Exploring Trade-Offs Organizational Decision-Makers Face in Food Provisioning Practices for Company Restaurants

Sven Kolk – 1050710

Department of Business Management and Organization, University of Wageningen

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Dr. Herman Kok

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Abstract

Introduction: Organizations play an important role in shaping food systems through their food provisioning practices in company restaurants, influencing employee health, environmental sustainability, and economic considerations. Company restaurants are an important part of this system, yet decision-makers often face trade-offs between sustainability dimensions. Understanding how organizational decision-makers perceive these trade-offs is important for fostering sustainable and nutritious food environments in organizational settings.

Objective: This study aims to explore how key decision-makers (e.g., procurement managers, catering managers, facility managers, HR managers, and sustainability managers) navigate trade-offs among economic, social, and environmental sustainability factors when selecting food offerings in company restaurants across different sectors in the Netherlands.

Methods: A quantitative research approach was employed, including a survey among food procurement decision-makers across sectors (e.g., healthcare/welfare, financial/ business services, industry/manufacturing, education, and government). The findings were obtained through a combination of descriptive statistics, simple linear regression analysis, Kruskal-Wallis H test, one-way analyses of variance (ANOVA), multivariate analysis of variance (MANOVA), and multidimensional scaling. These methods were utilized to analyze: (1) the perceived importance of sustainability decision-criteria, (2) the influence of generational differences in workforce on the perceived importance of healthiness criteria by organizational decision-makers, and (3) the perceived importance of food provisioning practices for employees with regular versus irregular working hours across different sectors and organizational decision-making roles.

Results: Findings reveal that economic considerations often take precedence over environmental and social concerns, though variations exist depending on sectoral characteristics and organizational decision-making roles. Additionally, generational differences among workforces do not have significant influence on food provisioning practices. Similarly, employee working hours do not significantly influence food provisioning practices.

Conclusion: This study reveals that financial sustainability often outweighs social and environmental considerations in food provisioning practices in company restaurants. It contributes to research on sustainability trade-offs by showing how multiple stakeholders and decision-criteria interact in decision-making. The findings suggest that organizations should realign food provisioning with broader sustainability goals, particularly by prioritizing

environmental sustainability. Additionally, involving employees in food provisioning practices and menu development could improve the accessibility and acceptance of sustainable food options.

Keywords: Sustainability trade-offs, workplace nutrition, food provisioning practices, company restaurants, organizational decision-making.

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1. Introduction

Organizations such as schools, hospitals, and other corporate spaces have an important yet often underappreciated role in shaping the food system through the types of foods they provide to their employees (Goggins & Rau, 2016). Because a significant proportion of the population is employed within organizations, where considerable amounts of food are consumed, typically within company restaurants (Goggins, 2018). Therefore, these settings are responsible for managing large amounts of food and it can be concluded that the company restaurants have an important role in our food culture and eating patterns (Goggins & Rau, 2016; Price et al., 2016). In this study, the term "company restaurant" is used as a comprehensive term encompassing various terms employed across different sectors and in the literature, such as catering restaurants, company canteens, workplace cafeteria, and workplace canteens.

Company restaurant food provision in general is a system involving both people and equipment in the preparation and serving of food (Fusi et al., 2016). With catering a diverse combination of inputs are transformed into desired outputs (Smith and West, 2003). Two types of company restaurant models can be found in organizations. One the one hand, with in-house foodservice, the organization oversees all food-related operations internally, prioritizing support for its core business functions rather than generating profits. The layout and operations are secondary to the company's primary activities (Mikkelsen, 2005). On the other hand, contract or outsourced foodservice involves delegating the day-to-day operations to an external provider, while the facilities themselves remain under the company's ownership (Mikkelsen, 2005).

The types of food offered in company restaurants are shaped by various stakeholders involved in organizational food provisioning. According to Goggins (2018) several key decision-makers

play a significant role in deciding the daily food options and influencing the food culture of employees and customers. In recent years, sustainability has become a growing priority in their decision-making processes, driven by increasing interests from both corporate and government organizations in sustainable, ethical, and green procurement practices. Therefore, sustainable management has also emerged as an important focus for businesses, emphasized by the Triple Bottom Line (TBL) framework introduced by Elkington (1999). This framework shows that companies must balance economic performance with social and environmental responsibility to achieve true sustainability (Shim et al., 2021). It highlights the interconnectedness of environmental, social, and economic dimensions, urging organizations to adopt practices that align with all three (Elkington, 1999). This TBL framework has emerged as a paradigm for sustainable development, whereby meeting the needs of the present and of future generations (Dyllick & Hockerts, 2002)

These trade-offs arise when achieving goals in one-dimension results in compromises in another, making it difficult to fully satisfy all objectives simultaneously (Hahn et al., 2010). For instance, organizations generally face a conflict between short-term financial goals and long-term environmental commitments (Hahn et al., 2014). Economic considerations are frequently perceived as being more important than social and environmental goals, further complicating the decision-making process (Hahn et al., 2014). In the context of procurement, Carter and Jennings (2004) argue that organizations must go beyond these economic considerations to incorporate socially and environmentally responsible purchasing practices. However, decision-makers often face challenges in balancing these dimensions, as tensions and trade-offs between competing priorities are common (Hahn et al., 2014). These tensions and trade-offs require decision-makers to carefully evaluate and prioritize outcomes, balancing immediate needs with broader sustainability objectives.

Considering the environmental sustainability dimension, organizations are recognized as having substantial influence in promoting sustainable practices (Goggins & Rau, 2016). Organizational food systems generate greenhouse gas (GHG) emissions at various stages in the cycle, including farming and its inputs, manufacturing, distribution, refrigeration, retail, food preparation, and waste disposal (Garnett, 2011). Moreover, in the Western world, meals predominantly consist of animal-based products (Kooiman, 2016). This reliance has large environmental and societal consequences, such as elevated CO2 emissions, loss of biodiversity, hunger, malnutrition, inadequate animal welfare standards, and a rise in food-related diseases (Kooiman, 2016). Additionally, pressing concerns related to water and air pollution, public

health, and workers' rights have led to demands to reform food provisioning by incorporating social, environmental and economic standards (Barlett, 2011).

The social aspect of the TBL framework within food provisioning practices in organizations can be tied to employee well-being, which is significantly influenced by the quality and healthiness of workplace food offerings (Thorsen et al., 2009). If the offerings in company restaurants do not align with healthy dietary standards, they can adversely affect employee health. Unhealthy eating patterns and lifestyle choices, including obesity, can lead to decreased employee performance, resulting in lower productivity and work capacity (Corvo et al., 2020). Given that working adults spend up to two-thirds of their waking hours at work, the food they consume during this time significantly influences their dietary habits (Clohesy et al., 2019; Quintiliani et al., 2010). Most employees have one or more meals at work, which accounts for about one-third of their daily caloric intake, so company restaurants can have a large impact on employee health and performance (Clohesy et al., 2019).

Therefore, a shift has occurred in recent years. According to Kooiman (2016), the previous standard in schools or company restaurants in The Netherlands was among others: ham and cheese sandwiches, burgers, chicken nuggets, meat pasty, milk and yoghurt (Kooiman, 2016). However, nowadays, company restaurants are providing employees with more healthy options. For example, in company restaurants in educational institutions, standards and guidelines are being updated to serve healthier foods and drinks including fruits, vegetables and whole grains (van Kleef et al., 2019). In addition to this, employees in different occupational classes and sectors have different nutritional intakes (Tanaka et al., 2018). For example, a study in Japan found that male workers in service work, transport, and labor had poorer dietary habits, including skipping meals and overeating compared to others (Fukuda et al., 2005). Similarly, in Norway, "White-collar workers" (e.g., professionals, administrators, and officials) were less likely to eat foods like French fries and hotdogs and were more likely to eat foods such as fruits, vegetables, and fish, than "manual workers" (Kjøllesdal et al., 2010). These differences in nutritional preferences across occupational groups could also be a factor of influence in the decision-making process of professionals regarding the food provision in company restaurants.

However, prioritizing healthier and more sustainable food options could come with financial implications (i.e., the economic dimension). Healthier and more sustainable food and drink options are often more expensive than less healthy and better tasting ones, primarily due to shorter shelf life, which results in higher costs and potential losses (Rao et al., 2013; Jones et al., 2014). This aligns with concerns raised by Carter et al. (2008), who question the economic

feasibility of sustainable procurement. Conversely, Pullman et al. (2009) provide evidence suggesting that adopting sustainable procurement strategies can enhance financial performance.

Overall, this means that offerings in company restaurants are of importance to create a more sustainable food system environmentally wise, but it can also be of importance to employees and employers themselves economically and enhance productivity and overall health of the workforce. Understanding the trade-offs that key decision-makers must consider between these aspects could be important for organizations to make informed decisions about food offerings in company restaurants.

1.1 Problem statement

1.1.1 Research Gap

The literature widely acknowledges the trade-offs between the three dimensions of sustainability – environmental, social, and economic – and the challenges organizations face in balancing these priorities. While the TBL framework (Elkington, 1999) is well established as a guiding framework for sustainable decision-making, its application in the context of food provisioning within company restaurants remains underexplored. Existing studies primarily examine sustainability in broader contexts, such as supply chains (Nunes et al., 2020; Meehan & Bryde, 2011; Nand et al., 2022; Van Marrewijk & Werre, 2003), general organizational management (Epstein et al., 2015; Gao & Bansal, 2012; Hahn et al., 2010; Hahn et al., 2015), or the restaurant sector (Shim et al., 2021).

Research done by Shim et al. (2021), although focused on conventional restaurants rather than company restaurants, it explored the application of the TBL framework in the restaurant sector, assessing how its three dimensions (economic, environmental, and social, impact restaurant value. The study found that economic considerations tended to enhance restaurant value, while focusing on environmental considerations appeared to diminish restaurant value.

Additionally, Meehan and Bryde (2011) contribute to the literature by emphasizing the role of procurement in advancing sustainability by integrating environmental, economic, and social dimensions across supply chains. In addition to this literature, Gao and Bansal (2012) emphasize the interconnectedness of the three dimensions and propose both instrumental and integrative approaches to organizational wide decision-making. Similarly, Epstein et al. (2015) broadens the understanding of how corporates navigate trade-offs between social, environmental, and economic sustainability, revealing that companies integrate stakeholder

considerations into their decision-making processes, recognizing the financial value of social and environmental performance.

Hahn et al. (2010) challenge the notion of 'win-win' outcomes in sustainability, suggesting that trade-offs are inevitable due to the inherent complexity of sustainability development. Building on this, Hahn et al. (2015) propose a framework for managing conflicting priorities within organizations, even when they seem to contradict another. Moreover, Van Marrewijk and Werre (2003) critique the 'one solution fits all' approach to corporate sustainability. Instead, they presented an overview that identifies multiple levels of corporate sustainability ambitions.

In addition to this, Nand et al. (2022) extended the literature by examining sustainability-related trade-offs within supply chains, highlighting the different challenges faced by suppliers in industrialized versus developing countries. Next to previous contributions, the role of individual decision-makers in shaping sustainable food systems within companies remains underexplored. While Nunes et al. (2020) have examined how stakeholder priorities vary along supply chains, there is still limited understanding of how decision-makers related to food provisioning within organizations prioritize sustainability dimensions and which factors influence their decisions.

In addition to trade-offs focused on TBL, research on food consumption and dietary practices across sectors and occupational groups demonstrates a wide range of nutrient intake and food choices (Fukuda et al., 2005; Gupta et al., 2021; Tanaka et al., 2018). For example, Fukuda et al. (2005) concluded that individuals in occupational classes with lower incomes exhibit poor dietary habits, and lower participation in health check-ups, with notable gender disparities. Similarly, Tanaka et al. (2018) revealed that working men significantly differed in nutrient intake between occupational groups, such as higher calcium intake among teachers compared to nurses, and better calcium and vitamin C intake among agricultural workers than forestry and fishery workers. In addition to differing nutritional intake, Gupta et al. (2021) emphasized that company restaurant meals foster employee relationships and enhance productivity, though generational differences in nutritional preferences pose a challenge to meeting diverse nutritional needs.

Although these studies have researched nutritional differences between occupational groups with differing characteristics, little attention has been given to the decision-making processes underlying food provisioning in company restaurants, which directly influence these habits. This is particularly important in the context of the current trend toward healthier and more sustainable food options, which may have environmental, economic, and social consequences for businesses.

Despite this extensive research on sustainability trade-offs in supply chains, organizations, procurement processes, the restaurant sector, and the differences in nutritional intake among occupational groups, the specific context of food provisioning in company restaurants remains underexplored. Therefore, a knowledge gap exists. While company restaurants uniquely integrate the three dimensions of sustainability – directly impacting employee health and productivity (social), organizational costs (economic), and environmental outcomes (environmental) – there is limited understanding of how key decision-makers weigh these trade-offs when deciding on food provisioning services. In particular, little is known about how sustainability priorities vary across decision-makers in different sectors, and which factors most influence decision-making.

1.1.2 Research aim

To answer the research gap, this study aims to comprehensively explore the decision-making processes of organizational decision-makers in food provisioning within company restaurants, with a particular focus on the trade-offs they navigate between the three dimensions of sustainability (e.g., environmental, social, and economic). By examining how organizational decision-makers balance these dimensions in practice, the research seeks to deepen the understanding of the complex factors influencing the selection of food offerings in company restaurants across different sectors. The study will investigate the various sustainability criteria considered by organizational decision-makers when making food provisioning choices and how these criteria are weighted relative to another. Additionally, it will explore the role of employee characteristics in decision-making.

Through this exploration, the study aims to identify sector-specific differences in food provisioning practices and to offer insights into the decision criteria and processes that guide food provisioning practices in company restaurants. Ultimately, the study intends to contribute to the development of more sustainable and health-conscious food systems within organizations.

1.1.3 Research questions

Central research question

How do decision-makers across different sectors weigh trade-offs among the three dimensions of sustainability – environmental, social, and economic - when selecting food offerings in company restaurants?

Sub research questions

The examination of the central research question will be guided by both theoretical and empirical research questions, which aim to investigate the complexities surrounding food service models, key decision criteria, key decision-maker involvement, and employee influences.

Theoretical research questions:

- How do company restaurants differ in terms of management models, and in which sectors are company restaurants most commonly found?
- What decision criteria among the three dimensions of sustainability – environmental, social, and economic - are considered in the selection of food products offered in company restaurants?
- Which stakeholders are involved in what role in the choice of food offerings in company restaurants?

Empirical research questions:

- Which criteria among the three dimensions of sustainability – environmental, social, and economic - are considered most important by decision-makers when selecting food options for company restaurants?
- To what extent does the type or preferences of employees influence the food offerings in company restaurants?

2. Literature Review

This literature review examines key factors influencing food provisioning within company restaurants, focusing on management models, decision criteria, stakeholder roles, and sectoral nutritional differences to answer the research questions. A comprehensive search strategy was employed, utilizing academic databases, such as Scopus, Web of Science, ScienceDirect, and Google Scholar. Google Scholar was included to capture grey literature such as conference papers and reports, while Scopus, Web of Science, and ScienceDirect were prioritized for their in-depth coverage of academic journals. Specific terms like "company restaurant", "workplace cafeteria" helped identify studies on various types of company restaurants, while additional keywords like "management models", "outsourced catering", and "in-house foodservice" allowed for a deeper understanding of management structures in company restaurants. To

understand the decision criteria behind food selection, terms like "food procurement", "sustainability criteria". Furthermore, keywords such as "stakeholders", "management roles", and "managers" targeted examining the decision-making roles within company restaurants. Moreover, a snowballing technique was used to identify additional relevant literature. The findings reveal patterns in decision-making criteria, stakeholder responsibilities, and sector-specific nutritional intake, contributing to a deeper understanding of organizational food service practices in differing sectors.

2.1 Organizational food servicemanagement

The way organizations structure their food provisioning has changed over time. This section first examines the development and purpose of company restaurants across time, emphasizing their contribution to productivity, organizational food settings, and employee well-being. Next, the various foodservice management models are examined, with a distinction made between in-house and outsourced management models. The factors that impact organizational decision-making in food supply are also covered. As a result, this section offers a starting point for comprehending the compromises that businesses must make when choosing their foodservice approaches.

2.1.1 The evolution and function of company restaurants

A company restaurant refers to a designated space within an organization, such as a factory or office, where employees can purchase and consume food and meals, often at a reduced cost (Cambridge Business English Dictionary, n.d.). The idea originated in the USSR during the 1930s, where socialist governments encouraged the establishment of company canteens to boost production efficiency while simultaneously offering workers a space that promoted both a healthy diet and political education (Nérard, 2014).

Moreover, the concept of a company restaurant took flight during industrialization as a new form of gastronomic institution (Thoms, 2009). According to Corvo et al. (2020), the rise in average household incomes, along with the introduction of new technologies like electric appliances, refrigerators, and gas kitchens, transformed household environments. As a result, factories and other workplaces began establishing canteens where employees could take their lunch breaks. These canteens provided convenient access to food and played an essential role in addressing malnutrition and food shortages among the working class (Corvo et al., 2020).

Employers soon realized that company restaurants could enhance employee well-being and consequently improve productivity (Thoms, 2009). Since employees spend a significant amount of time at work, their dietary choices in the workplace are of importance (Quintiliani et al., 2010). The workplace is now widely regarded as an effective setting for promoting health, with many employers investing in initiatives at improving employee well-being as part of their human resource development efforts (Heinen & Darling, 2009).

2.1.2 Organizational foodservice management models

The way in which the food is offered to employees can differ. The organizational and institutional food services can be managed internally (i.e., in-house), outsourced to a food service management company, or utilize a hybrid approach that incorporates both models (Mikkelsen, 2005; Reynolds & Hunter, 2019). In the Netherlands, major multinational food service management companies include Compass and Sodexo.

On the one hand, the in-house foodservice management model. The in-house foodservice management model involves a company handling food service internally rather than outsourcing the task (Pahirathan, 2017). In this model, the company utilizes its own employees and resources to provide meals to employees. Unlike outsourcing, where an external provider is contracted to manage food services, in-house operations are carried out by the company's own workforce and assets (Pahirathan, 2017).

According to Chan Khk (2015), the cost of in-housing activities related to food provision involve several components. First, there are opportunity costs related to the time spent by staff. Additionally, ongoing expenses arise from the need to hire extra full-time employees. Moreover, unpredictable expenses, such as overtime and fluctuating time commitments from employees on a month-to-month basis, contribute to the overall cost. Lastly, there are effectiveness costs when in-house resources lack the necessary skills or capacity to adequately handle the work (Chan Khk, 2015). However, Goggins (2018) highlighted the benefits of in-house food services, emphasizing greater control over operations and the flexibility to adapt quickly to changing circumstances.

On the other hand, the outsourcing food service model concerns turning over parts of an organization's activity (e.g., managing the company restaurant) to an outside operator (Baitheiemy, 2003). The term outsourcing covers many areas, such as manufacturing as well as services. In-house employees may not have the expertise or skill set to effectively manage a

self-operating food service program. They prefer to contract out the services rather than to try to do it in-house (Pahirathan, 2017).

Organizations choose to outsource for a variety of reasons, with cost reduction being one of the primary motivations (Pahirathan, 2017). Outsourcing offers an efficient approach to controlling expenses, as it allows organizations to mitigate additional costs per employee. This includes salaries, overhead, training, and other related expenses (Pahirathan, 2017). According to Baily et al. (2005) and Lyson and Farrington (2006), outsourcing can also help reduce or spread risks by partnering with providers who possess the necessary expertise to tackle specific challenges. Many organizations opt for outsourcing due to a lack of internal resources (Pahirathan, 2017). According to Goggins (2018), the advantages of outsourcing are expressed in the reduction in people management (i.e., staffing, administration), maximization of labor efficiency (i.e., more flexible terms and conditions for contract staff), and reduced financial and operational risk.

In addition to cost savings, outsourcing can provide access to economies of scale, resulting in further cost reductions through partnerships with large food service providers (Pahirathan, 2017). This strategy enables organizations to focus more on their core activities, thereby enhancing productivity by concentrating efforts on their primary strengths (Baily et al., 2005; Lyson & Farrington, 2006).

Furthermore, according to Kolasa (2018), food service management companies offer expertise in addressing operational challenges, ensuring quality assurance, enhancing employee satisfaction, and overseeing staffing needs. A contract with food service management providers can be especially appealing if they are prepared to invest in upgrading kitchen and dining facilities as part of the arrangement. In addition to this, food service management companies provide valuable expertise in tackling operational challenges, maintaining quality assurance, improving employee satisfaction, and managing staffing requirements (Kolasa, 2018).

In line with this, several studies have examined the decision-making processes involved in outsourcing food provisioning practices, identifying key criteria for selecting food service providers across various sectors. Kahraman et al. (2004) emphasized hygiene, food quality, and service quality as primary criteria, with sub-criteria including food types, calorie content, taste, and hygiene standards for both food and personnel. Similarly, Aytaç et al. (2011) identified hygiene, references, taste, variety of dishes, service quality, price, and structural adequacy as evaluation criteria. Ulutaş (2019) also highlighted hygiene, taste, food types, service time, references, service quality, and pricing in his selection process. Additionally, Fu (2019) focused on service quality and multi-dimensional assessments of supplier performance when evaluating

catering suppliers for an airline. Lastly, Arslankaya (2020) considered product quality, pricing policies, timely service delivery, and the before-and-after sales service concept as criteria for outsourcing food provisioning. This variation in specific needs and criteria for outsourcing food services highlights the importance of examining the distinct characteristics of food provisioning in different sectors, as explored in the next section.

2.2 Characteristics of food provisioning across sectors

This section explores the variations in food provisioning within company restaurants across different sectors, highlighting how occupational and organizational characteristics influence the availability and consumption of meals in workplace settings. Additionally, it examines the types of sectors where company restaurants are more prevalent and contrasts them with sectors in which such facilities are less common. Moreover, the section delves into the nutritional intake of different occupational classes and the sector-specific needs, workforce composition, and job-characteristics that influence food provisioning practices of decision-makers and the nutritional intake of employees.

