Striking the balance: The priority ranking of flexible work arrangements in freight forwarding companies

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ABSTRACT

The Flexible Work Arrangements (FWA) is increasing its prominence in today's business world. Companies are increasingly adopting flexibility to improve employee happiness and overall operational efficiency as the landscape of work patterns evolves. There is a growing research need to address the relative importance of different FWA according to specific business fields of the companies. This study aims to contribute to the field of organizational management by systematically prioritizing and ranking various FWA in the context of Turkish freight forwarding companies using the Analytic Hierarchy Process (AHP) methodology. The literature mainly suggests available FWA and their individual contributions to employee satisfactions. However, there is a research gap to identify the most relevant methods that match the specific needs of the sea freight forwarding sector. This study tries to construct a complete hierarchy of flexible work arrangements by meticulously using the AHP framework and including the viewpoints of both academics and Human Resources (HR) officials. This study seeks to establish a comprehensive hierarchy of flexible work arrangements, taking into account practices such as remote work, flextime, flexplace, and leave control, among others, through a meticulous application of the AHP framework. The findings of this study are expected to provide practical insights, assisting freight forwarding firms in making educated decisions on the implementation and priority of flexible work practices and promoting a harmonious and productive work environment.

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Introduction

The topic of flexible work arrangements is gaining prominence in recent scholarly discussions. Contemporary studies in the literature have demonstrated that retaining talented and experienced personnel is a diligently pursued asset in the container shipping industry (Yildiz & Esmer, 2021; Yildiz et al., 2023a). Offering FWA can be an attractive job selection criterion for employees working in the container shipping companies. It can also help companies to attract and retain talented individuals who value work-life balance and flexibility in their work arrangements (Yusaini et al., 2023).

Flexible work arrangements have been associated with increased job satisfaction and improved employee well-being (Gajendran and Harrison, 2007). By providing employees with more control over their work schedules and locations, freight forwarding companies can contribute to higher job satisfaction and employee morale (Turkmen & Polat Dede, 2019). Flexible work arrangements, such as telecommuting or flexible scheduling, can help employees in the industry achieve a better work-life balance (Dilmaghani, 2020). This is particularly relevant in an industry that often involves irregular working hours and demanding schedules (Yusaini et al., 2023). Therefore, this area is not only attracting the academic research interests but also industrial interests specifically from human resource strategy perspective.

Flexible work arrangements are critical in catastrophe scenarios because they allow organizations and individuals to continue operations while adapting to changing business environment conditions (Yildiz & Akkas, 2023). Yildiz et al. (2023a), revealed that, during the pandemic, container shipping companies greatly benefited from flexible work arrangements. They allowed freight forwarding firms to swiftly adjust because they already had practices in place, such as working from home and rotating shifts.

Upon evaluating the given information, it becomes evident that flexible work arrangements play a crucial role in the container shipping industry, particularly for freight forwarders (Sulistiyani et al., 2023). Based on this point, the aim of this study is to identify which practices within flexible work arrangements, known for their significance to freight forwarders, are more important and feasible. As a result, it is intended to create a guide for companies that have not previously implemented these systems or are just starting to do so, helping them shape their priorities accordingly. In line with this, a comprehensive literature review was conducted to identify eight fundamentals of FWA practices. A questionnaire form was then created, consisting of pairwise comparisons, and administered to 20 experts including academics and industry representatives. The data obtained were processed using the Analytic Hierarchy Process (AHP) method, and ultimately, the prioritization of FWA practices specific to freight forwarder companies was determined.

Conceptual Background

FWA refer to practices that allow employees to have more control and flexibility over their work schedules, locations, and hours (Syihabudhin & Kinanti, 2022). These arrangements can include working from home, working outside regular office hours, reducing or extending contract hours, or banking overtime hours (Groen et al., 2018). The goal of flexible work arrangements is to support employees in achieving a better work-life balance, to enhance their well-being and job-related outcomes (Niijp et al., 2012; Wahab & Tatoglu, 2020; Butarbutar et al., 2022).

There is evidence to suggest that flexible work arrangements have positive effects on employees and organizations. Research has shown that flexible work arrangements can improve work-life balance, job satisfaction, organizational commitment, and employee engagement (Wahab & Tatoglu, 2020; Eshak & Egypt, 2021; Marumpe et al., 2023). They can also lead to increased productivity, performance, and well-being among workers (Subramaniam et al., 2015; Wahab & Tatoglu, 2020; Alzona & Villapando, 2021). Flexible work arrangements have been found to be particularly beneficial for certain groups, such as millennials and women (Subramaniam et al., 2015; Eshak & Egypt, 2021).

