopt strategies that integrate these elements, ensuring an adaptable and employee-centric workplace.

5. Conclusion

5.1 The Impact of Flexible Work Arrangements on Work-Life Balance

The findings indicate a moderate positive relationship between FWA and WLB, supporting Wahab et al. (2024), who highlighted that FWA fosters autonomy, reducing stress and enhancing satisfaction. Flexible hours and compressed workweeks align with Ab Wahab & Tatoglu (2020), who demonstrated their effectiveness in reducing burnout and improving morale. However, the mixed results for remote work, with productivity challenges, echo Contreras et al. (2020), who emphasized potential issues such as isolation and weakened team cohesion. These results underscore the need for tailored FWA implementation, as suggested by Azeem & Kotey (2023), to align with both organizational needs and employee preferences.

5.2 The Impact of Technology Integration on Work-Life Balance

The strong positive correlation between TI and WLB supports the Technology Acceptance Model (Davis, 1989), which highlights the importance of perceived usefulness and ease of

use in technology adoption. The results are consistent with Burnett & Lisk (2021), who demonstrated that communication tools improve collaboration and team cohesion. The stronger influence of TI compared to FWA aligns with Mayasari et al. (2024), who identified technology as a critical enabler of workplace flexibility. However, concerns about over-reliance on technology, as noted by Vázquez et al. (2024), stress the importance of balanced and user-friendly solutions.

5.3 The Impact of Flexible Work Arrangements and Technology Integration on Work-Life Balance

The synergistic effect of FWA and TI on WLB, explaining 58.5% of the variance, supports Sun & Jung (2024), who emphasized the complementary nature of these elements. This aligns with the Work-Life Border Theory (Clark, 2000), which highlights the role of enabling technologies and structural flexibility in helping employees manage boundaries between work and personal life. Employees experiencing both workplace flexibility and access to supportive technology report higher satisfaction and improved time management, confirming the findings of Suki et al. (2024), who emphasized the importance of integrated workplace practices for SMEs.

5.4 Contribution of Study

This study fills a gap in the literature by providing empirical evidence on the impact of FWA and TI on WLB in the Malaysian SME context, as suggested by Wahab et al. (2024). By addressing challenges faced by SMEs, the findings offer actionable insights for owners to implement cost-effective strategies, particularly for attracting and retaining younger generations. The study also supports policymakers in designing frameworks that encourage SMEs to adopt flexible, technology-driven workplace practices. Ultimately, it reinforces the findings of Suki et al. (2024) by emphasizing the role of aligned workplace policies in fostering balanced and resilient workforces.

6. Recommendations

6.1 Recommendation 1: Tailored Flexible Work Arrangements

SMEs should adopt tailored flexible work arrangements that align with their operational needs and workforce demographics. Given the significant role of FWA in enhancing work-life balance (WLB), SMEs can implement flexible hours and compressed work weeks to address employees' personal and professional demands. For roles where remote work is less feasible, such as customer-facing or production-based jobs, partial flexibility, such as staggered shifts, can be introduced. Clear guidelines, effective communication, and periodic reviews can ensure these arrangements do not disrupt operations while fostering a supportive work environment.

6.2 Recommendation 2: Enhance Technology Integration

Investing in accessible and user-friendly technology is crucial for SMEs to support flexible work practices and boost employee productivity. SMEs should focus on adopting cost-effective solutions, such as cloud-based platforms, HR management systems, and collaboration tools. Providing training to employees ensures the optimal use of these technologies while addressing resistance to change. SMEs should also prioritize cybersecurity measures to protect sensitive data. Leveraging technology to streamline workflows and reduce manual tasks will enable employees to focus on meaningful work, further improving their WLB.

6.3 Recommendation 3: Foster a Culture of Work-Life Balance

SMEs must embed work-life balance into their organizational culture. This involves leadership commitment to promoting employee well-being through policies and practices that reflect an understanding of diverse workforce needs. Regular feedback mechanisms, such as employee surveys, can help gauge satisfaction with WLB initiatives and identify areas for improvement. Establishing wellness programs, stress management workshops, and time-off policies can further enhance employees' overall experience and satisfaction.