2.2.1 Sectoral variations in food provisioning within company restaurants

Workers regularly consume meals or beverages in company restaurants, highlighting the importance of food quality and availability in these settings (Onufrak et al., 2019; Price et al., 2016). However, the availability and frequency of usage of company restaurants can vary between occupational groups and sectors. Results of a study done by Woo et al. (2024) noted that 30.2% of white-collar workers, 7.3% of green-collar workers, 39.2% of pink-collar workers, and 35.5% of blue-collar workers reported eating at least one meal at their workplace. Additionally, 13.6% of pink-collar workers noted having two or more meals at work within 24 hours. From the people that consumed food at work, company restaurant meals were the most common option for white-collar workers (48.4%), and blue-collar workers (48.3%), though fewer pink-collar workers (23.1%) and green-collar workers (26.7%) consumed their meals at a company restaurant (Woo et al., 2024). Therefore, it can be said that company restaurants are present across different occupational groups and sectors.

Company restaurants are particularly relevant in large organizations, especially within the education and industry/manufacturing sectors (Eves et al., 1996; Raulio et al., 2010). The industry and manufacturing sector encompasses companies that process materials, create new products, and provide repair and installation services for machinery and equipment (Netherlands Chamber of Commerce, n.d. - a). This includes a diverse range of activities, such

as wood processing, printing, and the production of goods like food, beverages, clothing, electronics, and pharmaceuticals (Netherlands Chamber of Commerce, n.d. - a). Similarly, the educational sector includes a variety of institutions that offer education and training, ranging from primary and secondary schools to universities and vocational training centers (Netherlands Chamber of Commerce, n.d. - b).

Additionally, workplaces with a large concentration of employees who hold higher educational qualifications or belong to higher occupational classes are also more likely to offer company restaurants (Raulio et al., 2010). These individuals tend to be found in white-collar organizations, while lower occupational classes are more common in blue-collar industries (Kooiman, 2016). As a result, company restaurants are frequently present in sectors such as trade, banking, and business services (e.g., financial institutions), which are predominantly composed of white-collar jobs (Van Den Bersselaar, 2019). The financial institutions and business services sector includes organizations involved in banking, insurance, and financial intermediation, encompassing a wide range of entities such as banks, insurance companies, brokers, and investment institutions (Hill, 2020). Furthermore, a study done by Onufrak et al. (2016) concluded that the government sector often contains company restaurants where they serve their employees. This sector encompasses various governmental bodies at central, regional, and local levels and therefore includes all entities that are responsible for public administration and governance (Kesner-Škreb, 2006).

Moreover, the healthcare and welfare sector often provide company dining options. For instance, hospitals typically feature multiple food outlets, including company restaurants, vending machines, and gift shops, making their nutrition environment distinctive (Winston et al., 2013). This sector comprises a wide range of organizations and institutions that specialize in medical care, social welfare, and community services (Netherlands Chamber of Commerce, n.d. -c). It includes professionals such as childcare providers, district nurses, freelance home care workers, as well as institutions like hospitals, dental practices, general practitioners, midwives, physiotherapists, psychotherapists, occupational health services, social workers, medical laboratories, ambulance services, and nursing homes (Netherlands Chamber of Commerce, n.d. -c).

All in all, these sectors, while diverse in nature, share the commonality of needing workplace food service, and company restaurants provide a solution tailored to the specific demands of each sector's workforce.

In contrast, certain sectors may not provide company restaurants. For instance, as noted by Wandel and Roos (2004), construction workers often bring their own packed lunches, which they eat in nearby sheds. These workers typically operate at various locations for set periods and do not have access to on-site company restaurants. The transportation and logistics sectors face similar circumstances. According to Wandel and Roos (2004), transport workers, such as drivers, frequently eat at particular cafeterias, making it hard to study their eating habits due to the absence of a consistent company dining facility.

2.2.2 Occupational group classifications

Understanding the trade-offs key decision-makers consider in different sectors requires recognizing the types of employees they manage and the specific occupational groups they serve through food provisioning practices. Therefore, it is important to recognize what job classifications and occupational classes exist. According to several studies (Gibson & Papa, 2000; Hu et al., 2010), there are various occupational groups and job roles which can be classified into different categories. First, white-collar jobs. The term 'white-collar' comes from the fact that office workers are commonly expected to wear white shirts, while manual workers are often seen in blue overalls (Van den Bersselaar, 2019). White-collar jobs can be considered in a wide range of non-manual paid roles, spanning from entry-level clerical positions to mid-level planning and accounting functions, and extending to senior managerial roles (Van den Bersselaar, 2019). In contrast, laborer and skilled trade positions are categorized as blue-collar jobs, reflecting their manual and technical nature (Gibson & Papa, 2000; Hu et al., 2010).

Howe (1977) came up with another classification for a class of workers called "pink-collar" jobs to denote typical female work in the service sector, such as nurses, schoolteachers, and secretaries. Later, this classification was extended to roles in hospitality (e.g., waitstaff), retail, care workers, administration roles (e.g., office clerks), salespersons and beauty salon assistants as representatives of the pink-collar workforce (Gibson & Papa, 2000; Hu et al., 2010; Pines & Guendelman, 1995).

Lastly, green-collar workers. There is a divided opinion within the literature regarding green-collar workers. According to Seok et al. (2017) and Lee et al. (2015), green-collar workers are people that are employed in the agriculture or the fishing sector. However, Fernandez et al. (2015) and McClure et al. (2017) observed that green collar jobs focus on advancing sustainability by reducing waste, energy consumption and pollution. These jobs may involve professionals such as environmental consultants, green building architects, engineers and

environmental lawyers, as well as roles in manufacturing and construction, like solar panel installers, green building and renewable energy construction workers, or factory employees producing materials for sustainable buildings. Additional examples include organic farmers, environmental educators, public transit employees and engineers specializing in eco-friendly vehicles (McClure et al., 2017).

2.2.3 Factors influencing food choices in company restaurants

Many of these workers spend a significant portion of their working time in the same environment, surrounded by the same colleagues (Clohessy et al., 2019; Smedlund et al., 2004). As a result, the food they consume in the workplace is an important aspect of their daily routine, making it a relatively straightforward subject for study, particularly given the consistency of their daily schedules (Clohessy et al., 2019).

The factors influencing food choices at work can be categorized into several key themes. Nichollis et al. (2017) categorized these factors into four areas: the workplace environment (e.g., availability of healthy food options), social influences (e.g., peer pressure from colleagues), individual knowledge (e.g., nutritional awareness), and organizational barriers (e.g., work stress). The extent to which these factors are present (e.g., low nutritional awareness, unavailability of healthy food options, high work stress, etc.) have been linked to an increased consumption of unhealthy foods high in sugar, salt, and saturated fats (Nichollis et al., 2017). Similarly, Zeballos and Todd (2020) found that workplace stress, particularly for white-collar employees, can trigger emotional eating, with employees turning to snacks, sweets, or high-calorie foods as coping mechanisms during stressful periods. In addition, Kurtuluş et al. (2023) observed that employees often skip lunch breaks or health education programs during periods of increased work demands, leading to fatigue and a preference of convenient, less nutritious food choices over healthier alternatives (Murakami et al., 2020). Furthermore, individual behaviors, lifestyle choices, and attitudes towards diet and health significantly impact eating habits (De Irala-Estévez et al., 2000).

The physical space available for eating also plays a role in shaping employees' food choices. Pridgeon and Whitehead (2013) identified limited eating space as a factor that influences consumption behavior (e.g., consume unhealthy snacks at the workspace desk). However, the format in which it is served – whether buffet or à la carte – appears to have no significant effect on employee's choices (Lassen et al., 2006). The size of the workforce also affects how often employees dine at company restaurants, with variations across different occupational groups.

For instance, Raulio et al. (2010) found that in larger organizations with 30 or more employees, male workers where more inclined to eat at a company restaurant, while those in smaller workplaces (fewer than 30 employees) favored packed meals or other alternatives. Female employees showed a similar preference for packed meals in smaller workplaces, but in larger organizations, both company restaurants and packed meals were common choices. Moreover, employees in healthcare and social welfare roles (i.e., pink-collar workers) and those in small office settings (white-collar workers) tend to utilize company restaurants more frequently. In contrast, male employees in trading, service, and various office roles in small workplaces were less likely to bring packed meals compared to their counterparts in other sectors (Raulio et al., 2010).

Not only the size of the workforce, but also the size of the company influences the workforce's dining habits with their procurement strategies in company restaurants. For example, with smaller programs (e.g., such as school snacking initiatives) usually sourcing from grocery stores, while larger institutions (e.g., universities) tend to buy food trough broadline distributors, who handle large inventories and offer a wide range of products (Reynolds & Hunter, 2019).

Finally, De Irala-Estévez et al. (2000) identified several other factors that affect employees' nutritional intake, including psychological aspects and socio-demographic characteristics such as education, income, and ethnicity, as well as the availability of food.

2.2.4 Nutritional variations across occupational groups

In addition to the underlying reasons why employees choose certain products, organizations (e.g., universities), must consider the taste preferences and dietary needs of the diverse visitors (i.e., employees) utilizing company restaurants (Roy et al., 2019). These visitors coming from different occupational classes working in different sectors all have to eat during their working days.

In current research there is a debate regarding the existence of differences in nutritional intake across various occupational sectors. Conchola et al. (2016) reported no significant differences in nutritional between occupational groups. The study did identify higher levels of work-related physical activity among blue-collar workers, while white-collar workers exhibited greater engagement in leisure-time physical activity.

Although, Woo et al. (2024) did find significant differences between occupational groups and nutritional intake. According to Woo et al. (2024) nutrient intake is closely related to working

conditions, as people in developed countries spend most of their time in the workplace. Moreover, research by Tanaka et al. (2018) demonstrated that workers' diets are closely linked to their working conditions, including shift work, working hours, physical or mental strain, and job control. In particular for men, these work-related factors can significantly impact nutritional intake, food choices and overall health (Tanaka et al., 2018). Therefore, several factors can influence the relationship between occupation and dietary habits (Woo et al., 2024). Workers in higher occupational positions reporting lower intakes of total fat, saturated fat, and overall energy intake, alongside increased fiber consumption (Darmon & Drewnowski, 2008; Giskes et al., 2010; López-Aspiazu et al., 2003; Smith & Baghurst, 1992), while desk workers (i.e., "white-collar" workers) were observed to have higher intakes of protein, lipids, meat, dairy, fish, vegetables, and fruits (Owaki et al., 2001).

In contrast, manual workers (i.e., blue-collar workers) exhibited greater consumption of carbohydrates, including rice, wheat products, potatoes, and soybean products (Owaki et al., 2001). In addition to this, blue-collar workers typically have higher intakes of cholesterol and calories, as well as elevated levels of fiber, sodium, total fat, saturated fat, and multi unsaturated fats compared to white-collar workers (Kachan et al., 2012). Conversely, male green-collar workers demonstrate a higher consumption of fiber, while white-collar workers exhibit the highest intake of total fats, saturated fats, and n-6 fatty acids (Woo et al., 2024). These factors collectively influence the types of food employees consume.

All in all, there are several factors such as environmental, societal, biological, psychological, and socioeconomic factors that influence nutritional intake and food preferences (Kurtuluş et al., 2023).

2.2.5 Generational differences

Besides the previously mentioned reasoning for nutritional intake the differences in ages within workforces also have an influence on nutritional intake and company restaurant utilization and with a mix of these multiple generations (i.e., "Baby boomers", "Generation X", "Millennials", "Generation Z",) existing in the global workplace, there are challenges for operators to keep everybody satisfied (Gupta et al., 2021). For example, according to Gupta et al. (2021) "Generation Z" (i.e., people who are born from 1997 to 2012) is eager to explore new cuisines and ingredients, while both Gen Z and millennials embrace the use of technology in their dining experiences (e.g., self-service kiosks). Additionally, millennials (i.e., people who are born from 1980 to 1996) tend to snack more frequently and are nearly three times as likely as "baby

boomers” (i.e., people who are born from 1946 to 1964) to worry about being judged for taking regular lunch breaks. In contrast, "baby boomers”, the oldest group, prioritize health and are more focused on making nutritious food choices (Gupta et al., 2021). Despite these generational differences, there are many commonalities between generations. Across all groups, health benefits and sustainability are widely valued (Gupta et al., 2021). Convenience and food-on-demand are universally appreciated, though some older workers still prefer traditional mealtimes (Gupta et al., 2021).

Based on this existing literature, which highlights differences in the dietary preferences and health priorities between generational groups, the following hypothesis is proposed:

H1: Decision-makers within organizations that have to manage food provisioning services to an older workforce are more health oriented than those in organizations with a predominantly younger workforce.

2.2.6 The influence of "Daytime work” vs. "Shift work”

Not only organizational, occupational socio-demographic, or generational characteristics can influence employee's dietary behavior. Another factor that can influence eating behaviors within organizations is the scheduling of work hours and the specific shifts assigned to employees. Shift work refers to working during non-traditional business hours (i.e., 6:00 pm to 6:00 am), which therefore may be misaligned with workers' biological clocks (Bedrosian et al., 2016; International Agency for Research on Cancer, 2007)

Previous research focused on shift workers has primarily examined food and nutrient intake across different shifts and work environments, revealing variations in dietary patterns. For instance, research indicates that shift workers generally have more frequent eating episodes throughout the day compared to individuals working regular daytime schedules de (Assis et al., 2003; Esquirol et al., 2009). Additionally, night shift workers are specifically highlighted for their higher tendency to snack compared to those who work during the day (de Assis et al., 2003; Waterhouse et al. 2003).

Furthermore, men working night shifts exhibit higher energy intake from sodas, added fats, fruits, and vegetables, but lower intake from breads and meats compared to day workers (De Assis et al., 2003). Moreover, night shift workers tend to drink more sugary beverages than those working during the day. Overall, shift workers generally make less healthy food choices compared to day workers (Hemiö et al., 2015).

Another way that shift work may alter employees' lifestyle is that shift work can change food timing and a diet can be difficult to maintain (Hemiö et a., 2015). Especially if the facilities for eating outside the normal working hours are not well organized and certain food choices are not available (Hemiö et al., 2015). This results in employees working regular daytime schedules dining at company restaurants more frequently than those with irregular working hours (Raulio et al., 2010).

Based on this existing literature, this study proposes the following hypothesis for further exploration:

H2: Decision-makers in organizations face a trade-off in prioritizing food provisioning practices and place greater emphasis on the food provisioning of employees working regular hours (e.g., 09:00 – 17:00) over those of employees working irregular hours (e.g., shift work or night shifts).

2.3 The role and process of food procurement in organizational food provisioning

This section examines the role and process of food procurement in organizational food provisioning, providing an overview of the stages involved, key decision-makers, and influencing decision-criteria. First, food procurement is defined, detailing its stages from needs and assessment and supplier selection to cost management, food storage, preparation and waste management. The section then explores the various decision-makers involved in the procurement process and outlines the integration of sustainability considerations (e.g., environmental, social, and economic) into procurement decision-making.

2.3.1 What is food procurement?

Food procurement encompasses the entire process of determining what food to buy and from whom, as well as the subsequent steps of receiving, storing, preparing, serving, managing waste, and monitoring costs (L'Abbé et al., 2011). It provides a complementary nutrition strategy that leverages existing operational infrastructures to facilitate healthy eating as the easy or "default" choice for individuals (Booth et al., 2011).

The term "procurement" refers to the comprehensive process of purchasing, which includes understanding needs, identifying and selecting suppliers, negotiating prices and pertinent terms and ensuring timely delivery (Moynihan et al., 2005).

The procurement process in various types of foodservice establishments largely influences food offerings, a concept known as product differentiation (Astner et al., 2011). The degree of differentiation varies across sectors. In commercial foodservice (e.g., conventional restaurants) product offerings are often tailored to specific market segments, providing these establishments with substantial flexibility to differentiate their offerings and target particular customer groups. In contrast, food provisioning in company restaurants, such as those found in schools and hospitals, faces more limited opportunities for differentiation. This is due to a broader customer base and greater influence from national political goals, which restrict the variety of options available (Astner et al., 2011).

Lastly, according to Bergström et al. (2005), the procurement of food, whether for in-house or outsourced food service operations, follows strict and regulated procedures. Most food provisioning organizations have dedicated procurement departments, where different managers can be responsible for the food provision (e.g., selection of suppliers) within companies (Bergström et al., 2005; Goggins, 2018; Reynolds & Hunter, 2019). These managers will be discussed in the following section.

2.3.2 Decision-makers related to food provisioning

Effective food procurement is an important aspect of food service management and is recognized as a complex managerial process driven by organizational decision-making (Unklesbay & David, 1977). Organizations have come to the understanding that procurement serves as a profit-generating function rather than merely a routine activity for placing orders (Giunipero & Brand, 1996). Within companies, food-related decision-making is typically spread across various institutional staff roles (Reynolds & Hunter, 2019). According to literature, key decision-makers in this process include procurement managers, catering managers, facility managers, human resource managers, and sustainability managers, each having a distinct role in shaping food offerings within organizations (Goggins, 2018; Reynolds & Hunter, 2019).

While these professionals have different responsibilities, all possibly influence the selection and provision of food in company restaurants. For example, a procurement manager is responsible for acquiring goods and services, such as raw materials, capital equipment, and other necessary items to support business operations (Moynihan, 2005). Catering managers balance financial sustainability with the promotion of healthy eating practices, aligning food choices with both business objectives and employee well-being (Gowdy & McKenna, 1994).

Facility managers, as defined by the International Facilities Management Association (IFMA), manage a broad range of tasks, including long- and short-term facility planning, financial and real estate management, space planning, construction oversight, daily operations, and maintenance, as well as support services such as security and communication (Hu et al., 2016). Meanwhile, human resource managers shape workplace food environments through employee welfare initiatives and policy implementation, overseeing processes from recruitment to organizational development (Umar, 2001).

Additionally, with sustainability gaining importance in organizational strategies, sustainability managers are increasingly involved in food procurement, serving as key drivers of sustainable and health-conscious sourcing practices (Goggins, 2018). These professionals can help improve food sourcing by promoting sustainable and health-conscious food choices (Grandia, 2015).

Together, these decision-makers shape procurement strategies, which are influenced by numerous factors, including the dynamics between the buyer and supplier as well as the broader organizational and operational context in which they function (Easton, 1992; Pfeffer & Salancik, 2003). These decision-makers can also make the decisions regarding the outsourcing of the food provisioning practices or provide them in-house (Goggins, 2018).

However, these food provisioning professionals encounter various challenges that affect their capacity to make optimal procurement decisions and offer a wide range of food options. For instance, they are limited by the availability of food supply and distribution networks in their area, as well as by internal institutional frameworks that may restrict the procurement of specific products, such as locally sourced foods (Goggins, 2018). Furthermore, the organizational aspect of food provisioning is influenced by national and international policies, which require professionals to comply with regulations regarding health and safety, procurement, and other legal considerations (Smith et al., 2015). These nutritional standards and guidelines can play an important role in shaping the types of food that are acquired and purchased throughout these processes (Robles et al., 2013).

2.3.3 The food related criteria included in the decision-making process

Besides the decision-makers influencing food provisioning practices. Procurement decisions in food provision practices are also shaped by a range of factors, including organizational dynamics, supplier relationships and several food related criteria (Bergström et al., 2005). Additionally, these decisions are nowadays influenced by a complex interplay of environmental, social, and economic considerations, as outlined in the three pillars of

sustainability proposed by Elkington (1999). These food related criteria are explained in the following section.

2.3.3.1 Environmental sustainability factors

Environmental sustainability and the key criteria related to it are increasingly prioritized in food procurement decisions, as environmental concerns have gained importance in purchasing decisions, influencing decision-makers alongside traditional factors (Bergström et al., 2005). First, many organizations prioritizing environmental impact increasingly adopt third-party certifications like organic, sustainable seafood as part of their commitment to sustainability (Barlett, 2011).

Moreover, commitments to sustainable food procurement influence menu composition and kitchen practices (Barlett, 2011). While, for example, outsourcing food services typically streamlines purchasing processes and therefore enhances operational efficiency, it may also result in extended supply chains (Reynolds and Hunter, 2019). These extended supply chains increased the distance of food traveled along with the greenhouse gas emissions linked to the average meal (Renting & Wiskerke, 2010).

In addition to the length of supply chains, prioritizing seasonal ingredients is an effective strategy for reducing environmental impact (Macdiarmid, 2012). According to Macdiarmid (2012), seasonality can be understood in two ways. In the context of global seasonality, food is harvested during its natural growing season but distributed worldwide, whereas local seasonality ensures that both production and consumption take place within the same climatic region. While global seasonality enables a diverse and consistent food supply, it can cause environmental pressures in production regions, such as water scarcity and biodiversity loss (Macdiarmid, 2012). More locally sourced food can also significantly reduce transportation distances (food miles), thereby decreasing environmental impact (Tikkanen, 2014).

Additionally, the European Commission has introduced the "Green Public Procurement" (GPP) criteria and aims to help public authorities (e.g., governments, hospitals, educational institutions) ensure that the goods, services, and works they require are procured and executed in a way that reduces their associated environmental impacts (Boyano Larriba et al., 2019). For food procurement, the criteria emphasize organic food products, requirements for marine and aquaculture products, and animal welfare. Additionally, they include agricultural products labeled with geographical indications, seasonal produce, integrated production and packaging. In outsourced food provisioning services, criteria prioritize the inclusion of plant-based menu

options, food and beverage waste prevention, and the sorting and disposal of other types of waste. Further specification addresses efficient energy and water consumption in kitchens, as well as sustainable food transportation practices. These criteria collectively support a shift toward more responsible procurement choices across public food services (Boyano Larriba et al., 2019).

2.3.3.2 Social sustainability factors

The social sustainability key factors that influence food procurement emphasize the ethical and health related dimensions of food provision. The health and nutrition of employees is important, as company restaurants often provide a significant portion of daily dietary intake (Quintiliani et al., 2010). Healthy food procurement involves prioritizing nutritious offerings that meet dietary needs while promoting employee well-being (Astner et al., 2011).