However, it is important to note that the impact of flexible work arrangements can vary depending on factors such as the extent of telecommuting, task interdependence, job discretion, and organizational support (Allen et al., 2015; Weale et al., 2017). Some studies have found mixed or inconclusive results regarding the relationship between flexible work arrangements and job satisfaction (Golden & Veiga, 2005). Additionally, the effectiveness of flexible work arrangements may depend on the specific context and industry (Weale et al., 2017; Groen et al., 2018). Flexible work arrangements can include various components that cater to the needs and preferences of both employees and employers. The components of flexible work arrangements can vary depending on the organization and the specific needs of the employees. However, some common components include:
**Flextime**

Flextime refers to a flexible work arrangement that allows employees to have control over their work schedules, particularly in terms of the start and end times of their workday (Crowley & Kolenikov, 2014; White et al., 2020). It provides employees with the flexibility to adjust their working hours to accommodate personal needs, such as family responsibilities, personal appointments, or other commitments (Chapman et al., 2016; Mohamed & Zaki, 2017).

The concept of flextime recognizes that individuals have different preferences and peak productivity periods throughout the day (Lyness et al., 2012). By allowing employees to choose their work hours within certain parameters set by the organization, flextime aims to enhance work-life balance and job satisfaction (Lee & Kim, 2010; Lee & DeVoe, 2012). It provides employees with the autonomy to structure their workday in a way that suits their individual needs and preferences, which can contribute to increased job satisfaction and reduced work-family conflict (Caillier, 2012).

Research has shown that flextime can have positive effects on various work-related outcomes. For example, studies have found that flextime is associated with improved work-family balance (Haque & Ahmed, 2016; Smith et al., 2019), increased job satisfaction (Caillier, 2012), higher productivity (Lee & DeVoe, 2012), decreased absenteeism (Wadsworth et al., 2010), and enhanced organizational commitment (Caillier, 2012). Flextime has also been found to be beneficial for attracting and retaining talent, particularly for individuals who value work-life balance and flexibility (Chapman et al., 2016).

Information technology (IT) workers often work flexible hours to meet project deadlines and complete tasks during their most productive periods. Furthermore, employees in marketing and sales may utilize flextime to accommodate client schedules and attend meetings or events at different times.

**Remote work**

Remote work, also known as telecommuting or working from home, refers to a flexible work arrangement where employees perform their job duties outside of the traditional office setting, typically using technology to connect with colleagues and complete tasks (Porto & Vega, 2023). Remote work has gained significant attention and popularity, especially with advancements in technology that enable mobile connections and the recent COVID-19 pandemic, which necessitated remote work for many organizations (Rañeses et al., 2022).

The impact of remote work on various aspects of work and life has been a subject of research and debate. Studies have examined the consequences of remote work on work-family conflict, job satisfaction, performance, turnover intent, role stress, and other work-related outcomes (Golden et al., 2006; Gajendran & Harrison, 2007; Allen et al., 2015). The findings have been mixed, with some studies suggesting that remote work enhances work-life balance and reduces conflict, while others indicate potential challenges and negative effects (Allen et al., 2015). It can also lead to higher productivity and performance (Gajendran & Harrison, 2007). The flexibility and autonomy provided by remote work can allow employees to better manage their work and personal responsibilities, leading to improved work-life balance and well-being (Felstead & Henseke, 2017).

Using collaboration and project management technologies, project managers may manage teams and monitor projects remotely. Some financial analysts and advisers give investment advice and financial planning services remotely.

**Compressed workweek**

A compressed workweek is a form of flexible work arrangement in which workers work their regular weekly hours over fewer days. A compressed workweek, as opposed to the usual five-day workweek, often consists of increased daily hours to satisfy the entire weekly work hours. Because of the compacted schedule, employees can take more consecutive days off, resulting in a three-day weekend or longer breaks. (Hyatt & Coslor, 2018). The compressed workweek concept seeks to give employees with greater flexibility, work-life balance, and the ability to cut travel time and expenses. Employers can also use it to fit special company demands or operational requirements without jeopardizing staff productivity or efficiency. The effectiveness of establishing a shortened workweek, however, is dependent on the nature of the job, employee preferences, and the company's capacity to efficiently manage the schedule (Arbon et al., 2012; Noback et al., 2016).

Nurses and healthcare workers often work 12-hour shifts three to four days a week, enabling them to take longer breaks. To enhance production efficiency, certain industrial firms use compressed workweeks, in which workers work longer hours but on fewer days per week. Police officers, firefighters, and paramedics usually work lengthy hours followed by many days off. To fulfill tight deadlines, workers in the mining and construction sectors may work shortened schedules throughout project stages. Truck drivers and long-haul transportation
workers sometimes work compressed schedules in order to finish lengthy journeys in a shorter amount of time.

**Job sharing**

The term “job sharing” refers to a flexible work arrangement in which two or more employees share the tasks and workload of a single full-time employment (Wadsworth et al., 2010). Employees share the hours and activities of the job amongst themselves in a job-sharing arrangement, allowing each individual to work part-time while collectively covering the full-time role (Thakur et al., 2018; Ouakouak et al., 2021).