6.4 Limitation of Study

This study is limited by its cross-sectional design, which provides a snapshot of the relationship between FWA, TI, and WLB at a single point in time. As a result, the long-term effects of these practices remain unexplored. The reliance on self-reported data introduces the potential for bias, as participants may overstate the benefits or challenges of FWA and TI.

Additionally, the study's focus on Malaysia SMEs restricts the generalizability of its findings to SMEs in other cultural or economic contexts. The absence of managerial perspectives further narrows the scope, leaving critical organizational insights underexplored. Furthermore, unintended consequences, such as the potential for digital fatigue or the inequity of flexibility amongst different job roles, were not investigated.

6.5 Suggestion for Future Research

Future studies should adopt longitudinal designs to assess the evolving impact of FWA and TI on WLB over time, particularly during periods of economic shifts or global disruptions. Mixed-method approaches, combining quantitative surveys with qualitative interviews, can provide a more nuanced understanding of how these practices influence different stakeholders, including management.

Cross-sectoral and cross-cultural comparative studies could uncover unique challenges and enablers for SMEs in diverse industries and regions. Exploring emerging technologies, such as artificial intelligence and virtual collaboration tools, and their role in enhancing WLB would add value to the literature. Lastly, future research should address unintended consequences,

such as digital fatigue and unequal access to flexibility of work arrangement, to provide a balanced view of these workplace practices.

Acknowledgments

The author gratefully acknowledges the invaluable guidance and dedication of supervisor Logama Doraisamy. Her passion for teaching and extensive experience provided the inspiration and support necessary to explore and complete this research. The author also extends sincere appreciation to the Women's Institute of Management and the University of East London for providing the academic platform and resources that supported the successful completion of this study.

Authors contributions

The author was solely responsible for the conceptualization, study design, data collection, analysis, manuscript preparation, and revisions. The final manuscript was reviewed and approved by the author.

Funding

Not applicable.

Competing interests

The author declares no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Macrothink Institute.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

References

Ab Wahab, M., & Tatoglu, E. (2020). Chasing productivity demands, worker well-being, and firm performance: The moderating effects of HR support and flexible work arrangements. *Personnel review*, *49*(9), 1823-1843.

Abiodun, O. I., Abiodun, E. O., Alawida, M., Alkhawaldeh, R. S., & Arshad, H. (2021). A review on the security of the internet of things: Challenges and solutions. Wireless Personal Communications, 119, 2603-2637.

Adisa, T. A., Aiyenitaju, O., & Adekoya, O. D. (2021). The work–family balance of British working women during the COVID-19 pandemic. *Journal of Work-Applied Management, 13*(2), 241-260.

Aksoy, E. (2025). Balancing act: Exploring the interplay of production pressure and innovation/flexibility climates on employee well-being. *Creativity and Innovation Management, 34*(1), 222-236.

Alferjany, M. A. O. A., & Alias, R. B. (2020). Generational differences in values and attitudes within workplace. *Psychology and Education Journal*, *57*(9), 1496-1503.

Alsulami, A., Mabrouk, F., & Bousrih, J. (2022). Flexible working arrangements and social sustainability: study on women academics post-COVID-19. *Sustainability, 15*(1), 544.

Ateeq, K. (2022, February). Hybrid working method: An integrative review. In 2022 International conference on business analytics for technology and security (ICBATS) (pp. 1-8). IEEE.

Attar, M., Çağlıyan, V., & Abdul-Kareem, A. (2020). Evaluating the moderating role of work-life balance on the effect of job stress on job satisfaction. *Istanbul Business Research, 49*(2), 201-223.

Attaran, M., & Woods, J. (2019). Cloud computing technology: improving small business performance using the Internet. *Journal of Small Business & Entrepreneurship, 31*(6), 495-519.

Azeem, M. M., & Kotey, B. (2023). Innovation in SMEs: The role of flexible work arrangements and market competition. *The International Journal of Human Resource Management, 34*(1), 92-127.

Bansal, A., Panchal, T., Jabeen, F., Mangla, S. K., & Singh, G. (2023). A study of human resource digital transformation (HRDT): A phenomenon of innovation capability led by digital and individual factors. *Journal of Business Research, 157*, 113611.

Bolino, M. C., Kelemen, T. K., & Matthews, S. H. (2021). Working 9-to-5? A review of research on nonstandard work schedules. *Journal of Organizational Behavior, 42*(2), 188-211.