Ethical considerations, such as animal welfare, reflect societal concerns about humane treatment and sustainable livestock practices (Boyano Larriba et al., 2019). Similarly, certified fair-trade products, for example, offer a way to influence global food supply chains, but strong organizational goals for fair trade remain relatively rare (Barlett, 2011).

In addition, the visual appearance of food, the taste of the products, food safety, and alignment with established norms influence consumer satisfaction and acceptance (Bergström et al., 2005). Furthermore, supporting local food systems not only helps regional economies, but also creates closer relationships between consumers and producers (Tikkanen, 2014).

Lastly, when implementing changes in food provision, organizations, such as universities, must consider taste preferences of their employees and visitors who utilize company restaurants (Roy et al., 2019). The food choices of employees in workplace settings are influenced by a different set of factors compared to choices made at home or when shopping for food. According to Price at el. (2016), employees prioritize 11 key criteria when choosing food in the workplace: value for money, variety, naturalness, nutrition, portion size, taste, visual appearance, origin, animal welfare, environmental impact, fair trade, and organic sourcing. These factors highlight the considerations employees make when deciding what to eat at work and what key criteria decision makers should consider when evaluating the food provided in the workplace (Price et al., 2016).

2.3.3.3 Economic sustainability factors

Often economic factors remain central to procurement decisions (Pagell and Shevchenko, 2014). Price considerations, including staying within budgetary constraints are important for

many organizations (Astner et al., 2011). Decisions regarding the integration of seasonal ingredients can also reduce the costs made in company restaurants, however, it might limit the variety and diversity of the offerings (Barlett, 2011). Additionally, it is important to ensure quality and safety standards, as it balances customer preferences and cost (Barlett, 2011).

Timely delivery is another important economic factor, as delays can decrease the operational efficiency and increase costs (Bergström et al., 2011; Reynolds & Hunter, 2019). Outsourcing food services is often positive to achieve operational efficiency, streamlining procurement processes and reducing managerial burdens, though it may entail trade-offs in terms of environmental and social impacts (Reynolds & Hunter, 2019).

A detailed breakdown of these procurement related food criteria and employee food choice criteria, along with their respective sources, and the organization between the three pillars is presented in the tables in appendix A, appendix B, appendix C, and appendix D.

Based on the literature reviewed regarding food procurement processes and their complexities, this study proposes a hypothesis for exploration, namely:

H4: Procurement managers and facility managers prioritize the economic sustainability factors influencing their decisions on food offerings in company restaurants over the environmental and social sustainability factors.

H5: Human resource managers and catering managers prioritize the social sustainability factors influencing their decisions on food offerings in company restaurants over the environmental and economic sustainability factors.

H6: Sustainability managers prioritize the environmental sustainability factors influencing their decisions on food offerings in company restaurants over the economic and social sustainability factors.

3. Conceptual framework

The conceptual framework that is derived from the literature connects organizational characteristics, sustainability trade-offs, and food provisioning outcomes in company restaurants. It synthesizes insights from the existing literature to explain how various factors interact and influence decision-making in company restaurants.

Organizational characteristics serve as the structural and contextual foundation of food provisioning. Organizations differ in size, sector, and management models, which influence their capacity to implement food provisioning practices. For example, the foodservice model – whether in-house or outsourced – affects the degree of control and flexibility organizations have over food offerings (Mikkelsen, 2005; Reynolds & Hunter, 2019). Moreover, workforce dynamics, such as generational differences (e.g., baby boomers, generation X, Millennials, Generation Z) and working hours (day versus shift work), play a role in determining employee food preferences and consumption patterns (de Assis et al., 2003; Esquirol et al., 2009; Gupta et al., 2021; Hemiö et al., 2015; Raulio et al., 2010; Waterhouse et al. 2003), which can influence decision-making, as decision-makers should focus on the taste preferences of their employees when implementing changes in food provision (Roy et al., 2019).

At the heart of the decision-making process are the various trade-off aspects that reflect the organization's priorities and constraints. These trade-off aspects, which are categorized into economic, social, and environmental dimensions, as opposed by the framework of Elkington (1999), show the complex considerations organizations must balance nowadays when designing food offerings. The key decision criteria are well-documented in the literature and categorized into the three dimensions of sustainability (Astner et al., 2011; Bergström et al., 2005; Boyano Larriba et al., 2019; Reynolds and Hunter, 2019; Renting and Wiskerke, 2010; Tikkanen, 2014;). By examining these trade-offs, this framework captures the practical challenges decision-makers encounter when attempting to address both organizational and employee preferences through food offerings.

The outcome of the decision-making process is reflected in the food that is provided in company restaurants. The conceptual framework illustrated in figure 1 visually demonstrates how these elements interconnect to influence food choices within company restaurants.

This framework highlights the interplay between organizational characteristics and the sustainability trade-offs they navigate. It provides a foundation for analyzing how organizations in different sectors and with varying workforce dynamics approach food provisioning in company restaurants, focusing on economic, social, and environmental sustainability.

Fig. 1: The conceptual framework related to the decision-making process of stakeholders on food provisioning choices.

4. Methodology

This section outlines the methodology employed in this study to investigate the food procurement processes within organizations and institutions in the Netherlands, focusing on trade-offs faced by key decision-makers when selecting food provision services for company restaurants. This study employs a quantitative research design through the use of a structured survey aimed at key decision-makers responsible for food provisioning in various sectors.

4.1 Research design

This study employs a deductive approach, while inductive reasoning builds theory from specific observations, deductive reasoning tests existing theories against specific instances, such as

company restaurants in different sectors (Hyde, 2000). This deductive research started with hypotheses developed from existing literature, which then guided data collection and analysis (Pearse, 2019). Therefore, a cross-sectional survey method is used to gather quantitative data from key decision-makers overseeing food provision. The survey methodology was considered well-suited for this study, as it enabled standardized, large-scale data collection across multiple sectors, allowing for a broad analysis of the decision-making processes involved in organizational food provisioning. Therefore, the design enabled the collection of data from a wide range of organizations at the same point in time. The sectors that were included in the study are industry/ manufacturing, financial/business services, government, education, and healthcare/ welfare. The selection of these sectors was based on the varying availability of company restaurants, as well as differences in occupational groups.

The structured format of surveys supported the analysis of sectoral differences and variations between in-house and outsourced food service models, enhancing the reliability and generalizability of findings across organizational settings. By combining theoretical perspectives with empirical data, this study provided an understanding of important factors influencing food procurement decisions in organizational settings, contributing valuable insights to the field.

4.2 Literature review

A literature review has been conducted to establish the foundation of the research by providing context and identifying key themes, theories, and gaps in the existing body of knowledge related to food provisioning practices and decision-making in company restaurants. This review has focused on food procurement processes, including the roles of various decision-makers, the criteria influencing procurement choices, and the differences between in-house and outsourced food services.

The literature review has also explored the dynamics of food offerings within different sectors, emphasizing the roles of decision-makers and the decision-criteria influencing procurement choices, as outlined by Astner et al. (2011), Bergström et al. (2005), Boyano Larriba et al. (2019), Renting and Wiskerke (2010), Reynolds and Hunter (2019), and Tikkanen (2014). It has highlighted the internal and external influences on procurement decisions, including organizational policies, employee preferences, supplier relationships, and market conditions.

4.2.1 Search strategy

To conduct the literature review, academic databases such as Google Scholar, Scopus, Web of Science, and ScienceDirect have been utilized. Scopus, ScienceDirect, and Web of Science were included for their comprehensive coverage of peer-reviewed literature, particularly in fields relevant to this study such as business management, food science, sustainability, and organizational behavior. Google scholar was included to capture a broader range of academic papers and grey literature, including conference papers and reports that may not be included in traditional databases. The following sections detail the search methodology for each of the three theoretical research questions, as well as the analysis of dietary differences across occupational groups and sectors. The review encompassed peer-reviewed journal articles, books, reports, and policy documents. Additionally, a snowballing technique was applied to identify supplementary literature that may not have surfaced initials searches but was relevant to the research topic. Special attention has been given to studies originating from the Netherlands or comparable Western countries to ensure contextual relevance to the research.

In Appendix E a detailed outline of the search approach taken for each research question can be found, including the use of snowballing for further exploration.

After identifying relevant articles with these search strategies, key findings were extracted to answer each research question. The results were categorized and analyzed to identify key patterns, decision-making criteria, and stakeholder roles. The analysis provided insights into different management models used in company restaurants, the factors influencing food product selection, the roles of various stakeholders in decision-making, and sectoral differences in dietary habits.

4.3 Survey

This section outlines the survey methodology used to investigate the decision-making processes, important procurement criteria, and stakeholder responsibilities in food supply in company restaurants from diverse industries. The survey was designed to generate empirical insights into how organizations address environmental, economic, and social sustainability in their food offerings. The next subsections go into detail on the survey development process, pilot testing, sample techniques, data collections methods, and analytical approaches used to interpret the results.

4.3.1 Survey development

The survey was designed to explore the decision-making processes, criteria, and stakeholder roles in food provisioning within workplace canteens across various sectors. It aimed to provide insights into how organizations approach environmental, economic, and social sustainability criteria when determining their food offerings.

To ensure the coverage of important topics, the survey was carefully structured into five sections. These topics included an introductory screening, demographic and organizational characteristics, procurement practices and catering models, decision-making criteria, and food offerings with employee satisfaction.

First, the survey started with a screening question to ensure that respondents were involved in decision-making regarding food provisioning practices, filtering out ineligible participants. The subsequent section collected demographic and organizational details, including the sector, respondent roles, organizational size, and workforce characteristics to contextualize the findings. The third section addressed procurement practices, differentiating between in-house and outsourced food management models, gathering motivations and decision-making dynamics specific to each model.

In the fourth section, participants evaluated the importance of various decision-making criteria using a five-point Likert scale. The criteria were categorized into social sustainability (e.g., health, nutritional value, employee satisfaction), environmental sustainability (e.g., product related emissions, plant-based options, food waste management), and economic factors (e.g., cost, quality, operational efficiency). Open-ended questions allowed respondents to elaborate on specific criteria or include considerations not predefined in the survey. Finally, the fifth section focused on the food offerings in company restaurants, capturing data on meal types, nutritional intake, and employee satisfaction, alongside the perceived influence of employee preferences on food provisioning decisions.

The questions included were based on academic literature, which ensured that the questions were both theoretically grounded and practically relevant. A combination of closed-ended and open-ended questions were used to balance the collection of data with opportunities to gather additional information.

4.3.2 Target population

The target population for this study are the key decision-makers related to the food provision in company restaurants. The key decision-makers influencing food provisioning in companies are procurement-, catering-, facility-, Human Resource (HR), and/or sustainability managers (Goggins, 2018; Reynolds & Hunter, 2019). These key decision-makers often represent different occupational groups such as white-collar, blue-collar and pink-collar workers working in different sectors. The varying frequency and preference for company restaurants among these groups, as highlighted by Woo et al. (2024), reveal different needs and priorities in food provisioning. These occupational groups are prevalent in different sectors. Therefore, several sectors are included in this study which are based on literature.

Company restaurants are especially present in large organizations. Therefore, company restaurants can be found in the industry/ manufacturing sectors and the education sector (Eves et al., 1996; Raulio et al., 2010). Additionally, Van Den Bersselaar (2019), found that company restaurants are frequently present in sectors such as business services. Additionally, the government sector encompasses various governmental bodies at central, regional, and local levels and therefore includes all entities that are responsible for public administration and governance (Kesner- Skreb, 2006). According to Winston et al. (2013), the healthcare and welfare sector also typically features multiple food outlets, including company restaurants, vending machines, and gift shops. These sectors are the industry/ manufacturing, education, government, healthcare and welfare, and the financial/business services.

These selected key decision-makers working in the selected sectors and managing the relevant occupational groups will be targeted for the survey in this study. This approach allowed for a detailed analysis of how different sectors and occupational roles impact food provisioning decisions. Furthermore, by examining these factors, the study can investigate the trade-offs that key-decision-makers make when considering the triple bottom line dimensions – economic, social, and environmental – when making food provisioning decisions.

4.3.3 Pilot test

Pilot testing was conducted with a small group of professionals from diverse sectors to refine the clarity, flow and relevance of the survey. The feedback that was gathered during the pilot test is reviewed and the feedback considered as valuable is incorporated into the final survey design.

4.3.4 Sampling procedure and data collection

A mixed sampling strategy was employed, combining purposive and random sampling to ensure a broad and relevant data collection. Purposive sampling was used to directly recruit key-decision-makers in food provisioning, as defined in the literature. This ensured that participants had substantial involvement in organizational food provisioning. In addition, purposive sampling was implemented by distributing the survey through various channels, including professional networks, social media platforms (e.g., LinkedIn, Instagram, WhatsApp), email, and databases of organizations within the targeted sectors. While outreach was broad, predefined inclusion criteria ensured that only respondents holding relevant positions were included in the final dataset.

The data collection is conducted using www.qualtrics.com, allowing participants to complete the questionnaire with convenience. An introductory story was included explaining the study's purpose, the importance of participation, and assurances of confidentiality. To enhance response rates, follow-up reminders will be sent to non-respondents one week after the final invitation.

4.3.5 Data analysis

The data gathered for this study was examined using a combination of descriptive statistics and statistical techniques to determine the most important decision criteria that organizational decision-makers consider when determining food provisioning within company restaurants. The study investigated the prioritization of social, environmental, and economic sustainability factors, as well as to discover sectoral and role-based differences in perceptions of these dimensions.

Initially, descriptive statistics such as means, and standard deviations were employed to characterize the importance of various decision-making criteria. This approach gave an initial understanding of how organizational decision-makers prioritize sustainability-related criteria when selecting food offerings in company restaurants. The results were visualized using tables and graphs to highlight the distribution of responses across different sectors and organizational roles.

Subsequently, a number of statistical analysis techniques were employed to investigate the possible impact of sectoral and role-based disparities on the various sustainability characteristics. First, a single linear regression was carried out to investigate a potentially significant association between the age of the workforce and the perceived importance that

organizational decision-makers placed on health-related factors, addressing Hypothesis 1. Second, a Kruskal-Wallis H test was used to evaluate the perceived importance of company restaurants for employees with regular working hours and for company restaurants for employees with irregular working hours, addressing Hypothesis 2. The significance between groups for samples with varying sample sizes was investigated using this technique.

Third, the study employed a Multivariate Analysis of Variance (MANOVA), while it allows for the simultaneous assessment of multiple dependent variables (i.e., sustainability dimensions) while considering the effects of independent variables, such as sector and decision-making role. This approach helped in identifying any notable distinctions between important decision makers and sectors. Following the discovery of significant MANOVA findings, post-hoc pairwise comparisons were used to discover which sectors and organizational roles significantly differed within the sustainability dimensions.

Fourth, multiple one-way ANOVAs were carried out to examine how different organizational decision-makers prioritize the social, economic, and social sustainability dimensions in their food provisioning decisions. In addition to the ANOVAs, Tukey HSD post-hoc tests were used to identify specific pairwise differences between the dimensions. These analyses provided insights relevant to Hypotheses 3, 4, and 5.

Fifth, Multidimensional Scaling (MDS) is employed to analyze the perceptual relationships between decision-making criteria in food provisioning. MDS enabled the visualization of how organizational decision-makers perceive the importance and prioritize the different decision-criteria in their food provisioning practices. This technique involves Principal Component Analysis (PCA). PCA takes a dataset with many variables (e.g., the perceived importance of decision-criteria) and finds a smaller number of 'principal components' that capture the most significant variance in the data. Afterwards, MDS is used to map the perceived relationships between these criteria in a two-dimensional space.

Lastly, in addition to quantitative statistical analyses, qualitative insights were integrated to contextualize the trade-offs that decision-makers encounter in food provisioning. This facet of the analysis aimed to enhance the comprehension of the managerial complexities association with balancing the three sustainability dimensions in food provisioning practices.

The analyses were conducted using IBM SPSS Statistics, and findings are presented through appropriate visualizations, including charts and graphs, to enhance comprehension and facilitate interpretation of the results.

4.4 Ethical considerations

This study adheres to strict ethical standards that ensured the integrity of the study and the protection of participants' rights. Prior to data collection, informed consent is obtained from all participants, clearly outlining the study's purpose, procedures, potential risks, and benefits. Participants were assured of their right to withdraw from the study at any point without penalty. Confidentiality is maintained by anonymizing responses and securely storing data to prevent unauthorized access. Additionally, the research complied with the guidelines set by Wageningen University and Research.

5. Results

The results section presents the findings from the survey and analyses conducted to explore the factors influencing food provisioning practices in company restaurants. The section is organized in several key areas: the sample characteristics, the prioritization of sustainability dimension, and the influence of employees on food provisioning practices. Additionally, the sector highlights several additional factors and constraints that influence food provisioning practices. The analysis combines descriptive statistics, simple linear regression analysis, Kruskal-Wallis H test, multivariate analyses of variance (MANOVA), multiple analyses of variance (ANOVA), post-hoc analyses, and multidimensional scaling (MDS) to provide an understanding of the complex decision-making processes surrounding food provisioning in company restaurants across various sectors and organizational decision-making roles.

5.1 Sample description

This section outlines the process of selecting and refining the sample used in this study, as well as the characteristics of the final data set. The sample selection involved applying predefined criteria to ensure data quality and relevance for statistical analysis. Following this, an overview of the sample composition is provided, detailing sectoral representation, roles of organizational

decision-makers, company size, and catering arrangements. These characteristics offer context for interpreting the findings.

5.1.1 sample selection and data cleaning

A total of 113 respondents initiated the survey. However, 56 responses were excluded based on predefined criteria. Of the 113 respondents, 24 respondents reported that they were not involved in food provisioning practices, while 32 surveys were deemed unsuitable for analysis due to incomplete responses or failure to fully complete the survey. Furthermore, three more responses were excluded as they represented the only respondent within their respective sector or roles of organizational decision-makers, limiting the possibility of meaningful comparative analysis. After applying these selection criteria, the final dataset included 54 respondents, which served as the basis for the statistical analysis (Figure 2).

A total of 113 responses were collected for this study. After applying selection criteria, the final dataset included 54 respondents. These participants formed the basis for the statistical analyses, ensuring that the data were relevant and reliable for drawing conclusions about the decision-making processes in food provisioning. The final dataset was found sufficient for performing the necessary statistical tests to understand the role of sector and organizational decision-making roles in examining the trade-offs decision-makers encounter when shaping food provisioning practices.

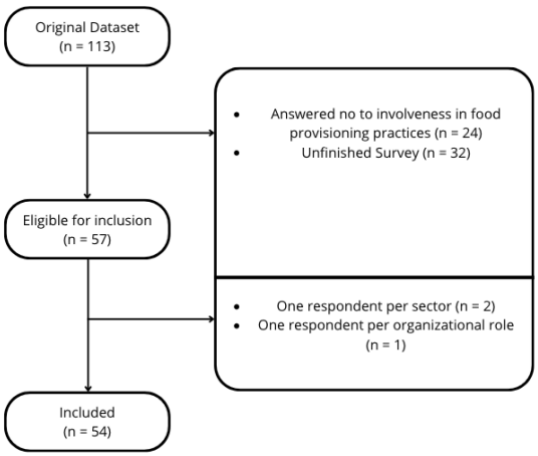


Figure 2: Flowchart of respondent selection

5.1.2 Sample characteristics

This section provides an overview of the characteristics of the sample used in this study, including the distribution of participants across various sectors, roles of the decision-makers, company size, and catering situations. Understanding these characteristics is important for contextualizing the findings and analyzing how these variables may influence the decision-making processes and trade-offs related to food provisioning within company restaurants. The overview of the sample can be seen in Table 1.

		Overall (n = 54)
Sector	Industry/ Production	5 (9.2%)
	Financial/ Business services	10 (18.5%)
	Government	29 (53.7%)
	Education	2 (3.7%)
	Hospitality	8 (14.8%)
Role of decision-makers	Procurement manager	7 (13.0%)
	Catering manager	8 (14.8%)
	Sustainability manager	4 (7.4%)
	Facility manager	21 (38.9%)
	Executive Management Team	4 (7.4%)
	Financial & Commercial manager	6 (11.1%)
	Contract manager	4 (7.4%)
Company size	Less than 50 employees	7 (13.0%)
	50 – 249 employees	15 (27.8%)
	250 – 999 employees	22 (40.7%)
	More than 1000 employees	10 (18.5%)
Catering situation	Internally managed food provision	31 (57.4%)
	Outsourced catering	23 (42.6%)

Table 1: Sample characteristics of the survey respondents

Moreover, respondents were asked which predefined key decision-making roles were also involved within the decision-making regarding food provisional practices next to them. These other involved decision-making roles are shown in Appendix A.

In addition to the predefined decision-making roles, respondents answered other roles within their organization or institution that are involved in decision-making related to the food provisioning within their company restaurant, respondents identified several other roles involved in the decision-making within their organization. These roles highlight the diversity of stakeholders influencing catering and food-related decisions, ranging from operational to strategic levels. The additional roles can be found in Appendix B.

5.2 Influence of employee characteristics on food provisioning practices

This section explores the composition of employees within the surveyed organizations and how workforce characteristics influence food provisioning in company restaurants. First, an overview is provided of the predominant employee classifications, working hours, and generational differences among organizations. Next, the potential impact of generational differences on decision-making regarding food provisioning is examined. Finally, the perceived importance of food offerings for employees with both regular and irregular working hours are analyzed.