Job sharing is often implemented to provide employees with greater work-life balance and flexibility, particularly for individuals who have personal commitments or prefer part-time work (Wadsworth et al., 2010). It allows employees to share the responsibilities of a full-time role while reducing their working hours, enabling them to fulfill other personal or family obligations (Thakur et al., 2018; Ouakouak et al., 2021). The benefits of job sharing can include increased job satisfaction, reduced work-related stress, improved work-life balance, and enhanced productivity (Wadsworth et al., 2010; Thakur et al., 2018). Job sharing can also help organizations retain valuable employees who may otherwise leave due to personal circumstances or the need for reduced working hours (Wadsworth et al., 2010; Thakur et al., 2018; Ouakouak et al., 2021).

Sales representatives or account managers may share a client portfolio, with each partner in charge of serving customers on particular days or at particular times. HR professionals may job share to handle recruiting, benefits administration, or employee relations activities, ensuring year-round coverage. Job sharing may be used by legal assistants, paralegals, and administrative employees in law firms to help lawyers and handle casework.

**Reduced hours**

Reduced hours are a sort of flexible work arrangement in which workers work fewer hours than the regular or full-time workweek. Part-time employees work less hours while still being considered employees of the firm, rather than the typical 40 hours per week (or the standard work hours in a given sector or nation) (Barnett & Gareis, 2002).

Reduced hours or part-time employment has several advantages for both individuals and companies. Employees benefit from enhanced work-life balance, increased scheduling flexibility, decreased travel time and expenditures, possible skill development, and less burnout. Cost savings, enhanced workforce management flexibility, access to a larger talent pool, higher employee retention, and the capacity to respond to seasonal or cyclical work needs can all benefit employers. Part-time employment arrangements can generate a win-win scenario by boosting employee well-being while also addressing the company’s operational demands (Kallis et al., 2013; Barck-Holst et al., 2017).

Temporary or seasonal employees, such as those recruited for holiday retail roles or agricultural labor, usually have shorter work weeks. Interns and entry-level workers may begin with part-time hours to obtain experience before progressing to full-time roles. To accommodate several customers or personal obligations, consultants may provide their services on a part-time or reduced-hour basis. Due to the physically and intellectually demanding nature of their jobs, certain healthcare personnel, such as medical technicians and radiologists, may work fewer hours.

**Flexplace**

The concept of flexplace recognizes that not all work tasks require physical presence in the office and that employees can effectively perform their job duties from a remote location. It offers employees the flexibility to choose where they work, providing them with greater autonomy and control over their work environment. Flexplace arrangements are often facilitated by technology such as laptops, smartphones, video conferencing, and cloud-based collaboration tools, which enable employees to stay, connected and collaborate with their colleagues (Gajendran & Harrison, 2007; Allen et al., 2015).

Flexplace may provide several advantages to both people and enterprises. It gives additional flexibility in managing work and personal commitments for employees, decreases commute time and expenses, and improves work-life balance. It can also lead to increased job satisfaction, better well-being, and less work-family friction. Flexplace can benefit organizations by increasing employee productivity, increasing job satisfaction and engagement, reducing office space and overhead costs, and contributing to environmental sustainability by reducing commuting-related emissions (Hill et al., 2001; Gajendran & Harrison, 2007; Allen et al., 2015).

Software developers and engineers may collaborate with team members from faraway places by utilizing online tools and version control systems. Writers, content producers, and copywriters may work from any place with internet connectivity to create articles, blog posts, and marketing material. Translators and language experts often work from home to offer translation and interpretation services to
Flexible scheduling

Flexible scheduling refers to a work arrangement that allows employees to have greater control and flexibility over their work hours and schedules. It involves giving employees the ability to adjust their start and end times, take breaks when needed, and potentially work non-traditional hours. The goal of flexible scheduling is to accommodate employees' personal needs and preferences while ensuring that work tasks and responsibilities are fulfilled (Baltes et al., 1999; Febriani & Sopiah, 2022).

Flexible scheduling has several advantages, including higher job satisfaction, better work-life balance, less work-family conflict, and improved employee well-being. It can also contribute to increased staff productivity, engagement, and retention. Flexible scheduling enables employees to better manage personal commitments such as childcare, schooling, or caregiving, and can contribute to a strong business culture and employee morale (Baltes et al., 1999; Febriani & Sopiah, 2022).

Workers in bars, restaurants, and cafés may use flexible scheduling to coincide with peak eating times and take staff availability into account. Hotel employees, such as front desk clerks, housekeepers, and concierge services, may have flexible hours to effectively handle guest check-ins and cleaning responsibilities. Police officers, firefighters, and paramedics use flexible scheduling, rotating shifts, and on-call arrangements to ensure round-the-clock coverage. Truck drivers, pilots, and logistics workers may have to work around delivery deadlines and customer requests. Healthcare personnel, such as physicians, nurses, and medical staff, depend on leave management systems to seek time off for personal reasons or sickness while still guaranteeing enough patient care coverage.