Brega, C., Briones, S., Javornik, J., León, M., & Yerkes, M. (2023). Flexible work arrangements for work-life balance: a cross-national policy evaluation from a capabilities perspective. *International Journal of Sociology and Social Policy, 43*(13/14), 278-294.

Burnett, J. R., & Lisk, T. C. (2021). The future of employee engagement: Real-time monitoring and digital tools for engaging a workforce. In *International perspectives on employee engagement* (pp. 117-128). Routledge.

Chaudhary, S., Gkioulos, V., & Katsikas, S. (2023). A quest for research and knowledge gaps in cybersecurity awareness for small and medium-sized enterprises. *Computer Science Review, 50*, 100592.

Chitra, M., Surianarayanan, R., Mahamuni, V. S., Mohammed, S., Keno, M. T., & Boopathi, S. (2025). Study on Cloud Computing-Empowered Small and Medium Enterprises. In *Essential Information Systems Service Management* (pp. 189-220). IGI Global.

Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human relations, 53*(6), 747-770.

Climek, M., Henry, R., & Jeong, S. (2024). Integrative literature review on employee turnover antecedents across different generations: commonalities and uniqueness. *European Journal of Training and Development, 48*(1/2), 112-132.

Cochran, W. G. (1977). *Sampling techniques.* Johan Wiley & Sons Inc.

Contreras, F., Baykal, E., & Abid, G. (2020). E-leadership and teleworking in times of COVID-19 and beyond: What we know and where do we go. *Frontiers in psychology, 11*, 590271.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika, 16*(3), 297-334.

Davis, F. D. (1989). Technology acceptance model: TAM. *Al-Suqri, MN, Al-Aufi, AS: Information Seeking Behavior and Technology Adoption, 205*(219), 5.

Dindar Tıraş, S., & Güzel Özbek, A. (2024). Generation Y, Generation Z and Their Perception of Work Life. In Digital Economy and Green Growth: Opportunities and Challenges for Urban and Regional Ecosystems (pp. 175-191). Cham: Springer Nature Switzerland.

Dreyer, C., & Stojanová, H. (2023). How entrepreneurial is German generation Z vs. generation Y? A literature review. *Procedia computer science*, *217*, 155-164.

Ejjami, R. (2024). The digital evolution: Strategies for overcoming cybersecurity and adoption challenges in French SMEs. *International Journal For Multidisciplinary Research*, *6*.

Ewim, C. P. M., Achumie, G. O., Adeleke, A. G., Okeke, I. C., & Mokogwu, C. (2024). Developing a cross-functional team coordination framework: A model for optimizing business operations. *International Journal of Frontline Research in Multidisciplinary Studies*, *4*(1).

Faruque, M. O., Chowdhury, S., Rabbani, G., & Nure, A. (2024). Technology adoption and digital transformation in small businesses: Trends, challenges, and opportunities. *International Journal For Multidisciplinary Research*, *6*(10.36948).

Feeney, M. K., & Stritch, J. M. (2019). Family-friendly policies, gender, and work–life balance in the public sector. *Review of Public Personnel Administration*, *39*(3), 422-448.

Han, H., & Trimi, S. (2022). Towards a data science platform for improving SME collaboration through Industry 4.0 technologies. *Technological Forecasting and Social Change*, *174*, 121242.

Haque, S. M. S. (2023). The impact of remote work on hr practices: navigating challenges, embracing opportunities. *European Journal of Human Resource Management Studies*, *7*(1).

Hasani, T., Rezania, D., Levallet, N., O'Reilly, N., & Mohammadi, M. (2023). Privacy enhancing technology adoption and its impact on SMEs' performance. *International Journal of Engineering Business Management*, *15*, 18479790231172874.

Hasyim, H., & Bakri, M. (2025). Work-Life Imbalance: Its Impact on Employee Motivation and Well-Being. *Economics and Digital Business Review*, *6*(1).

Hendrawan, S. A., Chatra, A., Iman, N., Hidayatullah, S., & Suprayitno, D. (2024). Digital transformation in MSMEs: Challenges and opportunities in technology management. *Jurnal Informasi dan Teknologi*, 141-149.