5.2.1 Employee characteristics among organizations

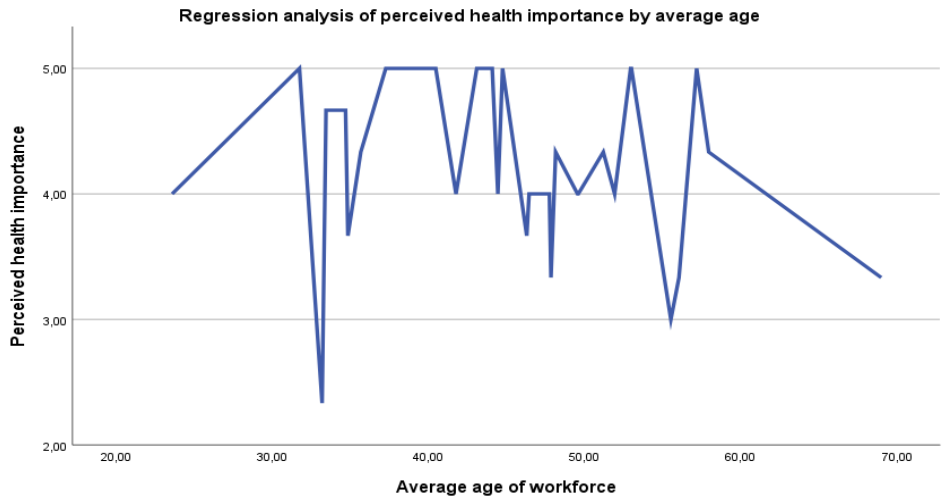
The majority of employees among the organizations (81.5%) are typically engaged in office-based roles such as administrative, IT, marketing, or management positions. A smaller proportion of respondents (18.5%) classified the majority of employees as pink-collar workers, typically employed in service-oriented professions such as healthcare providers, teachers, hospitality workers, and beauticians. Only a minority of respondents (3.7%) identified most employees as blue-collar workers, who are involved in manual labor or technical functions, such as those in industries and production roles. In addition to this, the majority of the respondents (81.5%) filled in that the employees within their organizations have regular working hours with only a minority (5.5%) working irregular hours and 13% having employees working both regular and irregular hours. The additional results can be seen in Table 2.

		Overall (n = 54)
Employee classification	White-collar employees	42 (77.8%)
	Pink-collar employees	10 (18.5%)
	Blue-collar employees	2 (3.7%)
Generational differences (in %)	Babyboomers	23.7%
	Generation X	28.8%
	Millenials	27.0%
	Generation Z	22.5%
Working hours of employees within organizations	Regular working hours (09:00 - 17:00)	44 (81.5%)
	Irregular working hours (e.g., Shiftwork)	3 (5.5%)
	Both	7 13.0%)

Table 2: Employee characteristics among the respondents' organizations

5.2.2 Influence of generational differences on the workforce

The descriptive statistics showed that the average perceived healthiness score had a mean of 4.2 (SD = 0.7) across the 33 respondents that were able to answer the survey question. The average age of the workforce within the organizations of the respondents was 45.2 years (SD = 9.3). To examine a possible significant relationship between the age of the workforce and perceived importance of health aspects by organizational decision-makers, a single linear regression was conducted. The regression model showed that the effect of "age of workforce" on "perceived importance of healthiness aspects by decision-makers" was not statistically significant (F (1, 31) = .822, p = .372). Given the non-significant result, there is no evidence that an increasing age of a workforce increases the perceived importance of healthiness aspects by decision-makers. The results can be found in Graph 1.



Graph 1: Single linear regression of perceived health importance.

5.2.3 Food provisioning for employees with regular working hours

Respondents were asked about the perceived importance and organization of food provisioning for employees with regular working hours (e.g., 09:00 – 17:00). The responses can be seen in table 3.

	Answer possibilities	**Overall (n = 54)**
Perceived Importance of company restaurants	Very Important	25 (46.3%)
	Important	27 (50.0%)

	Neutral	2 (3.7%)
Perceived organization of company restaurants	Excellently organized	23 (42.6%)
	Well organized	28 (51.9%)
	Moderately organized	3 (5.6%)

Table 3: Perceived importance of company restaurants for employees with regular working hours.

These findings indicate the the majority of the total respondents (n = 54) perceive company restaurants as highly important for employees with regular working within their organizations (M = 4.4). Specifically, 46.3% consider them very important, while half of the respondents (50.0%) regard them as important. Only a small percentage of the respondents (3.7%) are neutral on the matter. Additionally, no respondents perceived the importance of company restaurants as not important or not important at all.

Regarding the organization of company restaurants, most respondents rate them positively. A total of 42.6% perceive them as “excellently organized”, meaning the food offerings are always sufficiently available and diverse. Another 51.9% perceive them as "well organized", indicating that the offerings are mostly adequate and varied. Only 5.6% consider them to be "Moderately organized”, stating the food supply is sometimes limited or insufficient.

5.2.4 Food provisioning for employees with irregular working hours

In terms of food provisioning for employees with irregular working hours (e.g., shift work), only 10 respondents answered that employees within their organization have irregular working hours. Therefore, 10 valid responses were recorded. Respondents were asked whether employees with irregular working hours could use the company restaurant during their shifts. The majority of 90.0% (9 respondents) confirmed that employees with irregular working hours had access to the company restaurant, while only 10.0% (1 respondent) indicated that they did not. The results for the perceived importance and organization of company restaurants for employees with irregular working hours can be seen in Table 4.

	Answer possibilities	**Overall (n = 9)**
Perceived Importance of company restaurants	Very important	5 (55.6%)
	Important	4 (44.4%)
Perceived organization of company restaurants	Excellently organized	2 (22.2%)
	Well organized	6 (66.7%)
	Moderately organized	1 (11.1%)

Table 4: Perceived importance of company restaurants for employees with irregular working hours.

The respondents rated the perceived importance of the company restaurant for employees with

irregular working hours as important (M = 4.56). Additionally, among the respondents who evaluated the organization of company restaurants for employees with irregular working hours (n = 9), 66.7% perceived them as well organized, meaning that the offerings are mostly adequate and varied. Moreover, 22.2% indicated that the food offerings in company restaurants for employees with irregular working hours are excellently organized, meaning the food offerings are always sufficiently available and diverse. However, only one respondent (11.1%) mentioned that the organization of the company restaurant for employees with irregular working hours is moderately organized, stating the food supply is sometimes limited or insufficient.

In addition to the mean comparison, A Kruskal-Wallis H test was conducted to compare the perceived importance between employees with regular working hours (n = 54) and those with irregular working hours (n = 9). The test results showed that the difference in perceived importance between the two groups was not statistically significant (H (2) = 2.00, p = .368). This suggests that while the two groups had different sample sizes and distribution patterns, there is no strong evidence that decision-makers managing food provisioning practices for employees with regular working hours perceive company restaurants as more important than those with irregular working hours. Additionally, no respondents perceived the importance of company restaurants as neutral, not important, or not important at all.

The differences in perceived importance (expressed in means) of company restaurants for employees with regular working hours in comparison to employees with irregular working hours can be seen in Figure 3.

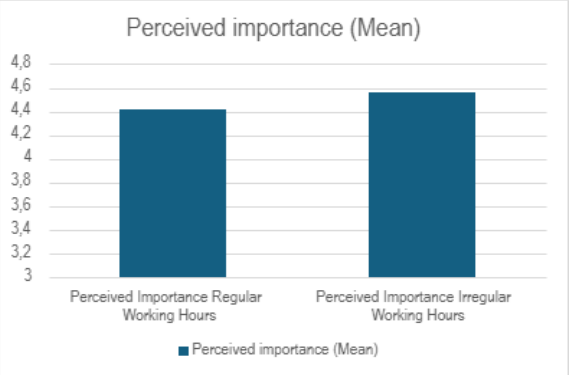


Figure 3: Comparison of perceived importance of company restaurants for employees with regular and irregular working hours

5.3 Analysis of sustainability key-decision criteria

5.3.1 Distribution of key decision criteria scores across sustainability dimensions

This section presents the results of the analysis of key decision criteria used by organizations in determining food provisioning within company restaurants. Descriptive statistics for each criterion are provided, including the mean and standard deviation, to highlight the relative importance assigned to different factors in the decision-making process.

Social sustainability dimension

Table 5 outlines the key criteria within the social sustainability dimension. The highest-rated criterion in this dimension was food safety, with a mean score of 4.7, followed by taste (M = 4.4, SD = 0.7) and healthiness (M = 4.2, SD = 0.9). However, criteria such as employee demographics (M = 3.2, SD = 1.2) and fair-trade products (M = 3.4, SD = 1.1) were rated the lowest of this dimension.

Criteria	**Mean (SD)**	
Food safety	4.7	(0.5)
Taste of products	4.4	(0.7)
Healthiness of products	4.2	(0.9)
Taste preferences of employees	4.1	(0.7)
The food complies with the applicable standards and guidelines within the relevant organization or sector	4.1	(0.9)
Visual presentation of the food	4.1	(1.0)
Support for regional economy	4.0	(0.9)
Nutritional value of the food	3.9	(0.9)
Animal welfare	3.6	(1.1)
Fair-trade products	3.4	(1.1)
Employee demographics	3.2	(1.2)

Table 5: Perceived importance of the decision criteria from the social sustainabity dimension.

Environmental sustainability dimension

Table 6 presents the criteria under the environmental sustainability dimension. For this dimension, the highest-rated criterion was food waste (M = 4.4, SD = 0.8), followed by the use of seasonal ingredients (M = 4.07, SD = 0.87). The criteria of product-related emissions (M = 3.2, SD = 1.0) and energy and water efficiency in kitchens (M = 3.3, SD = 1.0) scored relatively lower and are thus perceived as less important to decision-makers.

Criteria	Mean (SD)	
Food waste	4.4	(0.8)
The use of seasonal ingredients	4.1	(0.9)
Short supply chains	3.7	(1.0)
Origin of products	3.7	(1.1)
Plant-based options	3.5	(1.1)
Sustainable certification	3.5	(1.1)
Sustainable transport	3.5	(1.0)
Energy and water efficiency in kitchens	3.3	(1.0)
Product related emissions	3.2	(1.0)

Table 6: Perceived importance of the decision criteria from the environmental sustainabity dimension.

Economic sustainability dimension

Finally, Table 7 summarizes the economic sustainability criteria. In this dimension, product quality (M = 4.4, SD = 0.7) and variation and diversity of offerings (M = 4.3, SD = 0.8) scored the highest. On the other hand, portion size (M = 3.7, SD = 0.9) and the costs of products (M = 4.1, SD = 0.9) had the lowest ratings, meaning they are perceived as less important compared to the other criteria related to economic sustainability.

Criteria	Mean (SD)	
Quality of products	4.4	(0.7)
Variation and diversity of offerings	4.3	(0.8)
Timely delivery of products	4.2	(0.9)
Procurement within budget	4.1	(1.0)
Efficiency of operations	4.1	(1.0)
Costs of products	4.1	(0.9)
Portion size	3.7	(0.9)

Table 7: Perceived importance of the decision criteria from the economic sustainabity dimension.

5.4 Analysis of perceived importance of sustainability dimensions across organizational roles and sectors

To explore the key decision-criteria influencing food provisioning in workplace canteens, descriptive statistics were used to analyze the perceived importance of the sustainability dimensions across different organizational roles and sectors. The sustainability dimensions include social sustainability, environmental sustainability, and economic sustainability. These results provide insights into how decision-makers within organizations prioritize these factors.

Table 8 presents the mean scores and standard deviations for each sustainability dimension across various organizational roles. This analysis highlights potential variations in sustainability prioritization based on professional responsibilities, reflecting differences in the perceived importance of social sustainability, environmental sustainability, and economic sustainability.

Sustainability Dimension	Organizational Decision-Making Role	Mean	(SD)
Social Sustainability	Catering manager	4.2	(0.7)
	Procurement manager	4.2	(0.7)
	Facility manager	4.0	(0.5)
	Contract manager	3.9	(0.8)
	Senior management	3.8	(0.6)
	Financial/Commercial manager	3.8	(0.6)
	Sustainability manager	3.8	(0.6)
Environmental Sustainability	Contract manager	3.9	(0.9)
	Procurement manager	3.8	(1.0)
	Catering manager	3.8	(0.8)
	Facility manager	3.6	(0.7)
	Financial/Commercial manager	3.5	(0.3)
	Senior management	3.5	(0.7)
	Sustainability manager	3.3	(1.0)
Economic Sustainability	Procurement manager	4.7	(0.4)
	Catering manager	4.5	(0.7)
	Facility manager	4.1	(0.6)
	Senior management	4.0	(0.8)
	Financial/Commercial manager	4.0	(0.6)
	Contract manager	3.8	(0.7)
	Sustainability manager	3.6	(0.6)

Table 8: Perceived importance of the three sustainability dimensions across the various organizational decision-making roles.

Similarly, Table 9 provides an overview of sustainability priorities across different sectors. By comparing mean scores, this analysis shows sectoral differences in sustainability emphasis.

Sustainability Dimension	Sector	Mean	(SD)
Social Sustainability	Hospitality	4.1	(0.6)
	Industry/Production	4.1	(0.9)
	Financial/Business services	4.0	(0.6)
	Government	3.9	(0.5)
	Education	3.7	(0.6)
Environmental Sustainability	Industry/Production	4.1	(1.0)
	Education	3.9	(0.1)
	Financial/Business services	3.9	(0.6)
	Government	3.5	(0.7)
	Hospitality	3.4	(0.8)

Economic Sustainability	Hospitality	4.5	(0.4)
	Industry/Production	4.3	(0.8)
	Government	4.2	(0.6)
	Education	3.9	(1.3)
	Financial/Business services	3.8	(0.6)

Table 9: Perceived importance of the three sustainability dimensions across the various sectors included in the study.

These findings offer a basis for further analysis, including (M)ANOVA testing, to assess whether the observed differences are statistically significant and to better understand the underlying factors shaping sustainability decision-making in company restaurant food provisioning.

5.4.1 Multivariate Analysis of Variance

A multivariate analysis of variance (MANOVA) has been conducted to examine the effects of sector and organizational role on perceptions of social, environmental, and economic sustainability dimensions in company restaurant food provisioning practices. The overall model was significant for the social sustainability dimension ($F(24, 29) = 2.308$, $p = .016$), the economic sustainability dimension ($F(24,29) = 3.058$, $p = .002$), but not for the environmental sustainability dimension ($F(24,29) = 1.596$, $p = .115$). These findings suggest that sectors and organizational roles collectively influence perceptions of the economic and the social sustainability dimension. However, the non-significant results for the environmental sustainability dimension indicate that these factors might be less of a focus or perceived more similarly across sectors and roles.

Effects of sector and organizational role

The univariate tests indicate that sector has a significant effect on the economic sustainability dimension ($F(4,29) = 2.937$, $p = .037$), but not on the social sustainability dimension ($F(4,29) = 1.457$, $p = .241$) nor on the environmental sustainability dimension ($F(4,29) = 1.416$, $p = .254$). The significant effect of sectors on economic sustainability perceptions outlines that different sectors face unique challenges related to financial trade-offs. The lack of significance for the sector effect for social and environmental sustainability suggests that these dimensions are less influenced by sector-specific conditions and may be perceived more universally relevant across sectors.

Moreover, organizational role significantly influences the perceptions of decision-makers of the economic sustainability dimension ($F(6,29) = 2.760$, $p = .030$). However, the social

sustainability dimension (F (6, 29) = 1.784, p = .139) and the environmental sustainability dimension (F (6,29) = 0.966, p = .465) did not show any significance. These findings suggest that organizational role influences perceptions of economic sustainability, indicating that different organizational roles evaluate economic trade-offs differently. The non-significance of social and environmental sustainability perceptions across organizational roles suggests that these dimensions are seen as more consistently valued.

Additionally, the interaction effects between sector and organizational role had a significant effect on all three sustainability dimensions, which can be seen in Table 10.

	Dimension	**df**	**F-value**	***p*-value**
Sector * Organizational decision-making role	Social Sustainability	14	3.317	.003
	Environmental Sustainability	14	2.057	.049
	Economic sustainability	14	2.850	.008

Table 10: MANOVA results for interaction effects of sector and organizational decision-making roles on the sustainability dimensions.

These results indicate that the combined effect of sector affiliation and organizational role significantly shape the perceived importance of all the three sustainability dimensions. This suggests that differences in trade-offs in company restaurant's food provisioning practices are not only sector-dependent but also influenced by an individual's role within the organization.

Overall, the model explained a substantial proportion of variance (R^2) in the sustainability dimensions. The economic sustainability dimension had the highest explanatory power, with 71.7% of the variance accounted for. This reflects a strong relationship between the predictors and perceptions of economic trade-offs in food provisioning. Additionally, the social sustainability dimension explained 65.6% of the variance, showing a moderate to high level of explanatory power, while the environmental sustainability dimension accounted for 56.9%, indicating moderate explanatory power.

The adjusted R^2 which accounts for the number of predictors, indicated that the economic sustainability dimension had a strong fit (Adjusted R^2 = 48.2%). In comparison, the social sustainability dimension had a more moderate to strong fit (Adjusted R^2 = 37.2%) and the environmental sustainability showed a moderate fit (Adjusted R^2 = 21.3%). Therefore, the model provides moderate to high explanatory power, with the strongest fit observed for economic sustainability.

5.4.2 Post-hoc tests analysis of differences between organizational roles and sectors

In addition to the MANOVA, Tukey HSD post-hoc tests have been done. The analysis of the perceived importance of the three sustainability dimensions across different organizational decision-making roles revealed some significant differences in how these roles view the perceived importance of the sustainability dimensions. On the one hand, the results for the social sustainability dimension revealed no significant differences in the perceived importance of this dimension across organizational roles *(p > .05)*. Similarly, the environmental sustainability dimension shows no significant differences between decision-making roles overall *(p* > .05). These results are in line with the MANOVA saying that there are no significant differences between organizational decision-making roles and the perceived importance of sustainability dimensions. On the other hand, for the economic sustainability dimension, significant differences were observed between particular roles. Specifically, procurement managers exhibited a significant difference from both sustainability managers (mean difference = 1.05, *p* = .018), suggesting procurement managers perceiving the economic sustainability dimension significantly more important than sustainability managers. Similarly, catering managers exhibited a significant difference from sustainability managers (mean difference = 0.93, *p* = .039), suggesting catering managers perceiving the economic sustainability dimension significantly more important than sustainability managers.

Furthermore, marginally significant differences (.05 > *p* < .10) were found between procurement managers and facility managers (mean difference = 0.58, *p* = .097) and procurement managers and contract managers (mean difference = 0.90, *p* = .057), meaning the difference is not statistically significant at the .05 level. However, it is close to significance, suggesting that procurement managers may prioritize the economic sustainability dimension more than contract managers and facility managers.

The same holds for the sectoral differences. The results of the Tukey HSD post-hoc analysis indicated no statistically significant differences in the perceived importance of the sustainability dimensions across sectors. For the social sustainability dimension there were no significant differences in the perceived importance between the sectors (*p* > .05). Moreover, for the environmental sustainability dimension, there are also no significant differences in how sectors perceive the environmental sustainability dimension (*p* = .05). These results are also in line with the MANOVA saying that there are no significant differences between sectors and the perceived importance of sustainability dimensions. However, in the economic sustainability dimension, a significant difference was found between the Hospitality sector and

Financial/Business services sector, with a mean difference of 0.73 (p = .019), suggesting the Hospitality sector perceiving the economic dimension significantly more important than the Financial/Business services sector. These results indicate that, aside from the economic dimension, sectors generally exhibit relatively similar views on the social and environmental aspects examined.

5.5 Prioritization of sustainability dimensions by decision-makers

This section presents the results of the one-way ANOVAs conducted to examine whether organizational decision-making roles prioritize certain sustainability dimensions over others. For each role, the one-way ANOVA results, effect sizes, and post-hoc comparisons using the Tukey HSD test are reported. The ANOVA results can be found in Table 11.

The one-way ANOVAs revealed no statistically significant differences in the prioritization of sustainability dimensions for procurement managers (F(2, 18) = 2.182), p = .142), catering managers (F(2, 21) = 2.322, p = .123), sustainability managers (F(2, 9) = .322, p = .732), the executive management team (F(2, 9) = .488, p = .629), financial/commercial managers (F(2, 15) = 1.331, p = .294), and contract managers (F(2, 9) = .025, p = .975). Thus, for these organizational decision-making roles, statistically significant prioritization of one sustainability dimension over another could not be established.

For facility managers, the one-way ANOVA approached, but did not reach, statistical significance (F(F, 2 60) = 3.110, p = .052). The eta^2 (0.094) indicates that managerial role explains 9.4% of the variance in sustainability dimension prioritization, suggesting a small influence. Despite this marginal significance (p < .10), the post-hoc Tukey HSD revealed a statistically significant difference between the economic and environmental dimensions (p = .046). Facility managers scored the economic dimension significantly higher than the environmental dimension (Mean Difference = .435), providing evidence for the prioritization of economic sustainability over environmentally sustainability in their decision-making. No other pairwise comparisons were statistically significant.

Although, the descriptive statistics of the decision-makers combined indicated that, on average, economic sustainability shows the highest perceived importance (M = 4.1, SD = 0.6), followed by the social sustainability dimension (M = 4.0, SD = 0.6), while the environmental sustainability dimension scored the lowest (M = 3.7, SD = 0.7). This suggests that while all the three dimension are considered important, economic factors tend to be prioritized over social and environmental considerations in decision-making processes.

Decision-making role	df_1	df_2	F-value	eta^2	*p* – value
Procurement managers	2	18	2.182	0.195	.142
Facility managers	2	60	3.110	0.094	.052*
Catering managers	2	21	2.322	0.181	.123
Sustainability managers	2	9	0.322	0.067	.732
Executive management team	2	15	0.488	0.098	.629
Financial/ commercial managers	2	9	1.331	0.151	.294
Contract managers	2	9	0.025	0.006	.975

Table 11: One-way ANOVA output of sustainability dimensions' prioritization by decision-makers

5.6 Visualizing the decision-making criteria through Multidimensional Scaling

In addition to the simple linear regression, Kruskal-Wallis H test, MANOVA, and the multiple one-way ANOVAs, a Multidimensional Scaling (MDS) analysis has been performed. MDS is a visualization technique that represents the perceived similarity between items as spatial proximity. Therefore, MDS creates a map where each decision-making criteria is a point, and the distance between points reflects how similar the corresponding items are judged to be. Items perceived as similar cluster together on the map, while dissimilar items are located further apart. These resulting clusters offer insights into underlying structures or dimensions that influence perceptions of similarity.