Freight forwarding is a crucial aspect of the logistics industry, playing a major role in the movement of goods from one place to another (Min & Joo, 2009). Freight forwarders act as intermediaries between shippers and carriers, with the main objective of dispatching shipments via carriers (Gocer et al., 2023). They have the expertise and ability to arrange the movement of cargo from one destination to another within a short timeframe. Freight forwarders have established long-term relationships with carriers, allowing them to obtain favorable deals and ensure efficient transportation of goods (Vasantha & Meena, 2019).

The container shipping industry heavily relies on freight forwarders for the efficient consolidation and provision of cargo to container carriers for transport. Freight forwarders act as third-party logistics service providers, offering integrated services and serving as coordinators in supply chain management. They play a vital role in ensuring the smooth flow of goods and effective logistics operations in the container shipping industry (Ding et al., 2016). Freight forwarders also play a crucial role in facilitating global trade by providing efficient and reliable transportation services. They have extensive knowledge of international shipping regulations, customs procedures, and documentation requirements, which helps shippers navigate the complexities of cross-border trade.
Freight forwarders ensure compliance with legal and regulatory frameworks, minimizing the risk of delays or penalties in the shipping process (Notteboom & Merckx, 2006). Moreover, freight forwarders contribute to the competitiveness of container shipping by offering value-added services and enhancing supply chain efficiency. They act as intermediaries between multiple stakeholders, including shippers, carriers, and other logistics service providers, coordinating and optimizing the flow of goods. By streamlining logistics operations and improving coordination, freight forwarders help reduce costs, enhance service quality, and improve overall supply chain performance (Ozaydin & Gucluogullari, 2015).

In the container shipping industry, freight forwarders also play a significant role in carrier selection. Shippers rely on freight forwarders to assess and choose the most suitable ocean container carriers based on factors such as service quality, professionalism of carrier staff, and knowledge of services provided. Freight forwarders’ expertise and experience in the industry enable them to make informed decisions that align with the specific needs and requirements of shippers (Fanam et al., 2016). Furthermore, freight forwarders contribute to risk management in the container shipping industry. They help shippers mitigate risks associated with fluctuating freight rates, market volatility, and uncertainties in the shipping market. By providing insights into market trends, offering hedging options such as forward freight agreements (FFAs), and leveraging their network of carriers, freight forwarders assist shippers in making informed decisions and managing risks effectively (Alexandridis et al., 2018).

The role of freight forwarders has evolved over time due to the increasing demand for transport services and changes in the industry landscape. Leading shipping operators, such as Maersk, have expanded their activities to include freight forwarding, posing a threat to traditional freight forwarders. To remain competitive, freight forwarders need to adapt to these dynamic changes and offer added value to their clients. This includes providing a wide range of services, ensuring service quality, and embracing sustainable practices (Skiba & Karas, 2022). Conversely, ocean freight forwarder companies, which sometimes act as carriers, suppliers, and agents, have recently started to function as shipping lines through long-term agreements (Yildiz et al., 2023a).

In today’s changing economic environment, flexible work arrangements are critical for freight forwarding companies. These practices allow freight forwarders to respond quickly to the container shipping industry’s ever-changing needs. Sea freight forwarding entails intricate logistics, customs regulations, and worldwide supply chain management, which often necessitates around-the-clock attention. Remote working, flexible hours, and job sharing enable employees to maintain a good work-life balance while ensuring the company’s operations function smoothly. Furthermore, they can react quickly to crises or time-sensitive circumstances, improve employee retention, and attract a varied talent pool. In summary, implementing flexible work arrangements not only improves sea freight forwarding companies’ resilience and agility but also helps their long-term success and competitiveness in the worldwide market (Sulistiyani et al., 2023; Yildiz et al., 2023a).

The FWA practices are more commonly seen in the developed countries and some developing countries interacting more with the developed world. In this research, FWA practices in the literature are evaluated in the perspective of their applicability to Turkish Sea Freight Forwarding companies. Although flexible working arrangements in freight forwarders recently have been investigated by Sulistiyani et al. (2023) from the perspectives of employee performance, this study further helps to explore the unknowns regarding the prioritization of different criteria and their practical implications. In light of this study, it will be possible to have a deeper understanding regarding the flexible working preferences of Freight Forwarder companies which is an essential gap in the literature.

Materials and Method

Research Approach

According to Vaidya & Kumar (2006), the Analytical Hierarchy Process (AHP) is a frequently used approach for multi-criteria decision-making. It enables the creation of ratio scales based on comparisons of various criteria, whether discrete or continuous. As described by Saaty (1987), these comparisons might be obtained from real data or a baseline scale expressing relative preferences and perceptions. According to Vaidya & Kumar (2006), AHP is a legitimate methodology for picking the best choices, whilst Saaty (2008) revealed that it is a systematic way for ranking distinct aspects in a hierarchy. Talib et al. (2011) and Salgado et al. (2015) have both said that AHP is a suitable approach for prioritizing criteria in the context of the HRM discipline.