Ismail, A., Majid, A. H. A., Rahman, M. A., Jamaluddin, N. A., Susantiy, A. I., & Setiawati, C. I. (2021). Aligning Malaysian SMEs with the megatrends: The roles of HPWPs and employee creativity in enhancing Malaysian SME performance. *Global Business Review*, *22*(2), 364-380.

Jaharuddin, N. S., & Zainol, L. N. (2019). The impact of work-life balance on job engagement and turnover intention. *The South East Asian Journal of Management, 13*(1), 7.

Jones, S. (2022). *Marketing to the generations: Boomers, Gen X, Gen Y, and Gen Z explained*. LinkedIn.
https://www.linkedin.com/pulse/marketing-generations-boomers-gen-x-y-z-explained-scott

Kossek, E. E., & Kelliher, C. (2023). Making flexibility more i-deal: Advancing work-life equality collectively. *Group & Organization Management, 48*(1), 317-349.

Kossek, E. E., Gettings, P., & Misra, K. (2021). *The future of flexibility at work.* Harvard Business Review, 28.

Kramer, M. W., Day, E. A., Nguyen, C., Hoelscher, C. S., & Cooper, O. D. (2019). Leadership in an interorganizational collaboration: A qualitative study of a statewide interagency taskforce. *Human Relations, 72*(2), 397-419.

Leso, B. H., Cortimiglia, M. N., & Ghezzi, A. (2023). The contribution of organizational culture, structure, and leadership factors in the digital transformation of SMEs: a mixed-methods approach. *Cognition, Technology & Work, 25*(1), 151-179.

Lukács, B., & Antal, M. (2023). The practical feasibility of working time reduction: Do we have sufficient data?. Ecological Economics, 204, 107629.

Mahmood, A., & Khan, M. M. (2024). The Effect of Work-Family Conflicts on Employee Well-Being: The Mediating Role of Work-Life Balance and the Moderating Role of Psychological Resources. *Pakistan Social Sciences Review, 8*(4), 592-609.

Mayasari, N., Suhara, A., Dinarwati, S., Yuliastuti, H., & Tresnadjaja, R. (2024). The Effect of Technology Integration, Work-Life Balance, and Job Stress on Employee Well-Being in the Art Industry in Jakarta. *West Science Social and Humanities Studies, 2*(05), 776-786.

Mer, A., & Virdi, A. S. (2024). Decoding the challenges and skill gaps in small-and medium-sized enterprises in emerging economies: A review and research agenda. *Contemporary Challenges in Social Science Management: Skills Gaps and Shortages in the Labour Market*, 115-134.

Ng, P. M., Lit, K. K., & Cheung, C. T. (2022). Remote work as a new normal? The technology-organization-environment (TOE) context. *Technology in Society, 70*, 102022.

Ninaus, K., Diehl, S., & Terlutter, R. (2021). Employee perceptions of information and communication technologies in work life, perceived burnout, job satisfaction and the role of work-family balance. *Journal of Business Research, 136*, 652-666.

Olawale, O., Ajayi, F. A., Udeh, C. A., & Odejide, O. A. (2024). Remote work policies for IT professionals: review of current practices and future trends. *International Journal of Management & Entrepreneurship Research, 6*(4), 1236-1258.

Ortiz-Bonnin, S., Blahopoulou, J., García-Buades, M. E., & Montañez-Juan, M. (2023). Work-life balance satisfaction in crisis times: from luxury to necessity–The role of organization's responses during COVID-19 lockdown. *Personnel Review, 52*(4), 1033-1050.

Oyewobi, L. O., Oke, A. E., Adeneye, T. D., Jimoh, R. A., & Windapo, A. O. (2022). Impact of work–life policies on organizational commitment of construction professionals: role of work–life balance. *International Journal of Construction Management, 22*(10), 1795-1805.

Panda, A., & Sahoo, C. K. (2021). Work–life balance, retention of professionals and psychological empowerment: an empirical validation. *European Journal of Management Studies, 26*(2/3), 103-123.

Park, S., & Doo, M. Y. (2020). The effect of organizational culture and HR practices on female managers' commitment and job satisfaction. *European Journal of Training and Development, 44*(2/3), 105-120.