Figure 3 visually represents the interrelationships between the 27 decision-making criteria included in the study. The spatial proximity of attributes on the plot reflects their perceived similarity, with closer decision-making criteria indicating strong associations between each other. Four distinct regions of clusters of decision-making criteria can be extracted from the figure.

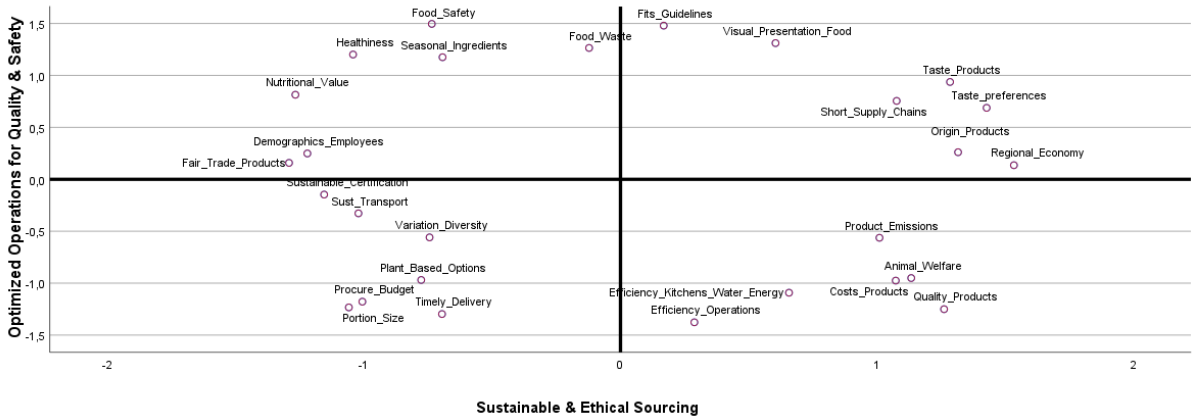
First, the upper right quadrant of the plot is characterized by attributes related to sensory aspects of the food (e.g., taste of products, taste preferences of employees, visual presentation of the food) combined with regional aspects of the food (e.g., origin of products, short supply chains, and support for local economy). The clustering of these attributes suggests that decision-makers who prioritize these factors tend to associate them strongly with each other, indicating a preference pattern focused on the immediate experience of food consumption and locality of the food. This suggests that the decision-makers in this study place a value on the sensory pleasure derived from eating, the presentation of the dish, and the connection between the food and its source.

Second, the left center of the figure, a cluster related to sustainability and ethical considerations can be concluded. Decision-making criteria such as sustainable certification, sustainable transport, fair-trade products, plant-based options, and variation and diversity are located in this cluster. This suggests that decision-makers prioritizing these criteria likely consider the ecological footprint of their food provisioning practices and the social implications of their choices.

Third, in the lower center of the figure, a cluster emerges focusing on operational efficiency and financial aspects of the food offerings. This cluster includes procurement within budget, the cost of products, timely delivery, efficiency of operations, efficiency in kitchens with water and energy, and portion size. This grouping suggests that decision-makers who prioritize these attributes are likely concerned with cost-effectiveness and resource management, reflecting a more practical and value-oriented approach to food provisioning practices.

Lastly, in the top left quadrant, a smaller cluster emphasizes health and safety criteria. Decision-making criteria such as food safety, healthiness, nutritional value, and seasonal ingredients are grouped together. This suggests that decision-makers who prioritize these decision-making criteria are likely health-conscious and seek out foods that contribute to well-being, reflecting a preference pattern centered on health, safety, and nutritional value.

However, the two-dimensional MDS exhibited a moderate stress value (0.384) and a low R^2 value of 0.139, indicating a less-than ideal fit to the observed preference data. While the figure offers valuable insights into potential relationships between the decision-making criteria, these values suggest that the two-dimensional space may not fully capture the complexity of decision-making criteria. The moderate stress value indicates a level of difficulty in representing the differences within the selected dimensions, whilst the low R^2 suggests that the model accounts for only a small proportion of the data (13.9%).



Graph 2: Multidimensional scaling of perceptions of sustainability aspects

5.7 Influence of employees on food provisioning practices in company restaurants

This section presents the findings on the alignment of food offerings with demographic composition, the alignment of the food provisioning practices with the needs of employees during work time, employee satisfaction, the influence of employees on food offerings, and the consideration of employee's eating habits in organizational food provisioning decisions. The results can be found in Table 12.

	Strongly Agree (5)	**Agree (4)**	**Neutral (3)**	**Disagree (2)**	**Strongly disagree (1)**	**Mean**
The offerings in company restaurants are tailored to the demographic composition of the workforce.	7 (13.0%)	22 (40.7%)	14 (25.9%)	6 (11.1%)	5 (9.3%)	3.36
The food offered in company restaurants aligns with employees' nutritional needs during work.	11 (20.4%)	21 (38.9%)	18 (33.3%)	4 (7.4%)	0 (0%)	3.72
Employees are satisfied with the food offered in company restaurants.	7 (13.0%)	24 (44.4%)	13 (24.1%)	2 (3.7%)	1 (1.9%)	3.76
Employees have a high influence on the food offered in company restaurants.	6 (11.1%)	15 (27.8%)	21 (38.9%)	10 (18.5%)	2 (3.7%)	3.24
The eating habits of employees (e.g. vegetarian, vegan, flexitarian, omnivorous) are taken into account when choosing the offering in the company restaurant.	16 (29.6%)	23 (42.6%)	11 (20.4%)	3 (5.6%)	1 (1.9%)	3.93

Table 12: Descriptive statistics on the employee influence on food provisioning practices.

Table 12 presents the distribution of responses regarding the alignment of food provisioning practices. Overall, the mean scores of the statements assume a generally positive perception of the food offerings, particularly in relation to alignment with employee nutritional needs and consideration of dietary preferences. However, notable portions of respondents remained neutral or disagreed on several aspects, especially when it comes to the influence employees have on food provisioning practices. These findings suggest that while there is a broad support for the alignment with food offerings with employee needs, there may be opportunities for further engagement and adaptation to improve employee influence and satisfaction in company restaurant food provisioning practices.

5.8 Additional considerations and criteria in food provisioning decisions

To identify additional factors considered important in food provisioning decisions for company restaurants, respondents were asked an open-ended question about aspects not covered in the survey.

Several respondents emphasized sustainability related concerns, particularly the protein transition (i.e., the implementation of vegetarian and vegan options) as being important. Furthermore, financial constraints were also mentioned. Respondents expressed concerns about the affordability of healthy food, with some indicating that nutritious options are often too expensive, making them less accessible. Others mentioned management team preferences, supplier influence, and the impact of nearby vendors as important considerations.

Another important factor was the alignment of food offerings with organizational culture, long-term strategic vision, and employer branding policies related to hospitality. Moreover, some respondents mentioned supply chain transparency and collaboration, mentioning block-chain based traceability as a potential solution. The unpredictability of demand was also noted as a challenge in food provisioning. Additionally, social responsibility considerations were mentioned including the role of company restaurants in supporting social return on investment (SROI) by training and employing individuals with a distance to the labor market.

Lastly, in response to the survey, several additional criteria were highlighted by respondents as important when determining food provisioning practices in company restaurants. These criteria

reflected not only health and sustainability criteria, but also cultural preferences and economic factors. The complete list of additional criteria can be found in Appendix W.

6. Discussion

This section provides an in-depth reflection of the findings of this study, evaluating their significance in the context of organizational food provisioning. First, the validity of the research design is considered, addressing its strength and potential biases. The discussion then interprets the key results, comparing them to existing literature and the explanation of the outcomes. Moreover, the study's limitations are acknowledged, outlining methodological, data-related, and practical constraints that may have influenced the findings. Lastly, the section elaborates on the implications of the study for organizations and policymakers and provides recommendations for future research directions to address remaining gaps and further advance knowledge in this field.

6.1 Validation of research design

The validity of this study is assessed through an examination of measurement accuracy, generalizability, internal and external validity, and the reliability of sources and methods.

6.1.1 Measurement accuracy

Measurement accuracy refers to how closely the survey accurately reflects the intended constructs and variables (De Leeuw et al., 2008). In this case, decision-makers' perceptions of

sustainability trade-offs in food provisioning practices within company restaurants. The design of the survey was based on an extensive literature review, ensuring that the questions captured the most relevant sustainability criteria and decision-making factors.

To further enhance measurement accuracy, the survey employed a mix of both closed-ended, Likert scale, and open-ended questions. This combination allowed for a quantification of responses while also enabling understanding of respondents' attitudes and priorities. The Likert scale, in particular, helped capture the perceived importance of sustainability criteria, allowing to quantify how strongly decision-makers weighed sustainability criteria/dimensions when making food provisioning decisions.

Additionally, the survey instrument underwent a pre-test phase, where a small sample of respondents provided feedback on the clarity and comprehensibility of the questions. Based on this feedback, adjustments were made, leading to a more understandable survey.

Despite these efforts to ensure accuracy, the study is subject to self-reported bias, which can be influenced by social desirability or different interpretations of sustainability criteria. Respondents might have presented themselves as more environmentally, socially, or economically responsible than they truly are, leading to potential over- or underreporting of certain criteria. Although the survey provided clear definitions of the sustainability related criteria, varying interpretations of sustainability could lead to inconsistencies in how respondents rated the importance of the sustainability related criteria.

6.1.2 Internal validity

Internal validity refers to the extent to which the observed relationship in a study reflects true causal influencing rather than confounding factors (Clemens et al., 2021). In this study, internal validity was ensured through several methods. Extensive data cleaning was applied, removing incomplete responses and those from individuals not directly involved in food provisioning decisions. Moreover, statistical techniques, including multivariate analysis of variance (MANOVA), regression analysis, and Kruskal-Wallis H tests, were employed to control potential confounders and identify significant patterns in sustainability trade-offs. These methods tried to help isolate the direct relationship between sustainability criteria and food provisioning decisions, enhancing the validity of the results.

Additionally, the survey itself was structured to minimize ambiguity, with clearly defined terms and a consistent Likert scale format to reduce variability in responses.

6.1.3 External validity

External validity refers to the generalizability of the findings to broader populations and contexts (Lucas, 2003). The study sample included key-decision makers from multiple sectors, including hospitality, government, financial/business services, education, and industry/production, which strengthens its applicability across different organizational contexts. However, the sample size (n = 54) remains a limitation, particularly in certain subgroups. For example, respondents managing food provisioning in company restaurants for employees with irregular working hours had a low number of respondents (n = 9). Additionally, given the sectoral focus, the findings may not fully generalize to industries not represented in the sample or to countries with different food procurement regulations and cultural contexts.

While the study provides valuable insights into sustainability trade-offs in company restaurant food provisioning, the findings may not be universally applicable to all organizations or countries.

6.1.4 Reliability of sources and methods

Reliability refers to whether the research methods used produce consistent and replicable results (Twycross & Shields, 2004). The use of a structured survey ensured that all respondents were asked the same set of questions, minimizing variations in data collection and reducing potential biases in responses. This standardization increases the reliability of the data by ensuring uniformity across the sample.

Additionally, the study utilized established techniques to assess the relationships between sustainability dimensions and decision-makers' perceptions. The application of these methods, which are widely recognized in social science research, further strengthens the reliability of the findings by allowing for a robust analysis of complex relationships.

Moreover, the literature review, which guided the design of the survey and the identification of relevant sustainability dimensions, was sourced from peer-reviewed journals. This ensured that the theoretical framework was grounded in credible and reliable sources, further enhancing the study's reliability.

However, the reliance on self-reported data introduces potential biases, such as social desirability bias, where respondents may provide answers, they believe are more socially acceptable rather than reflecting true perceptions (Novruzov, 2024).

6.2 Discussion of research questions

This section presents a critical analysis of the findings in relation to the research questions and hypotheses addressed in this study. The primary aim of the research was to explore the decision-making processes of organizational decision-makers in various sectors responsible for food provisioning in company restaurants, with a focus on how various factors influence the prioritization of sustainability dimensions in food provisioning practices. In the following sections, the research questions and hypotheses are discussed by integrating the study's results with relevant existing literature.

6.2.1 Discussion of theoretical sub-research questions

The following section examines the theoretical research questions, focusing on the various management models of organizational food provisioning, the sustainability related criteria influencing procurement decisions, and the key organizational stakeholders involved in the decision-making process. Accordingly, findings from existing literature are analyzed, supplemented with insights derived from the survey results, to provide a comprehensive view of the factors shaping food provisioning within organizations.

How do company restaurants differ in terms of management models, and in which sectors are company restaurants most commonly found?

This research question examined how restaurants differ in terms of management models and identified the sectors where these restaurants are most commonly found. The findings align with previous literature that highlights dominant food service models: in-house management and outsourcing (Mikkelsen, 2005; Reynolds & Hunter, 2019). These models each have distinct advantages and trade-offs.

The in-house food service model provides organizational control over food quality, menu flexibility, and alignment with corporate values, such as sustainability or employee well-being (Goggins, 2018). However, as Chan Khk (2015) noted, in-house management entails higher opportunity costs, ongoing labor expenses, and unpredictable operational costs. This study confirms that organizations opting for in-house management often have strategic reasons, such as maintaining direct oversight of food offerings and ensuring alignment with corporate health and sustainability goals.

Conversely, outsourcing remains widely used, driven by cost efficiency, access to specialized expertise, and reduced administrative burden (Pahirathan, 2017; Kolasa, 2018). The findings

suggest that companies with a strong focus on cost efficiency and operational streamlining are more likely to outsource their food services.

However, the survey results indicate that internally managed food provision is more prevalent (57.4%) than outsourced catering (42.6%). This suggests that many organizations still prefer maintaining direct control over their food services, despite the operational challenges associated with in-house management. This outcome can be suggested as uncommon, while existing research noted that outsourced catering is more common currently than in-house management. These studies indicate a shift towards outsourcing food provisioning practices (Haugen, 2014; Natukunda et al., 2013), with drivers as cost reduction, focus more on core competencies, and access to specialized expertise (Baily et al., 2005; Lyson & Farrington, 2006; Pahirathan, 2017). A factor that explains the outcome could be organizational size and structure. Smaller or more independent organizations may lack the bargaining power to secure favorable outsourcing contracts, making in-house management a more viable option. Moreover, the limited scale of smaller organizations might make it financially unattractive for catering companies to operate in a company restaurant, further discouraging outsourcing practices. Additionally, the operational costs and complexity of managing food services in smaller organizations are likely to be lower, reducing the perceived need to outsource. According to Memili et al. (2011) small- and medium-sized firms are less likely to outsource due to transaction costs arising from human asset specificity, threats of opportunism, and risk aversion.

What decision criteria among the three dimensions of sustainability – environmental, social, and economic - are considered in the selection of food products offered in company restaurants?

This study examined the decision criteria organizations consider when selecting food products for company restaurants, focusing on environmental, social, and economic sustainability. These decision criteria were the basis for the sustainability dimensions ranked in the survey.

Existing literature has highlighted the multifaceted nature of food provisioning practices, which are increasingly shaped by environmental, social, and economic sustainability considerations. An important finding is that environmental sustainability is becoming a more prominent factor, with organizations prioritizing locally sourced food, sustainable certifications, and waste reduction measures (Barlett, 2011; Boyano Larriba et al., 2019; Tikkanen, 2014). However, operational efficiency concerns may introduce challenges related to extended supply chains and increased greenhouse gas emissions (Renting & Wiskerke, 2010; Reynolds & Hunter, 2019).

Moreover, existing literature suggests that social sustainability criteria, including health and nutritional value, ethical considerations, and employee preferences, play an important role in food provisioning practices (Price et al., 2016; Quiniliani et al., 2010). However, economic sustainability criteria may still be considered as most dominant, with cost considerations (e.g., costs of products, budgetary constraints, operational efficiency) often outweighing social and environmental sustainability goals (Pagell and Shevchenko, 2014).

Several new criteria identified in this study were not identified in the existing literature, such as the increased focus on the protein-transition and accommodating religious and cultural dietary needs (e.g., Halal and Kosher). While environmental sustainable food practices have been discussed in the literature in terms of, for example, local food sourcing and food miles (Renting & Wiskerke, 2010), new criteria like implementing real-time dashboard to track sustainability metrics (e.g., track CO2 emissions per products), increase healthiness of meals (i.e., with high Nutriscore), the consideration of Social Return on Investment (SROI) and achieving participating social enterprises (PSO), and making food affordable for employees with lower budgets. The inclusion of these social sustainability criteria may suggest an increasing emphasis on the social dimension of sustainability (Colantonio, 2009). Organizations may be considering how food provisioning practices may not only impact the environment or the financial viability but also increase social equity and accessibility. The additionally mentioned criteria may expand the understanding of how organizations define sustainability in food provisioning, incorporating newer aspects that reflect technological advancements and social inclusivity. These findings may underscore the need for more holistic approaches that integrate economic, environmental, and social considerations, while acknowledging sector-specific constraints, stakeholder priorities, and other constraints.

These findings suggest a growing awareness of sustainability. However, they also raise questions about the practical implementation of these principles. This study indicates that while organizational decision-makers advocate a more holistic approach integrating economic, environmental, and social considerations, the economic aspect often dominates in practice. This difference between stated values and actual behavior underscores the complexity of sustainability implementation.

Which stakeholders are involved in what role in the choice of food offerings in company restaurants?

The results of this study largely align with the expectations based on the literature review, with some notable insights emerging regarding the roles of stakeholders in food provisioning within company restaurants.

The findings from the literature confirm that multiple stakeholders are involved in food provisioning decisions within organizations. As identified in the literature, procurement managers, catering managers, sustainability managers, and facility managers were identified as decision-makers (Goggins, 2018; Reynolds & Hunter, 2009). These findings aligned with the outcomes of the survey results. Additionally, human resource managers were expected to be included in the decision-making in food provisioning. However, there were too little respondents in the survey (n = 1) to include this organizational role in the study. A potential reason for this limited participation of human resource managers in this study could be that their primary responsibilities focus on broader employee aspects. While human resource managers may influence initiatives related to employee health and well-being, they may not be actively engaged in operational decision-making related to food provisioning practices (Gupta et al., 2024).

The new insights that emerged from the survey were the influence of the executive management team (e.g., CEO, partners). Although executive management was not initially considered a primary decision-maker in the literature, the results indicate that these top-level management roles influence the food offerings within company restaurants. This finding aligns with Kolasa (2018), who emphasizes the executive team's important role in establishing the overall framework for the company restaurant and collaboration with stakeholders to negotiate contracts that define standards and expectations. Additionally, the survey revealed that contract managers and commercial/financial managers often play a role in the decisions related to food service practices.

These findings support the framework laid out in the literature, which emphasized the complexity of food provisioning as a decision-making process involving various stakeholders with different priorities and responsibilities. The additional roles of executive management, financial/commercial managers, and contract managers broaden the understanding of organizational dynamics.

6.2.2 Discussion of empirical sub-research questions and hypotheses testing

Which criteria among the three dimensions of sustainability – environmental, social, and economic - are considered most important by decision-makers when selecting food options for company restaurants?

The first empirical sub-question aimed to investigate which criteria – among the three dimensions of sustainability – are perceived most important by decision-makers when selecting food options for company restaurants. The results of the study showed that decision-makers consider all three dimensions of sustainability important, with economic factors being the most dominant. The analysis of the key decision criteria used by decision-makers in determining food provisioning within company restaurants revealed that "food safety" (M = 4.7), "product quality" (M = 4.4), and "taste of products" (M = 4.4) are among the highest-rated factors, indicating their importance in the decision-making process. Additionally, "the use of seasonal ingredients" (M = 4.1) and "variation and diversity of offerings" (M = 4.3) are prioritized, reflecting focus on sustainability and diversity. On the other hand, criteria such as employee demographics (M = 3.2), fair-trade products (M = 3.4) and "portion size" (M = 3.7) were rated lower, suggesting they are of lesser importance.

However, the results revealed that economic sustainability was the leading factor for decision-makers. Overall, the economic sustainability dimension was perceived as the most important dimension for decision-makers, while the social sustainability dimension and the environmental sustainability dimension scored lower. However, food safety (social sustainability) was considered as most important by decision-makers, followed by product quality (economic sustainability) and taste of products (social sustainability).

Therefore, the results of this study align with the theory, which suggested that organizations face competing pressures when selecting food options for company restaurants. Notably, economic considerations remain central to these decisions, often overshadowing the environmental and social sustainability dimensions. These findings align with Hahn et al. (2010), who identified the challenge of balancing the environmental and economic sustainability dimensions, particularly among top and middle managers. Furthermore, Pagell and Shevchenko (2014) argued that sustainability initiatives often come at the expense of profitability, with the prioritization of economic objectives leading to a de-emphasis on environmental and social goals. Moreover, while previous research suggested an increasing emphasis on ethical considerations such as fair-trade and animal welfare (Boyano Larriba et al.,

2019), the current findings indicate that such factors remain secondary to economic considerations.

To what extent does the type or preferences of employees influence the food offerings in company restaurants?

This research question aimed to explore the extent to which employee preferences or type of employees influence food offerings in company restaurants. The findings largely align with the expectations derived from the literature, which suggest that employee preferences have a large role in food provisioning decisions (Roy et al., 2019).

First it is notable to mention that a key characteristic of company restaurants is their predominant presence in organizations employing white-collar workers. The results indicate that these restaurants are more commonly found in workplaces where white-collar employees make up the majority (respectively 77.8%). This finding aligns with prior research indicating that white-collar workplaces are more likely to offer structured food services, whereas blue-collar environments rely more on alternative catering solutions (Kooiman, 2016; Raulio et al., 2010; Van Den Bersselaar, 2019; Wandel & Roos, 2005).