The AHP method is also commonly applied to the problems of logistics management and freight forwarding. These problems include not only transport choice problems of freight forwarders but also choice criteria of costumers to select freight forwarders. For instance, Akman Durgut et al. (2022)

conducted research on the prioritization of digitalization barriers within the Turkish logistics industry. In another study, Yildiz et al. (2023b) examined the priority rankings of talent development practices within the container shipping industry, with participants including freight forwarders. Considering the findings from these studies, it is reasonable to assert that Analytic Hierarchy Process (AHP) is a valid method for conducting research in these domains.

AHP can be used in instances when the decision-maker can only offer judgment intervals based on perceptions rather than making firm decisions. The AHP method is commonly applied to the problems of logistics management and freight forwarding. These problems include not only transport choice problems of freight forwarders but also choice criteria of customers to select freight forwarders. In this study, the researchers employed AHP to estimate the weightings of eight major Flexible Work Arrangements (FWA) practices widely discussed in the HRM literature in the current study. The data was gathered from the perspectives of Academics working in the field and HR officials working in freight forwarding companies, which are actively operating in Turkey.

In AHP method, a criteria comparison matrix \( A \) is generated based on the nearest possible integer generated from the mean responses of the participants (Equation 1).

\[
A = \begin{bmatrix}
1 & \cdots & a_{1n} \\
\vdots & \ddots & \vdots \\
a_{n1} & \cdots & 1
\end{bmatrix}
\] (1)

To perform AHP analysis the matrix needs to be normalized. The criteria comparison matrix is normalized with the Equation 2.

\[
a'_{ij} = \frac{a_{ij}}{\sum_{i=1}^{n} a_{ij}}, i, j = 1, 2, \ldots, n
\] (2)

where \( a_{ij} \) is the comparison value of the two criteria. Then, priority weighing is calculated with the Equation (3) (Anonymous, 2023a).

\[
w_i = \left( \frac{1}{n} \right) \sum_{j=1}^{n} a'_{ij}, i, j = 1, 2, \ldots, n
\] (3)

The consistency ratio (CR) is used in AHP analysis to analyze the concurrency of expert perspectives. If the CR is 0.1 or below, the experts’ judgments were consistent, and the study may proceed to derive the mean relative weights. If the CR is more than 0.1, it indicates a lack of consensus among the experts, and more data from other experts must be acquired before performing the study (Tzeng & Huang, 2011). When people have distinct value systems and behave autonomously, the emphasis changes to understand the values that each person discloses. These priorities can then be determined and summarized mathematically or geometrically (Forman & Peniwati, 1998). The formula of CR is given as below (Equation 4).

\[
CR = \frac{\left( \lambda_{max} - n \right)}{(n - 1) * RI}
\] (4)

where:
- \( \lambda_{max} \) is the eigenvalue of the matrix.
- \( n \) is the number of attributes.
- \( RI \) is the random index dependent on \( n \) number.

The eigenvalue of the matrix is also calculated as follows (Equation 5).

\[
\lambda_{max} = \left( \frac{1}{n} \right) \sum_{j=1}^{n} \left( \frac{\sum_{i=1}^{n} a_{ij}w_j}{w_i} \right)
\] (5)

where \( w_j \) is the priority weighting of criterion \( j \).

Data Collection and Profile of the Respondents

A questionnaire survey was carried out to examine the significance of the eight primary FWA practices identified in the HRM literature. The poll included expert participants who compared the relative importance of certain FWA practices in pairs. The purpose was to identify the most viable procedures for freight forwarding firms. Each participant was asked to make separate and distinguishable judgments without the necessity of agreement on the relevance of criteria or alternate rankings. The goal of this method was to capture their impressions by having them pick between several possibilities. To reflect the perceived significance of one factor over another, participants utilized a pair-wise comparison scale (refer to Table 1).

Table 1. The research's linguistic scale

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Saaty AHP Scale (Crisp Values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equally preferred</td>
<td>1</td>
</tr>
<tr>
<td>Moderately preferred</td>
<td>3</td>
</tr>
<tr>
<td>Strongly preferred</td>
<td>5</td>
</tr>
<tr>
<td>Very strongly preferred</td>
<td>7</td>
</tr>
<tr>
<td>Extremely preferred</td>
<td>9</td>
</tr>
<tr>
<td>Equally to moderately preferred</td>
<td>2</td>
</tr>
<tr>
<td>Moderately to strongly preferred</td>
<td>4</td>
</tr>
<tr>
<td>Strongly to very strongly preferred</td>
<td>6</td>
</tr>
<tr>
<td>Very strongly to extremely preferred</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Source: Anagnostopoulos et al. (2007), Bakır & Atalık (2021), Yildiz et al. (2023b).
Purposive sampling was used to pick participants for this study, which means they were chosen based on specified criteria related to the research purpose. Purposive sampling’s main goal is to choose experts to include in the sample who have mentalities shaped by experience, competence, and expertise in the subject of the research. In AHP studies conducted based on perceptions, the goal is to include the most suitable experts in the sample to ensure that the evaluations yield accurate and valid results. In this regard, purposive sampling is considered the most appropriate sampling method for the selection of the sample in this study. Potential participants had to have a high degree of expertise and experience with the topic matter, as well as indicate their availability and desire to participate in the study (Palinkas et al., 2015; Yildiz et al., 2023b).