Ray, T. K., & Pana-Cryan, R. (2021). Work flexibility and work-related well-being. *International journal of environmental research and public health, 18*(6), 3254.

Samsudin, N., Zakaria, T., Osman, J., Ramdan, M. R., Khalid, I. K. M., Mohamad, N., ... & Sastraredja, S. (2024). The Digitalization Technology for Sustainable Rural Entrepreneurship: A Structured Review. *Journal of Advanced Research in Applied Sciences and Engineering Technology, 42*(1), 14-30.

Shifrin, N. V., & Michel, J. S. (2022). Flexible work arrangements and employee health: A meta-analytic review. *Work & Stress, 36*(1), 60-85.

Singh, P., Bala, H., Dey, B. L., & Filieri, R. (2022). Enforced remote working: The impact of digital platform-induced stress and remote working experience on technology exhaustion and subjective wellbeing. *Journal of Business Research, 151*, 269-286.

Singh, R., Chaudhuri, S., Sihag, P., & Shuck, B. (2023). Unpacking generation Y's engagement using employee experience as the lens: an integrative literature review. *Human resource development international, 26*(5), 548-576.

SME Corp. (2024). *Profile of MSMEs in 2015–2023*. https://www.smecorp.gov.my/index.php/en/policies/2020-02-11-08-01-24/profile-and-importance-to-the-economy

Soga, L. R., Bolade-Ogunfodun, Y., Mariani, M., Nasr, R., & Laker, B. (2022). Unmasking the other face of flexible working practices: A systematic literature review. *Journal of Business Research, 142*, 648-662.

Suki, N., Laidey, N. M., Kaur, J., & Shivaanii, M. (2024) Work-From-Home Policy Post-Pandemic: Into The.

Sun, Y., & Jung, H. (2024). Machine Learning (ML) Modeling, IoT, and Optimizing Organizational Operations through Integrated Strategies: The Role of Technology and Human Resource Management. *Sustainability, 16*(16), 6751.

Suprayitno, D. (2024). Assessing the Effect of Compensation Packages, Work-Life Balance Policies, and Career Development Opportunities on Employee Retention: A Case Study of MSME Employee. *International Journal of Business, Law, and Education, 5*(2), 1592-1561.

Thompson, R. J., Payne, S. C., Alexander, A. L., Gaskins, V. A., & Henning, J. B. (2022). A taxonomy of employee motives for telework. *Occupational Health Science,* 1-32.

Touriano, D., Sutrisno, S., Kuraesin, A. D., Santosa, S., & Ausat, A. M. A. (2023). The role of information technology in improving the efficiency and effectiveness of talent management processes. *Jurnal Minfo Polgan, 12*(1), 539-548.

Uddin, M. (2021). Addressing work-life balance challenges of working women during COVID-19 in Bangladesh. *International Social Science Journal, 71*(239-240), 7-20.

Vahdat, S. (2022). The role of IT-based technologies on the management of human resources in the COVID-19 era. *Kybernetes, 51*(6), 2065-2088.

Vázquez, I. G., Curtarelli, M., Anyfantis, I., Brun, E., & Starren, A. (2024). Digitalisation and workers wellbeing: The impact of digital technologies on work-related psychosocial risks. European Commission.

Wahab, H. A., Wahed, H., & Abd Razak, S. S. (2024, January). Flexible Work Arrangements and the Legal Considerations in Malaysia. In Proceedings of the 12th UUM International Legal Conference 2023 (UUMILC 2023) (Vol. 15, p. 401). Springer Nature.

Wahyoedi, S., Suherlan, S., Rijal, S., Azzaakiyyah, H. K., & Ausat, A. M. A. (2023). Implementation of information technology in human resource management. *Al-Buhuts, 19*(1), 300-318.

Williams, P., Cathcart, A., & McDonald, P. (2021). Signals of support: Flexible work for mutual gain. *The International Journal of Human Resource Management, 32*(3), 738-762.

Wu, T. (2022). Digital project management: rapid changes define new working environments. *Journal of Business Strategy, 43*(5), 323-331.

Yap, B. (2023). How private and SME businesses can thrive under the Malaysia MADANI roadmap. EY. https://www.ey.com/en_my/insights/tax/how-private-and-sme-businesses-can-thrive-under-the-malaysia-madani-roadmap