Moreover, the results of the survey provide a nuanced understanding of the role of employees in shaping food offerings. While employee preferences are considered, they do not solely dictate food provisioning decisions. Direct employee influence on food provisioning appears to be limited. The minority of respondents (38.9 %) agreed or strongly agreed that employees exert high influence over food offerings, while 38.9% remained neutral and 22.2% disagreed or strongly disagreed. This suggests that food provisioning choices are balanced against organizational considerations (e.g., costs, sustainability goals). The collected data suggest that company restaurant offerings generally align with employee needs and demographics. For instance, 53.7% of respondents agreed or strongly agreed that food offerings are tailored to workforce composition. Additionally, the majority of respondents (respectively, 59.3%) agreed or strongly agreed that they meet employees' nutritional needs during work hours. Moreover, the vast majority of respondents (respectively, 72.2%) agreed or strongly disagreed that employee dietary habits are taken into account, suggesting that dietary diversity is recognized even if employees do not directly shape food offerings in company restaurants.

Interestingly, despite the said importance of workforce demographics in shaping food provisioning practices, the results indicate that demographics are not a primary concern when

assessing social sustainability in food services. Respondents did not rank demographic characteristics as an important criterion. More importantly, demographic characteristics were ranked as the lowest criterion (together with product related emissions) of all criteria included in this study. This finding is interesting, as it challenges the assumption that a diverse offering and tailored to individual employee characteristics is a kay factor in food provisioning practices in company restaurants. However, a possible explanation for this discrepancy lies in the potential unfamiliarity of the term "demographic" among respondents. This could have led to the misunderstanding of the question's intent and potentially contributed to the differing outcomes observed across the survey questions.

In addition to the results, two hypotheses were initiated related to the gather information of decision-makers regarding perceived importance of company restaurants of employees with regular working hours compared to employees working irregular working hours and the influence of workforce age on the perceived importance of healthiness aspects within food provisioning practices. These hypotheses can also explain the influence of workforce characteristics on food provisioning practices. Therefore, Hypothesis 1 (H1) and Hypothesis 2 (H2) will be discussed in the following section.

H1: Decision-makers within organizations that have to manage food provisioning services to an older workforce are more health oriented than those in organizations with a predominantly younger workforce.

Hypothesis 2 (H2) proposed that decision-makers within organizations serving an older workforce would place greater emphasis on the healthiness of food offerings in company restaurants compared to those serving a younger workforce. However, the results of the linear regression did not support this hypothesis. The statistical analysis showed that the effect of workforce age on the perceived importance of healthiness aspects by decision-makers was not significant ($p = 0.372$). This finding suggests that workforce age alone is not a decisive factor in shaping the health orientation of food provisioning practices by decision-makers. This is not in line with Gupta et al. (2021), which stated that older workforces prioritize health and are more focused on nutritious food choices.

One potential explanation for this is that health-conscious food policies may be driven by broader organizational values, industry standards, or regulatory requirements rather than workforce age (Carino et al., 2021). Another possible explanation is that decision-makers may not perceive substantial differences in dietary preferences or health considerations between younger and older employees. While previous literature suggests that older individuals tend to

be more health-conscious in their dietary choices (Gupta et al., 2021). This outcome can be linked to the perceived influence of employees on food provisioning practices being moderate, as well as the perceived importance of employee demographics, as noted earlier.

Therefore, hypothesis 1, predicting a greater emphasis on healthy food offerings for older workforces, was not supported, as the simple linear regression showed no significant relationship between workforce age and the perceived importance of healthiness. This finding outlines the complexity of factors influencing food policies in company restaurants.

H2: Decision-makers in organizations face a trade-off in prioritizing food provisioning practices and place greater emphasis on the food provisioning of employees working regular hours (e.g., 09:00 – 17:00) over those of employees working irregular hours (e.g., shift work or night shifts).

This hypothesis examined whether decision-makers face a trade-off in providing food provisioning practices and whether they place greater emphasis on food provisioning for employees with regular working hours (e.g., 09:00 – 17:00). The findings indicate that decision-makers generally perceive company restaurants as highly important for their employees with regular working hours and for employees with irregular working hours.

Similarly, the organization of company restaurants serving both employees with regular working hours and those with irregular working hours appears to be well-organized overall. This suggests that food provisioning is not only recognized as a significant aspect of workplace management but is also effectively coordinated in most organizations. These outcomes are not in line with the literature review. Previous research suggests that irregular working hours can significantly impact employees' lifestyle, as irregular working hours disrupt meal timing and make it more challenging to maintain a consistent diet, especially if the facilities for irregular working hours are not well organized (Hemiö et a., 2015). However, it is important to acknowledge the potential for response bias, as decision-makers directly involved in organizing food provisioning may show their efforts in a positive manner. Given that individuals are generally unlikely to critically evaluate their own work, self-reported assessments of food provisioning quality should be interpreted with caution.

However, the Kruskal-Wallis H test revealed that the difference in perceived importance between the groups was not statistically significant. This suggests that, based on the available data, decision-makers do not necessarily prioritize food provisioning for regular-hours employees over those with irregular hours. However, while the mean values suggest that

decision-makers that provide food services to employees with irregular working hours might perceive company restaurants as slightly more important, the statistical test results indicate that this difference is not significant. The small sample size for the irregular working hours group introduces a limitation, as these results can't be considered as generalizable.

Therefore, hypothesis 1 is partially supported, but not resolutely accepted. While the descriptive statistics (i.e., mean values) hint at a greater perceived importance of food provisioning for employees with irregular working hours, the Kruskal-Wallis H test revealed no statistically significant difference between the two groups. All in all, the core prediction of the hypothesis (i.e., that decision-makers place greater emphasis on food provisioning for employees with regular hours) is not supported by statistical analysis.

6.2.3 Discussion of decision-makers' prioritization of sustainability dimensions

The following hypotheses explored the role of organizational decision-makers in shaping the sustainability dimensions related to food offerings in company restaurants, with a focus on the varying priorities between different managerial roles. The findings of this section are framed within three key hypotheses that examine how procurement managers, facility managers, human resource managers, catering managers, and sustainability managers balance social, environmental and economic sustainability factors when making food provisioning decisions. Therefore, Hypothesis 3 (H3), Hypothesis 4 (H4), and Hypothesis 5 (H5) were initiated to examine potential significant differences between organizational roles and the prioritization of the different sustainability dimensions. These hypotheses will be discussed in the following section.

H3: Procurement managers and facility managers prioritize the economic sustainability factors influencing their decisions on food offerings in company restaurants over the environmental and social sustainability factors.

The hypothesis posited that procurement managers and facility managers in organizational food provisioning prioritize economic sustainability over social and environmental sustainability.

On the one hand, for procurement managers, the ANOVA results (p = .142) indicated no statistically significant difference in the prioritization of the three sustainability dimensions. On the other hand, for facility managers, the ANOVA reached marginally significance (p = .052). Despite the marginal significance of the overall test, the post-hoc analysis revealed a statistically significant difference between the economic and the environmental dimension (p = .046). This means that facility managers perceived the economic dimension significantly more

important than the environmental dimension. This finding partially supports H3 for facility managers, as it demonstrates a prioritization of the economic sustainability over environmental sustainability.

However, as predicted by H3, procurement and facility managers showed a prioritization of economic sustainability factors in terms of the perceived importance when looking at the mean scores. The findings revealed that the economic sustainability dimension had the highest mean scores among these organizational roles, particularly for procurement managers (M = 4.7). Similarly, facility managers also ranked economic sustainability factors highly (M = 4.1).

Therefore, H3 can be partially accepted. For procurement managers, while a trend was observed favoring economic sustainability over environmental and social sustainability based on the mean scores, there was no statistical significance found ($p > 0.05$). For facility managers, the results partially accept H3, showing a significant prioritization of the economic sustainability dimension over the environmental sustainability dimension. In addition to this, facility managers also perceived the economic sustainability dimension as the most important based on the mean scores. However, there was no significant prioritization ($p > .05$) found between the economic and the social sustainability dimensions.

It is worth noting that procurement and facility managers may perceive the economic sustainability dimension as more important compared to other roles due to the nature of their responsibilities within organizations. Procurement managers, who are tasked with acquiring goods and services (Moynihan, 2005), are likely to focus on cost-effective food sourcing. The emphasis on managing costs in procurement decisions could make the economic sustainability dimensions more important for these professionals, as they are often tasked with optimizing budgets and minimizing expenses (Moynihan, 2005). Similarly, facility managers, who are responsible for a wide range of activities, including financing and management (Hu et al., 2016), may also place higher emphasis on economic sustainability.

However, the analysis of organizational roles revealed no significant differences in how these roles view the perceived importance of the sustainability dimensions ($p > 0.05$). These findings suggest that sustainability considerations are generally perceived with a similar level of importance within the organization. While there may be variations in mean scores between roles, the lack of significance indicates that, across these dimensions, sustainability considerations are largely perceived equally among different stakeholders.

H4: Human resource managers and catering managers prioritize the social sustainability factors influencing their decisions on food offerings in company restaurants over the environmental and economic sustainability factors.

The hypothesis posited that human resource managers and catering managers in organizational food provisioning prioritize the social sustainability dimension over economic and environmental sustainability dimensions. First it is worth noting that human resource managers were not considered in this study, while there were not enough respondents to analyze. Therefore, the catering managers will be the only ones to be taken into account for this hypothesis. The fact that there were too little human resource managers responding to the survey can be because of the influence in taking these decisions being absent. Therefore, it can be suggested that, although human resource managers organize, supervise and coordinate employee related processes (Umar, 2001), food provisioning practices are not one of these tasks.

However, for catering managers, the one-way ANOVA results ($p = .123$) showed no statistically significant difference in the prioritization of the three sustainability dimensions. Additionally, the post-hoc test did not reveal any significant pairwise differences.

This is in line with the overall perceived importance of the sustainability dimensions when looking at the mean values. H4 predicted a significant difference in perceived importance between the social sustainability dimension and the environmental and economic sustainability dimensions. However, catering managers scored the rated the economic sustainability dimensions as the most important (M = 4.5), while social sustainability (M = 4.2) and environmental sustainability (M = 3.8) scored lower. This suggests that although catering managers perceived social sustainability as important, the economic considerations paired with food provisioning practices are perceived as more important. This is in line with the definition of Gowdy & McKenna (1994), that said catering managers should balance business sustainability (e.g., the financial viability of organizations) with promoting healthy eating habits.

Therefore, H4 ($p > .05$) will be rejected, saying that catering managers do not significantly prioritize the social sustainability dimension over the economic and environmental sustainability dimensions.

H5: Sustainability managers prioritize the environmental sustainability factors influencing their decisions on food offerings in company restaurants over the economic and social sustainability factors.

This hypothesis posited that sustainability managers prioritize the environmental sustainability dimension influencing their decisions on food offerings in company restaurants over the economic and social sustainability dimension. This hypothesis was grounded on the explanation given by Goggins (2018), who suggested that a sustainability manager can incorporate sustainability into food procurement processes.

The one-way ANOVA for sustainability managers' scores (p = .732) revealed no statistically significant difference between the prioritization of the three sustainability dimensions. Additionally, the post-hoc test also showed no significant differences between any of the dimensions.

This is in line with the mean scores related to the perceived importance for the different sustainability dimensions. Notably, sustainability managers assigned relatively equal importance to economic sustainability (M = 3.6) and social sustainability (M = 3.8), while the environmental sustainability dimension was the least emphasized by sustainability managers (M = 3.3). A possible explanation for this could be that sustainability managers adopt a more integrated approach to sustainability, where they do not prioritize one dimension over another. This could reflect the idea that sustainability decisions are multidimensional, making it difficult to single out one dimension as more important than others. Another possible explanation could be related to the small sample size (n = 4). This small sample size might not fully capture the diversity of perspectives and approaches across a larger population. Potentially, these respondents could have assigned relatively lower scores accidentally due to personal traits being more conservative.

Therefore, H5 (p > .05) will be rejected. The sustainability managers included in the study did not demonstrate a statistically significant prioritization of environmental sustainability over economic or social sustainability.

6.2.4 Discussion of the main research question

This study aimed to investigate how organizational decision-makers across different sectors weigh trade-offs among the three dimensions of sustainability – environmental, social, and economic – when selecting food offerings in company restaurants. The findings suggest that decision-makers tend to consider these dimensions in an integrated manner, with economic

sustainability often taking precedence over environmental and social factors. However, despite the dominance of the economic sustainability dimension, decision-makers acknowledge the importance of environmental and social sustainability.

As noted by Hahn et al. (2010), trade-offs arise when achieving goals in one dimension leads to compromises in another, making it challenging to fully satisfy all objectives simultaneously. As demonstrated by the study's results, economic considerations were consistently perceived as the most important criteria in food provisioning decisions. The descriptive statistics confirmed that economic sustainability was perceived as the most important dimension, followed by social sustainability, and environmental sustainability. This ranking suggests that, while sustainability is considered across all dimensions, economic considerations (e.g., cost-efficiency and budget constraints) play a dominant role in the decision-making process. This is consistent with Hahn et al. (2014), who emphasized that short term financial goals are often prioritized over long-term environmental goals, complicating the sustainability decision-making process.

Additionally, there were observed differences between sectors and organizational roles regarding the perceived importance of the sustainability dimensions. The results indicate that both sector and organizational role influence perceptions of sustainability trade-offs in company restaurant food provisioning practices, particularly regarding economic sustainability. Specifically, the sector was found to significantly affect economic sustainability, with the hospitality sector perceiving economic sustainability significantly more important than financial/business services (p = .019). These findings align with the work of Cavagnaro and Gehrels (2009), who suggest that organizations within the hospitality sector, typically engaged in food service provisioning, are not generally recognized for their high level of sustainability. However, previous research on the financial sector suggests that its performance in corporate social responsibility and sustainability is relatively low compared to other sectors (Weber et al., 2012), making these findings somewhat unorthodox.

Moreover, the social dimension which was emphasized in certain sectors (e.g., Hospitality, Industry/Production) could reflect a sector specific approach, where employee well-being is directly linked to organizational outcomes such as productivity and job satisfaction. These sectors may, therefore, place greater emphasis on social sustainability in their food procurement decisions. This is in line with Ramesh (2022), which concluded that increasing employee well-being contributes to improved engagement, reduced absenteeism, enhanced creativity, and overall organizational resilience.

In terms of organizational roles, the results indicate that sustainability managers perceive economic sustainability as significantly less important than procurement managers (p = .018) and catering managers (p = 0.039). This outcome can explain the varied focus of these roles, with sustainability managers often trying to balance long-term and short-term goals, while procurement and catering managers may place higher emphasis on short-term internal interests (Annosi et al., 2024; Gelderman et al., 2015).

Therefore, the findings of this study suggest that organizational decision-makers tend to prioritize economic sustainability, often at the expense of environmental and social goals, though these dimensions are not entirely neglected.

6.3 Limitations

This section outlines important limitations encountered during the study, which came from methodological constraints, data-related challenges, and practical considerations. While this study contributes insights into food provisioning decisions in company restaurants, it is important to acknowledge these limitations, which could influence the interpretation and generalizability of the findings.

6.3.1 Methodological limitations

This study employed a cross-sectional survey design, meaning data were collected at a single point in time. As a result, the findings reflect associations between decision-making factors rather than causal relationships. The absence of longitudinal data collection limits the ability to assess how sustainability considerations in food provisioning evolve over time or in response to external pressures such as regulatory changes or shifts in consumer demand.

Another important limitation is the reliance on self-reported data, which introduces the risk of social desirability bias. Additionally, the voluntary nature of survey participation may have led to self-selection bias, where individuals with a strong interest in food sustainability were more likely to respond, potentially skewing the findings.

Moreover, a challenge is the limited availability of scientific literature specifically addressing the intersection of the three sustainability dimensions (social, environmental, economic) in company restaurants. While broader research exists on food choices, sustainability, and overall trade-offs related to the different sustainability dimensions, studies examining the specific trade-offs professionals face in the food provisioning practices remain scarce.

The final concern relates to construct validity, as standardized survey questions may not fully capture the complexity of decision-making processes. The use of predefined response categories, although necessary for standardization, limited the availability to capture context-specific nuances. While the Likert-scale responses provided a structured means of measuring priorities, they do not capture the full complexity of real-world food provisioning trade-offs. Open-ended qualitative insights could have provided additional depth, offering a more holistic understanding of the trade-offs professionals face in food provisioning.

6.3.2 Data constraints

One of the primary data limitations of this study is the response rate. While extensive efforts were made to reach a diverse pool of decision-makers across various sectors (i.e., e-mailing/calling potential organizations, LinkedIn messages, having the survey in 'newsletters' of platforms for decision-makers, etc.), participation remained voluntary, potentially leading to non-response bias. Organizations or individuals with a stronger commitment to sustainability may have been more motivated to participate, which could influence the results in a non-representative way. Furthermore, while the study examines sectoral and role-based differences in the prioritization of sustainability dimensions, the sample sizes within specific subgroups were uneven. While certain sectors of organizational roles were underrepresented, statistical power may be reduced, making it harder to detect meaningful differences. Additionally, interaction effects between sectors and organizational roles may exist but remain undetected due to sample limitations.

Data completeness also presented a challenge. A large number of survey responses were incomplete, requiring exclusion from the final analysis. Furthermore, a number of respondents may have interpreted survey questions differently or misunderstood questions or terms mentioned (e.g., question related to the age distribution within organizations). This variability in individual perceptions could introduce noise in the data, impacting the precision of the statistical results. However, pilot testing has been done to identify potential issues with question clarity. Future research could improve the survey design and ensure that all survey questions are even more clear, concise, and unambiguous to reduce respondent confusion.

6.3.3 Practical limitations

Several practical limitations influence the applicability of this study's findings to real-world food provisioning decisions in company restaurants. One key limitation is the context-specific character of food procurement, which is influenced by corporate policies, corporate strategies,

internal budgets, and contractual arrangements with caterers. These factors may impose limits on decision-makers, limiting their ability to fully implement or prioritize sustainability initiatives. For example, businesses with limited budgets may prioritize cost over sustainability, even when the long-term benefits of sustainable food provisioning are clear. Similarly, contractual arrangements with caterers can restrict flexibility in altering food offerings. Furthermore, organizational strategies may conflict with sustainability goals, resulting in a trade-off between immediate cost savings and long-term environmental or social benefits (Hahn et al., 2010). These internal considerations highlight the complexity of food procurement in real-world contexts, implying that the study's findings may not be universally applicable across different organizations.

On the other hand, external factors such as evolving regulations and market trends can significantly impact food provisioning practices. For instance, tightening sustainability regulations at the European Union or national level may guide organizations to prioritize environmentally friendly options, potentially altering procurement decisions in ways that were not accounted for during the study. These external factors introduce a degree of uncertainty, suggesting that the study's findings may represent only a snapshot of the food provisioning landscape at a specific moment in time. This temporal limitation restricts the applicability of the results in the context of ongoing changes and evolving conditions.

6.4 Implications

The findings of this study provide insights into the decision-making processes surrounding food provisioning in company restaurants, particularly regarding the prioritization of sustainability dimensions across different sectors and organizational roles. These insights hold several implications for both academic research (i.e., theoretical) and practical applications in corporate food provisioning strategies.

Firstly, this study contributes to the growing body of research on sustainability trade-offs, especially with the focus organizational food procurement. While this study tries to empirically demonstrate how decision-makers within organizations prioritize economic, social, and environmental sustainability dimensions within company restaurant food provisioning. Previous studies have highlighted the challenges of integrating sustainability into food policies (Pagell & Shevchenko, 2014), this research provides sector- and role-specific insights, emphasizing that sustainability considerations are not uniformly applied across organizational roles and sectors. Moreover, by analyzing sustainability priorities across different decision-

making roles, this study extends the understanding of intra-organizational sustainability dynamics, specifically the interplay between power dependencies, interest dissatisfaction, and value commitments (Koelewijn et al., 2012). The model employed in the analyses demonstrated moderate to strong explanatory power in capturing sustainability perceptions in food provisioning, particularly in relation to the economic sustainability dimension. This indicates that sectoral differences and organizational roles accounted for a significant proportion of the variance in food provisioning decisions. Therefore, according to the model, these factors play an important role in shaping food provisioning practices, with relatively small influence from other unaccounted variables.

Additionally, this study contributes to literature on sustainability decision-making by strengthening the notion that food provisioning in company restaurants is not determined by a single factor but by the interaction of multiple stakeholders and multiple decision-criteria. Therefore, these findings support a systems-thinking approach (Meadows, 2008), suggesting that sustainability in food provisioning should be viewed as an interconnected process where multiple actors and multiple decision-making criteria influence outcomes, rather than a linear decision-making hierarchy.

Moreover, a key implication of this study is that organizations should reassess their sustainability strategies to ensure that food provisioning aligns more effectively with broader corporate sustainability goals. Given that environmental sustainability ranked lowest among the decision-making criteria, organizations may need to reconsider how they integrate sustainability goals into food provisioning strategies. This can be particularly relevant in light of increasing regulatory pressures, such as the Corporate Sustainability Reporting Directive (CSRD), which requires companies to disclose the environmental and social impact of their operations. If organizations fail to address these aspects, they risk reputational damage and potential regulatory non-compliance. In addition to this, policy interventions may be necessary to encourage greater consideration of environmental factors. Government agencies and industry regulators could introduce stricter sustainability procurement criteria related to food provisioning within company restaurants, incentivizing organizations to adopt food provisioning strategies that contribute to a more sustainable food system and reduce environmental impact. Without interventions, organizations may continue to favor economic considerations, potentially slowing progress toward more sustainable food provisioning practices.

Furthermore, from a practical standpoint, this study provides actionable insights for organizations, policymakers, and foodservice providers aiming to enhance sustainability in company restaurants. Specifically, it highlights the importance of adopting a more inclusive approach to food provisioning. The findings reveal that while company restaurants generally align with employee dietary needs, employees have limited influence over food offerings. An inclusive approach involves actively engaging employees in decision-making processes, such as food procurement and menu development. For instance, organizations can establish regular feedback mechanisms like surveys or focus groups to gather employee input on dietary preferences, sustainability concerns, and cultural considerations. This information can be used to tailor menus that reflect employee preferences while also prioritizing sustainable, health-conscious options. Moreover, by incorporating employee feedback, organizations not only improve the accessibility and acceptability of sustainable food offerings but also foster a sense of engagement among employees. This, in turn, can lead to better health outcomes and higher employee satisfaction. If organizations fail to incorporate employee input into food provisioning strategies, they may miss opportunities to improve employee health, employee engagement, and organizational sustainability.