The final sample included 20 people chosen for their participation in the industry and competence on the topic. In selection of industrial participants, Utikad Database was used, and it was targeted to reach min.10% of the companies considered in the scope of this study. The academic researchers involved in the study are actively affiliated with maritime faculties, specifically within the department of maritime business management. These academics have been included in the sample deliberately, as they possess expertise and engage in research related not only to freight forwarding but also in the fields of human resource management and management and organization in general. Table 2 contains detailed information about the respondents.

Table 2. Profile of the respondents

<table>
<thead>
<tr>
<th>Participant No</th>
<th>Company/Institution</th>
<th>Occupation</th>
<th>Experience in the Field (Years)</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University</td>
<td>Academic Research</td>
<td>9</td>
<td>Doctorate</td>
</tr>
<tr>
<td>2</td>
<td>University</td>
<td>Academic Research</td>
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<td>Doctorate</td>
</tr>
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<td>University</td>
<td>Academic Research</td>
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<td>Doctorate</td>
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<td>4</td>
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<td>5</td>
<td>University</td>
<td>Academic Research</td>
<td>9</td>
<td>Doctorate</td>
</tr>
<tr>
<td>6</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>21</td>
<td>Graduate</td>
</tr>
<tr>
<td>7</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>6</td>
<td>Master’s</td>
</tr>
<tr>
<td>8</td>
<td>Freight Forwarder</td>
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<td>19</td>
<td>Master’s</td>
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<tr>
<td>9</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>13</td>
<td>Graduate</td>
</tr>
<tr>
<td>10</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>13</td>
<td>Master’s</td>
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<tr>
<td>14</td>
<td>Freight Forwarder</td>
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<td>15</td>
<td>Master’s</td>
</tr>
<tr>
<td>15</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>7</td>
<td>Master’s</td>
</tr>
<tr>
<td>16</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>6</td>
<td>Master’s</td>
</tr>
<tr>
<td>17</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>13</td>
<td>Graduate</td>
</tr>
<tr>
<td>18</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>15</td>
<td>Master’s</td>
</tr>
<tr>
<td>19</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>7</td>
<td>Master’s</td>
</tr>
<tr>
<td>20</td>
<td>Freight Forwarder</td>
<td>Human Resources</td>
<td>10</td>
<td>Graduate</td>
</tr>
</tbody>
</table>

Numerical Analysis

Following the data collection process, the obtained data from the survey questionnaires are carefully elaborated, and three different criteria matrixes are established based on the perspectives of two different occupations and the total responses to survey questionnaires. This numerical analysis will help us not only determine the criteria weighing ranking for the total responses of the participants but also comprehend point-of-view differences between academic and industrial participants.

The numerical analysis will help us to prioritize the FWA criteria, calculate the eigenvalues, delta, and consistency ratios which are mentioned in the materials and method section. The numerical analysis of the study is performed by using Microsoft Excel and BPMSG AHP calculator software (Anonymous, 2023b). BPMSG is a web based free software which is applicable to criteria prioritization, and consistency ratio calculation. It also provides high quality visual illustration of the results. In the generation of the matrixes, the nearest integer numbers of the mean responses are used. In the final stage of the numerical analysis CR is calculated by using the following Warton Random Index (RI) scale. Since the problem has 8 criteria, the RI is considered as 1.41.
Results and Discussion

As an outcome of the numerical analysis, initially the criteria weighing, and criteria rank results are generated. The table 4 presents the criteria weighing and rank of the study. The table below illustrates weighing and rank results of the 5 academic participants, 15 Private Sector HR Professional participants and total 20 participants.

The results of the study shown the Remote work criterion as the most important criterion with 31.597 % among flexible job arrangements criteria. This importance is accepted as a bit higher by academic participants in comparison to industrial participants. The most notable difference between academics and industry professionals' perspective is the ranking of Flextime. Whilst it is ranked as 2nd by academics, it is ranked as 7th by the industry. Job sharing on the other hand is ranked as the least important criterion by all participant categories.

When we calculated the consistency ratio of academic participants' responses, we found it around 0.061 which is also smaller than 0.1 and therefore consistent.

Ultimately, we calculated the consistency ratio of Private Sector HR Professionals' responses, we found it smaller than 0.1 (approximately 0.059) and consistent.

The findings of the study indicate that the participants, followed by flexplace, leave control, flextime, flexible scheduling, a compressed workweek, reduced hours, and job sharing, perceive remote work as the most significant flexible work arrangement. This ranking suggests that remote work is highly valued and considered important in providing flexibility and work-life balance. The higher importance given to remote work by academic participants compared to industry professionals may reflect the growing acceptance and adoption of remote work in academic settings. Academics may have experienced the benefits of remote work, such as increased autonomy and flexibility, which could explain their higher ranking of remote work.