6.5 Future research

While this study offers an analysis of the sustainability trade-offs decision-makers face in food provisioning within company restaurants, several important questions remain. Further research is needed to refine and expand on these findings, addressing limitations and exploring new dimensions of decision-making in sustainable food provisioning practices.

First, a limitation of this study is its cross-sectional design, which captures decision-making processes at a single moment in time. However, sustainability in organizational food provisioning is a dynamic process, influenced by external factors such as regulatory changes, evolving employee preferences, contracts with suppliers or caterers (typically changing on a four-year basis), or market pressures. Therefore, a longitudinal approach would allow researchers to assess how sustainability trade-offs develop and whether organizations progressively prioritize environmental or social criteria alongside economic considerations.

Second, a qualitative study on decision-making processes could provide a more nuanced understanding of the underlying motivations and constraints faced by key stakeholders. While this study quantitatively assessed sustainability priorities across different sectors and organizational roles, in-depth interviews or case studies could reveal the mechanisms, internal

power dynamics, and corporate cultures that shape food provisioning decisions. This approach allows for a more detailed exploration of how these decisions are influenced by the broader organizational context, including executive management priorities, stakeholder pressures, and internal policies. Ultimately, such research could shed light on the complex trade-offs decision-makers face and how sustainability related to food provisioning practices is operationalized within the constraints of day-to-day business operations.

Lastly, while this study focused specifically on food sustainability in company restaurants, many (especially large) organizations are increasingly focused on broader sustainability goals. Future research could examine how food sustainability aligns with or diverges from other sustainability initiatives within organizations. Investigating whether companies integrate food-related sustainability goals into their overall corporate sustainability strategies could offer a better understanding of how food provisioning is compared. This future research could have significant implications for organizations seeking to optimize their sustainability efforts. As companies are increasingly being held accountable by investors, consumers, and policymakers for their sustainability performance, it could be essential to ensure that food provisioning is not treated as a siloed issue but rather as a component of a larger sustainability strategy.

7. Conclusion

This study explored the trade-offs that organizational decision-makers face in organizational food procurement for company restaurants, specifically analyzing the prioritization of economic, social, and environmental sustainability dimensions across different sectors. The findings highlight the complexities of food provisioning in organizational settings, emphasizing how competing priorities influence food provisioning practices and decision-making.

The findings reveal a prioritization of the economic sustainability dimensions receiving high perceived importance. While social sustainability, particularly concerning employee health, is also considered important, environmental sustainability appears to have the least perceived importance. Moreover, the findings demonstrate that sector has a significant impact on how economic sustainability is perceived. For instance, organizations within the hospitality sector tend to place higher value on economic sustainability compared to those in the financial/business sector. This suggests that sector-specific economic considerations play a role in shaping sustainability priorities. Additionally, organizational role plays a role in shaping economic sustainability priorities. Facility managers tend to significantly prioritize economic sustainability more than the other sustainability dimensions. Catering managers also place

considerable emphasis on economic factors. In addition to this, procurement managers and catering managers perceived economic sustainability as significantly more important than sustainability managers, underscoring role-based differences in the perception of sustainability priorities. Interestingly, sustainability managers did not exhibit a prioritization of the environmental dimension.

Furthermore, this study suggests that employee preferences and demographics play a role in shaping food offerings, although direct employee influence on food provisioning decisions appears limited. While company restaurants generally cater to employee needs and dietary habits, there is room for greater inclusivity and employee involvement in the decision-making process. Strategies such as participatory decision-making, where employees can have a more active role in selection menu options or suggesting improvements, and implementing feedback loops, where their opinions are regularly solicited could enhance employee engagement and satisfaction with food offerings. In addition to this, contrary to the initial hypothesis, workforce age did not significantly influence the perceived importance of healthiness aspects, suggesting that other factors may play a more important role. Similarly, the perceived importance of company restaurants did not significantly differ between employees with regular and irregular working hours.

This study's limitations, including its cross-sectional design, reliance on self-reported data, and limited sample size within certain subgroups, should be acknowledged. These limitations underscore the need for future research employing longitudinal designs, qualitative methodologies, more representative samples in quantitative research, as well as exploring how food sustainability aligns with broader organizational sustainability goals and is integrated in overall corporate strategies. First, the longitudinal design would provide valuable insights into the evolving dynamics of food provisioning practice, enabling the identification of causal relationships and tracking the impact of organizational changes, sustainability initiatives, and external factors over time. Second, a qualitative study could aim to explore the underlying motivations, experiences and decision-making processes of key decision-makers involved in food provisioning within company restaurants, focusing on the factors influencing sustainability, employee inclusion, and sector-specific challenges. Third, future research should use more representative and larger samples through stratified sampling, broader distribution, and targeted outreach to underrepresented sectors and roles. Lastly, exploring how food sustainability aligns with broader organizational goals could provide valuable insights for optimizing sustainability efforts. Such research could offer a deeper understanding of the

complex dynamics of sustainable food provisioning, the motivations and constraints faced by decision-makers, and the complex interplay of factors that shape food provisioning decisions in company restaurants.

Overall, this study provides valuable insights for organizations seeking to enhance the sustainability of their food provisioning practices. By understanding how the three sustainability dimensions (e.g., social, environmental, and economic) influence decision-makers across different sectors and decision-making roles, organizations can develop more targeted strategies that balance sustainability. The findings offer practical implications for integrating sustainability into food policies, enhancing employee well-being, and fostering greater employee involvement in decision-making. This approach can help organizations contribute to a more sustainable food system while meeting the needs of both the business and its workforce.

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Appendix

Appendix A: Key environmental sustainability factors

Environmental sustainability	
Criterium	**Source**
Country of Origin	Tikkanen, 2014
Shorter supply chains	
Product related emissions	Renting and Wiskerke, 2010
Seasonal ingredients	Barlett, 2011 / Boyano
Third-party certifications	Larriba et al,. 2019
Plant-based menu options	Boyano Larriba et al., 2019
Food waste prevention and management	
Energy and water efficiency in kitchens	
Sustainable food transportation practices	
Responsible use of chemical products and consumables	
Sustainable packaging	
Organic food choices	

Appendix B: Key social sustainability factors

Social sustainability	
Criterium	**Source**
Healthiness of products	Astner et al., 2011
Nutritional value of products	
Employee demographics	
Taste preferences of employees	Roy et al. 2019
Food safety	Bergström et al., 2005
Norms and established practices	
Visual appearance of food	
Taste of products	
Fair Trade products	Barlet, 2011 / Boyano Larriba et al., 2019
Animal welfare	Price et al., 2016
Support for regional economy	Tikkanen, 2014

Appendix C: Key economic sustainability factors

Economic sustainability	
Criterium	**Source**
Price	Bergström et al., 2005
Portion size	
Quality	
Timely delivery	
Operational efficiency	Reynolds and Hunter, 2019
Procurement within budget	Astner et al., 2011
Variety and diversity of offerings	Barlett, 2011

Appendix D: The key food criteria related to employee food choices at work

Criterium	Source
Value for Money	Price et al., 2016
Variety	
Naturalness	
Nutrition	
Portion size	
Taste	
Visual Appearance	
Origin	
Animal Welfare	
Environmental Impact	
Fair trade	
Organic sourcing	

Appendix E: Search strategy for Literature review

What are the different types of company restaurants, and how do they differ in terms of management models?

To explore the different types of company restaurants and the management models associated with them, keywords and phrases such as "company restaurant", "corporate canteen", "workplace canteen", "workplace cafeteria", and "organizational food service" were utilized to capture literature on workplace dining facilities and their classifications. To investigate management variations, additional terminology like "management models", "contract catering", "in-house foodservice", and "outsourced foodservice" were applied, helping to identify studies that analyze management structures and operational models.

The search aimed to include scientific peer-reviewed reports, industry reports, government publications, and sector-specific studies that provided classifications of company restaurants by

management model. Additionally, case studies offering comparative insights were also included, as they revealed practical differences in operational choices and decision-making processes in diverse organizational settings.

What decision criteria among the three dimensions of sustainability – environmental, social, and economic - are considered in the selection of food products offered in company restaurants?

The search focused on understanding the criteria used in food product selection in company restaurant settings. Key terms included “food product selection”, "food procurement”, "menu planning”, and "key food related decision criteria” to capture literature examining logistical and strategic aspects of the food provided in company restaurants. Additional terms such as "decision criteria”, "selection standards”, "quality standards”, and "sustainability criteria” were employed to focus on studies that outline the decision criteria that are related to food procurement and food selection.

To provide a thorough review, relevant literature on institutional and regulatory guidelines for food service procurement was prioritized, as these often highlight the factors influencing decision-making. Research on environmental and social sustainability criteria was also included, reflecting the growing emphasis on sustainable practices in corporate food provisioning.

Which stakeholders are involved in what role in the choice of food offerings in company restaurants?

To identify the stakeholders involved in food provisioning and their specific roles, the search utilized keywords such as "stakeholders”, "decision-makers", "management roles”, "procurement managers”, "company restaurants”, "workplace canteens”, company cafeterias”, to target literature analyzing organizational roles in foodservice. Supporting phrases like "food offerings”, "food selection”, and "food provisioning” were added to capture the studies discussing stakeholder tasks and responsibilities to workplace dining.

This search sought literature on organizational food service management that outlines the unique responsibilities of roles such as procurement managers, catering managers, facility managers, and human resource managers.

Which different dietary habits can be distinguished between sectors and types of employees?

To examine dietary habits across sectors and employee demographics, the search included terms such as "dietary habits", "eating behaviors", "food preferences", and "nutrition patterns" to capture research on variations in diet in workplace contexts. Additionally, terms like "sectors", "industry differences", "workplace dietary trends", "occupational classes", "white-collar workers", "blue-collar workers", and "pink-collar workers helped locate studies and reports focusing on the different occupational classes within sectors and dietary differences across occupational classes.

The search prioritized research comparing dietary habits across sectors such as healthcare, education, and business services, as well as studies and reports that examined dietary preferences based on job roles or organizational classes. Comparative analyses and studies provided insights into how dietary behavior can vary by sector, while literature on factors like age, gender, or occupation in relation to workplace dining offered a perspective on dietary trends influenced by employee demographics.

Appendix F: Survey guide (In Dutch)

Introductie

Beste deelnemer,

Bedankt dat u de tijd neemt om deel te nemen aan deze enquête. Ik ben Sven Kolk, masterstudent in Sustainable Business and Innovation aan Wageningen University & Research. Als onderdeel van mijn afstuderen onderzoek ik de keuzes die professionals maken ten aanzien van het voedingsaanbod in bedrijfsrestaurants en bedrijfskantines.

De studie onderzoekt keuzes die professionals zoals inkoop-, catering-, facility-, human resource (HR), en/of duurzaamheidsmanagers maken bij het bepalen van het voedingsaanbod in bedrijfsrestaurants en bedrijfskantines. Hierbij worden de keuzes onderzocht vanuit het perspectief van de "Triple bottom line". Bij dit concept wordt er gekeken naar de balans tussen economische, sociale en milieuvriendelijke aspecten rondom de voedselvoorziening in bedrijfsrestaurants en bedrijfskantines. Dit onderzoek ik in verschillende sectoren, namelijk industrie en productie, financiële en zakelijke dienstverlening, overheid, onderwijs en gezondheidszorg.

Alle antwoorden blijven anoniem en uw vertrouwelijkheid zal strikt worden gehandhaafd. De verzamelde gegevens worden uitsluitend gebruikt voor academische doeleinden. Uw deelname is geheel vrijwillig en u kunt zich op elk gewenst moment terugtrekken zonder

enige consequenties.

Het invullen van de enquête duurt ongeveer 10-15 minuten. Uw bijdrage aan dit onderzoek wordt zeer op prijs gesteld en zal helpen met het in kaart brengen van de beslissingen die professionals nemen bij de voedselvoorziening in bedrijfsrestaurants en bedrijfskantines, met speciale aandacht voor de drie pijlers van duurzaamheid (economisch, sociaal en milieuvriendelijkheid).

Bedankt voor uw deelname.

Met vriendelijke groet,

Sven Kolk
MSc Student, Sustainable Bussiness and Innovation
Wageningen University & Research

Openingsvraag

	Vraag	Antwoorden
1	**Bent u betrokken bij beslissingen over het voedselaanbod in het bedrijfsrestaurant/ de bedrijfskantine van uw organisatie?**	• Ja • Nee (Einde van de enquête)

Demografische vragen

	Vraag	Antwoorden
2	**In welke sector bevindt uw organisatie zich?**	• Industrie/Productie • Financiële/Zakelijke dienstverlening • Overheid/Openbaar bestuur • Onderwijsinstelling • Gezondheidszorg/Welzijn • Anders, namelijk:
3	**Wat is uw rol binnen de organisatie? (Selecteer alle van toepassing zijnde antwoorden)**	• Inkoopmanager • Cateringmanager • Facility Manager • Human Resource (HR) manager • Anders, namelijk:
4	**Wie is er binnen uw organisatie nog meer betrokken bij het besluitvormingsproces voor voedselvoorziening in het bedrijfsrestaurant/ de bedrijfskantine? (Selecteer alle van toepassing zijnde antwoorden)**	• Inkoopmanager • Cateringmanager • Facility manager • Human Resource (HR) manager • Senior management • Externe consultants • Anders, namelijk:

5	**Hoeveel werknemers telt uw organisatie?**	• Minder dan 50 • 50 – 249 • 250 – 999 • 1000 of meer
6	**Hoe zou u de meerderheid van de werknemers in uw organisatie classificeren?**	• White-collar (Werknemers die voornamelijk kantoorwerk doen, zoals administratieve, financiële, IT-, marketing- of managementfuncties) • Blue-collar (Werknemers die voornamelijk handarbeid of technische functies uitvoeren, zoals industrie en productie) • Pink-collar (Werknemers in dienstverlenende beroepen, zoals zorg, onderwijs, klantenservice, horeca)
7	**Hoe groot is het aandeel werknemers (bij benadering) per leeftijdsgroep in uw organisatie? (Zorg dat het totaal gelijk is aan 100%)** **Als deze informatie niet bekend is, sla de vraag dan over.**	• Babyboomers (geboren tussen 1946 en 1964) ..... • Generatie X (geboren tussen 1965 en 1980) ..... • Millennials (geboren tussen 1981 en 1996) ..... • Generatie Z (geboren vanaf 1997) .....
8	**Welke werktijden zijn over het algemeen van toepassing op de meerderheid van de werknemers binnen uw organisatie?**	• Reguliere werktijden (bijv. 09:00 – 17:00) • Onregelmatige werktijden (bijv. ploegendienst, oproepdienst) • Allebei

Wanneer "onregelmatige werktijden" gekozen

9a	**Kunnen werknemers met onregelmatige werktijden gebruik maken van het bedrijfsrestaurant/ de bedrijfskantine tijdens hun werkzaamheden?**	• Ja • Nee

Voor alle respondenten

9b	**Hoe belangrijk vindt u de voedselvoorziening voor werknemers met reguliere werktijden (bijv. 09:00 – 17:00)?**	• Zeer belangrijk • Belangrijk • Neutraal • Niet zo belangrijk • Helemaal niet belangrijk
9c	**Hoe goed zijn de voedselvoorzieningen georganiseerd voor werknemers met reguliere werktijden (bijv. 09:00 -17:00) in het bedrijfsrestaurant/**	• Uitstekend georganiseerd – Het aanbod is altijd ruim voldoende en gevarieerd. • Goed georganiseerd – Het aanbod is meestal voldoende en gevarieerd. • Slecht georganiseerd – Er is nauwelijks of geen voedsel beschikbaar. • Slecht georganiseerd – Er is nauwelijks of geen voedsel beschikbaar.

	de bedrijfskantine van uw organisatie?	

Voor respondenten die "Ja" hebben geantwoord bij vraag 9a

9d	**Hoe belangrijk vindt u de voedselvoorziening voor werknemers met onregelmatige werktijden (bijv. ploegendienst)?**	• Zeer belangrijk • Belangrijk • Neutraal • Niet zo belangrijk • Helemaal niet belangrijk
9e	**Hoe goed zijn de voedselvoorzieningen georganiseerd voor werknemers met onregelmatige werktijden (bijv. ploegendienst) in het bedrijfsrestaurant/ de bedrijfskantine van uw organisatie?**	• Uitstekend georganiseerd – Het aanbod is altijd ruim voldoende en gevarieerd. • Goed georganiseerd – Het aanbod is meestal voldoende en gevarieerd. • Slecht georganiseerd – Er is nauwelijks of geen voedsel beschikbaar. • Slecht georganiseerd – Er is nauwelijks of geen voedsel beschikbaar.

Afwegingen in voedselvoorziening

10	**Wat is de huidige cateringsituatie binnen het bedrijfsrestaurant/ de bedrijfskantine van uw organisatie? (Selecteer de optie die het beste past bij de manier waarop de catering wordt georganiseerd)**	• Intern geregelde voedselvoorzieningen/ catering • Uitbestede voedselvoorzieningen/ catering

Besluitvormingscriteria

11. Hoe belangrijk zijn de volgende criteria in uw eigen beslissing(en) over voedselvoorziening binnen uw organisatie? (Beoordeel criterium op een schaal van 1 tot 5, waarbij 1 = niet belangrijk en 5 = zeer belangrijk)

11a	**Sociale en gezondheid gerelateerde criteria**	**1**	**2**	**3**	**4**	**5**
	Gezondheid van producten					
	Voedingswaarden van producten					
	Smaakvoorkeuren van werknemers					
	Voedselveiligheid					

	Het voedsel voldoet aan de geldende normen en richtlijnen binnen de betreffende organisatie of sector					
	Presentatie van het voedsel (bijv. visuele aantrekkelijkheid)					
	De smaak van de producten					
	Fair-trade producten					
	Dierenwelzijn					
	Ondersteuning voor regionale economie					

11b	**Milieu- en duurzaamheidscriteria**	**1**	**2**	**3**	**4**	**5**
	Herkomst van producten					
	Korte toeleveringsketens (weinig tussenstappen van producent tot consument)					
	Gebruik van seizoensgebonden ingrediënten					
	Aanwezigheid van duurzame certificeringen (bijv. biologisch)					
	Aanbod van plantaardige maaltijden					
	Voorkomen en beheren van voedselverspilling					
	Energie- en waterefficiëntie in keukens					
	Duurzame voedseltransportpraktijken					
	Productgerelateerde emissies					

11c	**Economische criteria**	**1**	**2**	**3**	**4**	**5**
	Kosten van producten en ingrediënten					
	Portiegrootte					
	Algehele kwaliteit van producten					
	Tijdige levering (door bijvoorbeeld leveranciers)					
	Efficiëntie in operationele processes (bijv. snelle en eenvoudige bereiding)					
	Inkoop binnen budget (voorkomen van overschrijdingen)					
	Variatie en diversiteit van aanbod					

	Vraag	**Antwoorden**
12a	**Zijn er aanvullende criteria die uw organisatie belangrijk vindt in de beslissingen over voedselvoorziening?**	• Ja • Nee
12b	**Wanneer ja geantwoord: Welke aanvullende criteria zijn dit?**	Open vraag.
13a	**Wilt u iets toelichten over uw beoordeling van één of meer criteria?**	• Ja • Nee

13b	**Wat zou u willen toelichten met betrekking tot bepaalde criteria?**	Open vraag.