Flexplace's second-place rating underlines the importance of giving employees the flexibility to pick their work location, allowing them to maximize productivity while accommodating personal preferences. Leave control, ranked third, indicates that participants understand the necessity of giving employees the option to regulate their time off, presumably indicating the desire for harmonious work-life integration. The fourth-place position for flextime demonstrates its importance in giving employees more control over their working hours, potentially increasing job happiness and engagement. However, the significant disparity in its rating between academics and industry experts reflects divergent views on its application and advantages.

Flexible scheduling and compressed workweek, which rank fifth and sixth, demonstrate the complex nature of professional flexibility. While both techniques provide benefits in terms of adjusting to individual demands, the differences in their positions may be due to differences in operational requirements and personnel responsibilities within the freight forwarding business. Surprisingly, reduced hours came in seventh place, indicating that people may prefer alternative types of flexibility to reduced working hours. Job sharing’s placement in the eighth and last position emphasizes its perceived limited application in the context of freight forwarding firms, possibly due to the nature of the industry’s tasks and obligations.

Table 4. Criteria weighing results of the study

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Academic Weighing &amp; Rank</th>
<th>Industrial Weighing &amp; Rank</th>
<th>Total Weighing &amp; Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Work</td>
<td>0.328098 (Rank 1)</td>
<td>0.288937 (Rank 1)</td>
<td>0.31597 (Rank 1)</td>
</tr>
<tr>
<td>Flexplace</td>
<td>0.153195 (Rank 3)</td>
<td>0.20038 (Rank 2)</td>
<td>0.201063 (Rank 2)</td>
</tr>
<tr>
<td>Leave Control</td>
<td>0.125426 (Rank 4)</td>
<td>0.182159 (Rank 3)</td>
<td>0.155691 (Rank 3)</td>
</tr>
<tr>
<td>Flextime</td>
<td>0.22695 (Rank 2)</td>
<td>0.063138 (Rank 7)</td>
<td>0.096471 (Rank 4)</td>
</tr>
<tr>
<td>Flexible Scheduling</td>
<td>0.076898 (Rank 5)</td>
<td>0.094351 (Rank 4)</td>
<td>0.086054 (Rank 5)</td>
</tr>
<tr>
<td>Compressed Workweek</td>
<td>0.038454 (Rank 6)</td>
<td>0.080426 (Rank 5)</td>
<td>0.067377 (Rank 6)</td>
</tr>
<tr>
<td>Reduced Hours</td>
<td>0.03129 (Rank 7)</td>
<td>0.0663 (Rank 6)</td>
<td>0.05307 (Rank 7)</td>
</tr>
<tr>
<td>Job Sharing</td>
<td>0.01969 (Rank 8)</td>
<td>0.02431 (Rank 8)</td>
<td>0.024307 (Rank 8)</td>
</tr>
</tbody>
</table>
Figure 1. Consistency ratio of the total participant responses

Figure 2. Consistency ratio of the academic participant responses

Figure 3. Consistency ratio of the private sector HR professionals’ responses
The difference in the ranking of flexitime between academics and industry professionals is notable. While academics ranked flexitime as the second most important criterion, industry professionals ranked it lower, in seventh place. This difference may be attributed to the nature of work in the freight forwarding, which often involves shift work and irregular schedules that may not easily accommodate flextime arrangements. Job sharing was consistently ranked as the least important criterion by all participant categories. This suggests that job sharing may not be widely recognized or implemented in the freight forwarding. The challenges associated with coordination and communication in job-sharing arrangements may contribute to their lower perceived importance. The higher importance given to remote work by academic participants compared to industry professionals may reflect the growing acceptance and adoption of remote work in academic settings. Academics may have experienced the benefits of remote work, such as increased autonomy and flexibility, which could explain their higher ranking of remote work. This finding suggests that the context of the industry and the nature of work may influence the perception and importance of different flexible work arrangements.

The findings align with previous research that highlights the positive impact of flexible work arrangements on job satisfaction, work-life balance, and productivity (Giovanis, 2015; De Menezes & Kelliher, 2017; Sanders & Karmowska, 2020). The importance of flexible work arrangements for freight forwarding companies lies in their potential to enhance employee satisfaction, well-being, and retention. By offering flexible work options, these companies can attract and retain talented individuals who value work-life balance and flexibility (Yildiz et al., 2023a).

In their study examining talent management practices in container shipping companies, Yildiz et al. (2023a) emphasized the significance of flexible work arrangements. According to Yildiz et al. (2023a), participants highlighted the importance of flexible work arrangements, particularly remote work, during the pandemic, noting that it played a lifesaving role, and with the assistance of technological advancements, work could be efficiently managed with minimal disruptions. In this study, which includes freight forwarders in its sample, it is emphasized that in parallel with the findings of our study, the importance of remote work practice is underlined by industry representatives in their own words.

Employees working in the marketing and sales departments of freight forwarder companies often have high mobility. Due to their active customer visits, they are frequently out of the office and even out of town. Yildiz et al. (2018) identified job requirements for the marketing department, which is one of the departments where maritime business management graduates commonly work in freight forwarder companies. They emphasized that the ability to work from anywhere at any time is essential for this position. This supports why the flexplace practice holds high priority in our findings from a different perspective.

This study emerges as an original work that fills an important gap, as it is one of the first studies to detail and name flexible work arrangements, and there has not been a study before that individually addresses these practices within the service sector. Past studies have typically addressed flexible work arrangements as a whole and focused on their effects on different components and their benefits to companies and employees (Soltani et al., 2009; Subramaniam et al., 2015; Turkmen & Polat Dede, 2019; Sanders & Karmowska, 2020). In this regard, our assertion that flexible work practices are essential for the service sector, especially for freight forwarders, is indirectly supported. Our study takes this a step further by detailing the specific practices within flexible work arrangements and strives to create an understanding of which ones are more suitable and significant for freight forwarders. It is important to note that the study specifically focuses on freight forwarding companies, and the references provided cover a wide range of topics related to flexible work arrangements. Future research specifically targeting the freight forwarding would provide more insights into the importance and implications of flexible work arrangements in this context. When these findings are compared to the current research, it is clear that the desire for flexible work arrangements is context-dependent, impacted by industry-specific demands and individual preferences (Thompson et al., 2015). This study offers useful insights for both academics and business, as well as suggestions for freight forwarding firms looking to establish flexible work arrangements customized to their specific operating settings and workforce demands. FWA in maritime industry is not limited to implementations seen in freight forwarding, Shore Control Centre and remotely operated ships will be promising technologies enabling seafarers to work remotely in maritime industry (Dybvik et al., 2020; Wright, 2020; Kurt & Aymelek, 2022). Additionally, with increasing motivations towards smart ports via digitalization, it will be possible to see further digitalization and FWA in the freight forwarding operations.
Conclusion

This study set out to determine the criteria of flexible work arrangements and their relative importance in Turkish Sea Freight Forwarder companies. One of the objectives of the study was to evaluate the differences between academic and industrial perspectives regarding the flexible work arrangements. The study developed a survey questionnaire based on the existing literature. By using that questionnaire, quantitative primary data from 5 academic and 15 Private Sector HR Professionals working in Turkey were collected. The participants were selected based on their knowledge and experience in the field as appropriate to the sampling approach of the study. The collected data were elaborated and analyzed by applying the AHP criteria prioritization methodology. The numerical analyses of the methodology were performed via Microsoft Excel and BPMSG software.

The results of the study suggested that the remote work criterion would be seen as the most important criterion by both academic participants and private sector HR professionals. The study also determined a major difference in the prioritization of flextime criteria between academic and industrial participants. The findings of this study indicate the need for academic-industrial collaboration to work on this issue to evaluate the changing dynamics in the workplace of freight forwarding businesses.

This study is a novel and exploratory research helping to discover the criteria prioritization in FWA of Sea Freight Forwarding in Turkey. This study is significant for the industry due to its contribution to resource allocation of freight forwarding businesses to FWA. Additionally, it is equally important to academic literature due to its response to address the determined research gap. As a consequence of this study, it is also possible to obtain an in-depth insight to flexible working preferences of Freight Forwarder companies. The outcomes of this study will also increase the motivation to redefine workplace and FWA implementation in freight forwarding.

This study also has some limitations. One of the limitations of this research is the limited number of participations in the survey questionnaire from academia. This is due to a lack of direct expertise in academia regarding the HR focus on Freight Forwarding in Turkey. Another limitation of this study is not considering the gender and age of the participants in consideration of their evaluations. The study also does not consider the fuzziness of the responses and uses AHP as a research methodology. Despite the limitations, this study demonstrates a significant basis for freight forwarder companies in Turkey to prioritize their flexible work arrangements criteria.

This study is likely to trigger more publications in this research area. Future studies are expected to develop this model further including the fuzziness of the responses by employing a Fuzzy AHP methodology. Additionally, the criteria used in this research could be also calculated according to different departments of the Freight Forwarder business organizations. This would enable us to evaluate the importance of the criteria for each business department. Another possible research could be to perform a longitudinal study on Freight Forwarder companies to identify changes in criteria prioritization due to the endogenous and exogenous effects over time.

Compliance With Ethical Standards

Authors' Contributions

The authors handled all the tasks collaboratively. Both authors read and approved the final manuscript.

Conflict of Interest

The authors declare that there is no conflict of interest.

Ethical Approval

The ethical approval of this study was gathered from Ethic Committee of Iskenderun Technical University.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

References


Anonymous. (2023a). Çok Ölçütlü Karar Verme Yöntemleri – III: Analitik Hiperaşı Süreci (Analytical Hierarchy Process-AHP). Retrieved on August 15, 2023 from https://acikders.ankara.edu.tr/pluginfile.php/105296/mod_resource/content/0/11.%C3%A7ok%20%C3%96l%C3%A7%C3%BCtl%C3%B6%20Karar%20Verme%20Y%C3%96ntemleri-III.pdf