Tevredenheid en invloed van werknemers

14. Beoordeel de volgende vragen op een schaal van 1 tot 5, waarbij 1 = helemaal oneens en 5 = helemaal eens.

	Stelling	**1**	**2**	**3**	**4**	**5**
14a	**Het aanbod in het bedrijfsrestaurant/ de bedrijfskantine is afgestemd op de demografische samenstelling van de werknemers.**					
14b	**Het aanbod in het bedrijfsrestaurant/ de bedrijfskantine is afgestemd op de werkzaamheden en behoeftes van werknemers.**					
14c	**De werknemers zijn tevreden met het huidige aanbod in het bedrijfsrestaurant/ de bedrijfskantine.**					
14d	**De werknemers hebben veel invloed op de beslissingen ten aanzien van de voedselvoorzieningen.**					
14e	**De eetgewoonten van werknemers (bijv. vegetarisch, veganistisch, flexitarisch, omnivoor) worden meegewogen bij de keuze van het aanbod in het bedrijfsrestaurant/ de bedrijfskantine.**					

Laatste opmerkingen

	Vraag	**Antwoorden**
15	**Welke aanvullende factoren zijn volgens u de belangrijk bij beslissingen over de voedselvoorziening binnen uw organisatie in het bedrijfsrestaurant/ de bedrijfskantine die niet in deze enquête aan bod zijn gekomen?**	Open vraag.
16a	**Kent uw sectorspecifieke uitdagingen met betrekking tot voedselvoorziening in bedrijfsrestaurants/ bedrijfskantines die anders zijn dan in andere sectoren? Denk hierbij aan bijvoorbeeld regelgeving, logistieke problemen, gezondheids- of duurzaamheidseisen, of de aard van het werk.**	• Ja • Nee
16b	**Kunt u dit toelichten?**	Open vraag

Appendix G: Additional predefined roles named by respondents

	Answered by n-respondents

Organizational role	Procurement manager	20
	Catering manager	19
	Facility manager	21
	HR-manager	6
	Senior management	10
	Sustainability manager	11
	External consultants	5

Appendix H: Other organizational decision-making roles in food provisioning practices named besides respondents' roles

Organizational Role	**Frequency**
Chef	1
Master's student in Climate Psychology and Behavior	1
Chain manager	1
Culinary team	1
Catering employees	1
Management Team (MT)	1
Daily board of foundation	1
Policy officer	1
Team leader of social work facility responsible for catering	1
Team Leaders	1

Appendix I: Simple linear regression output of the perceived importance of health aspects in relation to age of the workforce

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,393	1	,393	,822	,372[b]
	Residual	14,826	31	,478		
	Total	15,219	32			

a. Dependent Variable: Health_Average

b. Predictors: (Constant), Average_Age

Appendix J: Kruskal-Wallis H test output of the perceived importance of company restaurants for various working hours

Test Statistics[a,b]

	Working_Hours_Analyses
Kruskal-Wallis H	2,000
df	2
Asymp. Sig.	,368

a. Kruskal Wallis Test

b. Grouping Variable: Groep

Appendix K: MANOVA descriptive statistics

Descriptive Statistics

	Sector_Analysis	Organizational_Role_Analysis	Mean	Std. Deviation	N
Social_Dimension	IndustryProduction	Procurement manager	5,0000	.	1
		Catering manager	5,0000	.	1
		Facility manager	3,9091	.	1
		Senior management	3,4545	.	1
		Financial/Commercial manager	3,0000	.	1
		Total	4,0727	,90545	5
	FinancialBusiness services	Procurement manager	4,1818	,25713	2
		Catering manager	2,9091	.	1
		Sustainability manager	4,4545	.	1
		Facility manager	4,0000	,00000	2
		Senior management	3,7273	.	1
		Financial/Commercial manager	3,5000	,19285	2
		Contract manager	5,0000	.	1
		Total	3,9455	,58791	10
	Government	Procurement manager	4,4545	,77139	2
		Catering manager	4,3818	,32397	5
		Sustainability manager	3,5152	,36740	3
		Facility manager	3,8636	,50562	16
		Senior management	3,3636	.	1
		Contract manager	3,5909	,57954	2
		Total	3,9216	,53987	29
	Education	Facility manager	4,1818	.	1
		Contract manager	3,2727	.	1
		Total	3,7273	,64282	2
	Hospitality	Procurement manager	3,4545	,51428	2
		Catering manager	3,8182	.	1
		Facility manager	4,8182	.	1
		Senior management	4,7273	.	1
		Financial/Commercial manager	4,2121	,37848	3
		Total	4,1136	,59665	8
	Total	Procurement manager	4,1688	,68319	7
		Catering manager	4,2045	,65870	8
		Sustainability manager	3,7500	,55732	4
		Facility manager	3,9394	,49815	21
		Senior management	3,8182	,62545	4
		Financial/Commercial manager	3,7727	,57424	6
		Contract manager	3,8636	,84142	4
		Total	3,9613	,57918	54
Environmental_Dimension	IndustryProduction	Procurement manager	5,0000	.	1
		Catering manager	5,0000	.	1
		Facility manager	4,0000	.	1
		Senior management	2,7778	.	1
		Financial/Commercial manager	3,5556	.	1
		Total	4,0667	,95775	5
	FinancialBusiness services	Procurement manager	4,0000	,31427	2
		Catering manager	3,2222	.	1
		Sustainability manager	4,1111	.	1
		Facility manager	4,2222	,15713	2
		Senior management	4,2222	.	1
		Financial/Commercial manager	3,1667	,07857	2
		Contract manager	4,7778	.	1
		Total	3,9111	,55876	10
	Government	Procurement manager	4,3333	,94281	2
		Catering manager	3,8667	,46748	5
		Sustainability manager	3,0741	1,05604	3
		Facility manager	3,4583	,64772	16
		Senior management	3,0000	.	1
		Contract manager	3,3889	1,17851	2
		Total	3,5287	,72118	29
	Education	Facility manager	4,0000	.	1
		Contract manager	3,8889	.	1
		Total	3,9444	,07857	2
	Hospitality	Procurement manager	2,6111	,07857	2
		Catering manager	2,6667	.	1
		Facility manager	4,6667	.	1
		Senior management	3,8889	.	1
		Financial/Commercial manager	3,7037	,06415	3
		Total	3,4444	,74654	8
	Total	Procurement manager	3,8413	,99144	7
		Catering manager	3,7778	,75125	8
		Sustainability manager	3,3333	1,00615	4
		Facility manager	3,6402	,69472	21
		Senior management	3,4722	,69315	4
		Financial/Commercial manager	3,5000	,26989	6
		Contract manager	3,8611	,94444	4
		Total	3,6523	,71945	54
Economic_Dimension	IndustryProduction	Procurement manager	5,0000	.	1
		Catering manager	5,0000	.	1
		Facility manager	4,4286	.	1
		Senior management	3,5714	.	1
		Financial/Commercial manager	3,2857	.	1
		Total	4,2571	,79796	5
	FinancialBusiness services	Procurement manager	4,2143	,10102	2
		Catering manager	2,8571	.	1
		Sustainability manager	4,0000	.	1
		Facility manager	3,7857	,07711	2
		Senior management	3,0000	.	1
		Financial/Commercial manager	3,7143	,00000	2
		Contract manager	4,5714	.	1
		Total	3,7857	,58029	10
	Government	Procurement manager	5,0000	,00000	2
		Catering manager	4,7714	,19168	5
		Sustainability manager	3,4762	,64418	3
		Facility manager	3,9821	,51870	16
		Senior management	4,8571	.	1
		Contract manager	3,7143	,20203	2
		Total	4,1478	,83024	29
	Education	Facility manager	4,8571	.	1
		Contract manager	3,0000	.	1
		Total	3,9286	1,31320	2
	Hospitality	Procurement manager	4,5714	,40406	2
		Catering manager	4,5714	.	1
		Facility manager	5,0000	.	1
		Senior management	4,4286	.	1
		Financial/Commercial manager	4,3333	,50170	3
		Total	4,5179	,39132	8
	Total	Procurement manager	4,6531	,39432	7
		Catering manager	4,5357	,70297	8
		Sustainability manager	3,6071	,58757	4
		Facility manager	4,0748	,56716	21
		Senior management	3,9643	,83605	4
		Financial/Commercial manager	3,9524	,54710	6
		Contract manager	3,7500	,85335	4
		Total	4,1376	,64428	54

Appendix L: MANOVA test of between-subjects effects

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Social_Dimension	11,670[a]	24	,486	2,308	,016
	Environmental_Dimension	15,614[b]	24	,651	1,596	,115
	Economic_Dimension	15,768[c]	24	,657	3,058	,002
Intercept	Social_Dimension	413,043	1	413,043	1960,902	<,001
	Environmental_Dimension	372,556	1	372,556	914,089	<,001
	Economic_Dimension	448,906	1	448,906	2089,520	<,001
Sector_Analysis	Social_Dimension	1,228	4	,307	1,457	,241
	Environmental_Dimension	2,308	4	,577	1,416	,254
	Economic_Dimension	2,524	4	,631	2,937	,037
Organizational_Role_Analysis	Social_Dimension	2,254	6	,376	1,784	,138
	Environmental_Dimension	2,362	6	,394	,966	,465
	Economic_Dimension	3,557	6	,593	2,760	,030
Sector_Analysis * Organizational_Role_Analysis	Social_Dimension	9,781	14	,699	3,317	,003
	Environmental_Dimension	11,737	14	,838	2,057	,049
	Economic_Dimension	8,571	14	,612	2,850	,008
Error	Social_Dimension	6,109	29	,211		
	Environmental_Dimension	11,820	29	,408		
	Economic_Dimension	6,230	29	,215		
Total	Social_Dimension	865,132	54			
	Environmental_Dimension	747,741	54			
	Economic_Dimension	946,449	54			
Corrected Total	Social_Dimension	17,779	53			
	Environmental_Dimension	27,433	53			
	Economic_Dimension	21,998	53			

a. R Squared = ,656 (Adjusted R Squared = ,372)

b. R Squared = ,569 (Adjusted R Squared = ,213)

c. R Squared = ,717 (Adjusted R Squared = ,482)

Appendix M: Post-hoc test of sectoral differences between dimensions

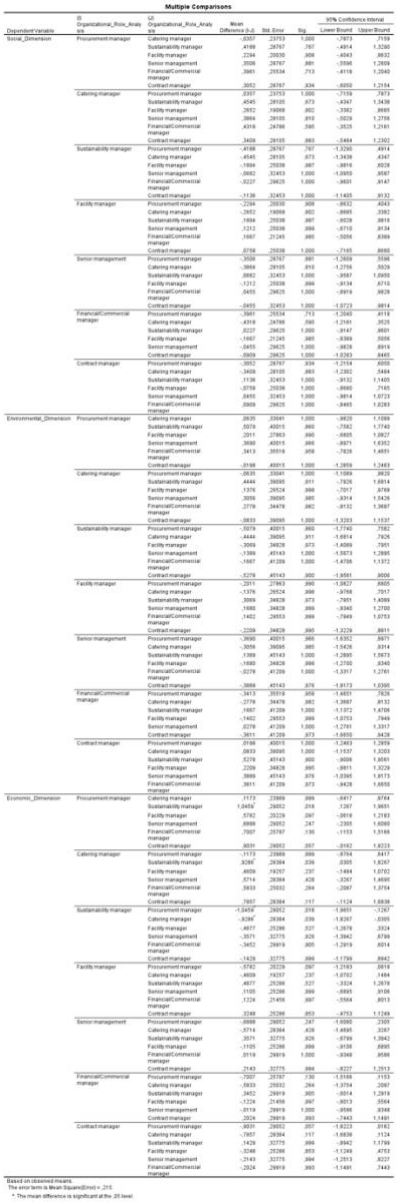
Multiple Comparisons

Dependent Variable	(I) Sector_Analysis	(J) Sector_Analysis	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Social_Dimension	Industry/Production	Financial/Business services	,1273	,25138	,986	-,6034	,8580
		Government	,1511	,22224	,959	-,4949	,7971
		Education	,3455	,38399	,895	-,7707	1,4616
		Hospitality	-,0409	,26164	1,000	-,8015	,7196
	Financial/Business services	Industry/Production	-,1273	,25138	,986	-,8580	,6034
		Government	,0238	,16831	1,000	-,4654	,5131
		Education	,2182	,35550	,972	-,8152	1,2516
		Hospitality	-,1682	,21770	,936	-,8010	,4646
	Government	Industry/Production	-,1511	,22224	,959	-,7971	,4949
		Financial/Business services	-,0238	,16831	1,000	-,5131	,4654
		Education	,1944	,33553	,977	-,7810	1,1697
		Hospitality	-,1920	,18328	,831	-,7248	,3408
	Education	Industry/Production	-,3455	,38399	,895	-1,4616	,7707
		Financial/Business services	-,2182	,35550	,972	-1,2516	,8152
		Government	-,1944	,33553	,977	-1,1697	,7810
		Hospitality	-,3864	,36284	,823	-1,4411	,6683
	Hospitality	Industry/Production	,0409	,26164	1,000	-,7196	,8015
		Financial/Business services	,1682	,21770	,936	-,4646	,8010
		Government	,1920	,18328	,831	-,3408	,7248
		Education	,3864	,36284	,823	-,6683	1,4411
Environmental_Dimension	Industry/Production	Financial/Business services	,1556	,34967	,991	-,8609	1,1720
		Government	,5379	,30914	,426	-,3607	1,4365
		Education	,1222	,53413	,999	-1,4304	1,6749
		Hospitality	,6222	,36395	,444	-,4357	1,6802
	Financial/Business services	Industry/Production	-,1556	,34967	,991	-1,1720	,8609
		Government	,3824	,23412	,489	-,2982	1,0629
		Education	-,0333	,49451	1,000	-1,4708	1,4041
		Hospitality	,4667	,30283	,545	-,4136	1,3469
	Government	Industry/Production	-,5379	,30914	,426	-1,4365	,3607
		Financial/Business services	-,3824	,23412	,489	-1,0629	,2982
		Education	-,4157	,46673	,898	-1,7724	,9410
		Hospitality	,0843	,25495	,997	-,6568	,8254
	Education	Industry/Production	-,1222	,53413	,999	-1,6749	1,4304
		Financial/Business services	,0333	,49451	1,000	-1,4041	1,4708
		Government	,4157	,46673	,898	-,9410	1,7724
		Hospitality	,5000	,50471	,857	-,9671	1,9671
	Hospitality	Industry/Production	-,6222	,36395	,444	-1,6802	,4357
		Financial/Business services	-,4667	,30283	,545	-1,3469	,4136
		Government	-,0843	,25495	,997	-,8254	,6568
		Education	-,5000	,50471	,857	-1,9671	,9671
Economic_Dimension	Industry/Production	Financial/Business services	,4714	,25387	,362	-,2665	1,2094
		Government	,1094	,22445	,988	-,5431	,7618
		Education	,3286	,38780	,913	-,7987	1,4558
		Hospitality	-,2607	,26424	,859	-1,0288	,5074
	Financial/Business services	Industry/Production	-,4714	,25387	,362	-1,2094	,2665
		Government	-,3621	,16998	,235	-,8562	,1320
		Education	-,1429	,35903	,994	-1,1865	,9008
		Hospitality	-,7321*	,21986	,019	-1,3712	-,0931
	Government	Industry/Production	-,1094	,22445	,988	-,7618	,5431
		Financial/Business services	,3621	,16998	,235	-,1320	,8562
		Education	,2192	,33886	,966	-,7658	1,2042
		Hospitality	-,3701	,18510	,292	-,9081	,1680
	Education	Industry/Production	-,3286	,38780	,913	-1,4558	,7987
		Financial/Business services	,1429	,35903	,994	-,9008	1,1865
		Government	-,2192	,33886	,966	-1,2042	,7658
		Hospitality	-,5893	,36643	,504	-1,6544	,4759
	Hospitality	Industry/Production	,2607	,26424	,859	-,5074	1,0288
		Financial/Business services	,7321*	,21986	,019	,0931	1,3712
		Government	,3701	,18510	,292	-,1680	,9081
		Education	,5893	,36643	,504	-,4759	1,6544

Based on observed means.
The error term is Mean Square(Error) = ,215.

*. The mean difference is significant at the ,05 level.

Appendix N: Post-hoc test of organizational decision-making role differences between dimensions



Multiple Comparisons

Dependent Variable	(I) Organizational_Role_Analysis	(J) Organizational_Role_Analysis	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Social_Dimension	Procurement manager	Catering manager	-,0207	,23753	1,000	-,7873	,7459
		Sustainability manager	,4198	,26767	,767	-,4414	1,2810
		Facility manager	,2294	,26030	,906	-,6043	,9632
		Senior management	,3598	,26767	,881	-,5598	1,2809
		Financial/Commercial manager	,3981	,25534	,713	-,4118	1,2040
		Contract manager	,3052	,26767	,934	-,6050	1,2154
	Catering manager	Procurement manager	,0207	,23753	1,000	-,7459	,7873
		Sustainability manager	,4545	,28105	,873	-,4347	1,3438
		Facility manager	,2852	,19088	,802	-,3382	,9085
		Senior management	,3984	,28105	,813	-,3929	1,2756
		Financial/Commercial manager	,4318	,24788	,595	-,3525	1,2161
		Contract manager	,3459	,28105	,883	-,5484	1,2302
	Sustainability manager	Procurement manager	-,4198	,26767	,767	-1,2810	,4414
		Catering manager	-,4545	,28105	,873	-1,3438	,4347
		Facility manager	-,1694	,25038	,987	-,9818	,6429
		Senior management	-,0562	,32453	1,000	-1,0950	,9827
		Financial/Commercial manager	-,0227	,29625	1,000	-,9801	,9347
		Contract manager	-,1136	,32453	1,000	-1,1405	,9132
	Facility manager	Procurement manager	-,2294	,26030	,906	-,9632	,6043
		Catering manager	-,2852	,19088	,802	-,9085	,3382
		Sustainability manager	,1694	,25038	,987	-,6429	,9818
		Senior management	,1213	,25038	,999	-,6710	,9134
		Financial/Commercial manager	,1667	,21245	,985	-,5056	,8389
		Contract manager	,0769	,25038	1,000	-,7155	,8692
	Senior management	Procurement manager	-,3598	,26767	,881	-1,2809	,5598
		Catering manager	-,3984	,28105	,813	-1,2756	,5029
		Sustainability manager	-,0562	,32453	1,000	-,9987	1,0950
		Facility manager	-,1213	,25038	,999	-,9134	,6710
		Financial/Commercial manager	-,0455	,29625	1,000	-,9914	,9829
		Contract manager	-,0455	,32453	1,000	-1,0723	,9814
	Financial/Commercial manager	Procurement manager	-,3981	,25534	,713	-1,2040	,4118
		Catering manager	-,4318	,24788	,595	-1,2161	,3525
		Sustainability manager	-,0227	,29625	1,000	-,9347	,9801
		Facility manager	-,1667	,21245	,985	-,8389	,5056
		Senior management	-,0455	,29625	1,000	-,9829	,8919
		Contract manager	-,0909	,29625	1,000	-1,0283	,8465
	Contract manager	Procurement manager	-,3052	,26767	,934	-1,2154	,6050
		Catering manager	-,3459	,28105	,883	-1,2302	,5484
		Sustainability manager	,1136	,32453	1,000	-,9132	1,1405
		Facility manager	-,0769	,25038	1,000	-,8692	,7155
		Senior management	,0455	,32453	1,000	-,9814	1,0723
		Financial/Commercial manager	,0909	,29625	1,000	-,8465	1,0283
Environmental_Dimension	Procurement manager	Catering manager	,0635	,33041	1,000	-,9828	1,1099
		Sustainability manager	-,5079	,40015	,860	-1,7582	,7426
		Facility manager	,2011	,27863	,990	-,6805	1,0827
		Senior management	,3690	,40015	,966	-,8871	1,6352
		Financial/Commercial manager	,3413	,35518	,958	-,7828	1,4651
		Contract manager	,0198	,40015	1,000	-1,2859	1,3463
	Catering manager	Procurement manager	-,0635	,33041	1,000	-1,1099	,9828
		Sustainability manager	-,4444	,39095	,911	-1,7826	1,6814
		Facility manager	,1376	,26524	,998	-,7017	,9769
		Senior management	,3056	,39095	,985	-,9314	1,5426
		Financial/Commercial manager	,2779	,34478	,982	-,8132	1,3687
		Contract manager	-,0433	,39095	1,000	-1,3203	1,1537
	Sustainability manager	Procurement manager	,5079	,40015	,860	-,7426	1,7582
		Catering manager	,4444	,39095	,911	-,6814	1,7826
		Facility manager	,5820	,34828	,573	-,5089	1,6729
		Senior management	,7500	,40143	,500	-,5573	1,8573
		Financial/Commercial manager	,7223	,41209	,707	-,5708	1,8154
		Contract manager	,4911	,40143	,900	-,6161	1,5984
	Facility manager	Procurement manager	-,2011	,27863	,990	-1,0827	,6805
		Catering manager	-,1376	,26524	,998	-,9769	,7017
		Sustainability manager	,3069	,34828	,973	-,7951	1,4089
		Senior management	,1680	,34828	,999	-,9340	1,2700
		Financial/Commercial manager	,1402	,29553	,999	-,7949	1,0753
		Contract manager	-,2209	,34828	,995	-1,3229	,8811
	Senior management	Procurement manager	-,3690	,40015	,966	-1,6352	,8971
		Catering manager	-,3056	,39095	,985	-1,5426	,9314
		Sustainability manager	-,7389	,40143	,500	-1,8573	,3795
		Facility manager	-,1680	,34828	,999	-1,2700	,9340
		Financial/Commercial manager	-,0279	,41209	1,000	-1,3317	1,2761
		Contract manager	-,3889	,40143	,976	-1,6173	1,0396
	Financial/Commercial manager	Procurement manager	-,3413	,35518	,958	-1,4651	,7826
		Catering manager	-,2779	,34478	,982	-1,3687	,8132
		Sustainability manager	-,7607	,41209	,500	-1,9372	,4158
		Facility manager	-,1402	,29553	,999	-1,0753	,7949
		Senior management	,0279	,41209	1,000	-1,2761	1,3317
		Contract manager	-,3611	,41209	,973	-1,6850	,3428
	Contract manager	Procurement manager	,0198	,40015	1,000	-1,2463	1,2859
		Catering manager	,0833	,39095	1,000	-1,1537	1,3203
		Sustainability manager	,5278	,40143	,900	-,6061	1,6061
		Facility manager	,2209	,34828	,995	-,8811	1,3229
		Senior management	,3889	,40143	,976	-1,0395	1,8173
		Financial/Commercial manager	,3611	,41209	,973	-,9428	1,6650
Economic_Dimension	Procurement manager	Catering manager	,7173	,23869	,996	-,0417	1,4764
		Sustainability manager	1,0458	,26852	,016	,1287	1,9651
		Facility manager	,5782	,20229	,097	-,0619	1,2193
		Senior management	,6988	,26852	,247	-,2205	1,6080
		Financial/Commercial manager	,7007	,25797	,130	-,1153	1,5166
		Contract manager	,6031	,26852	,357	-,2162	1,8223
	Catering manager	Procurement manager	-,7173	,23869	,996	-,8764	,8417
		Sustainability manager	,3286	,28384	,539	-,8305	1,8297
		Facility manager	-,1609	,19257	,237	-,1484	1,0702
		Senior management	-,0714	,28384	,428	-,3267	1,4695
		Financial/Commercial manager	-,0833	,25932	,284	-,3087	1,3754
		Contract manager	-,7957	,28384	,117	-,1124	1,6838
	Sustainability manager	Procurement manager	-1,0458	,26852	,016	-1,9651	,1287
		Catering manager	-,3286	,28384	,539	-1,8297	,8305
		Facility manager	-,4877	,20286	,527	-1,2078	,3324
		Senior management	-,3571	,32775	,826	-1,3942	,6799
		Financial/Commercial manager	-,3452	,29919	,805	-1,2919	,6014
		Contract manager	-,1429	,32775	,999	-1,1799	,8942
	Facility manager	Procurement manager	-,5782	,20229	,097	-1,2193	,0619
		Catering manager	-,1609	,19257	,237	-1,0702	,1484
		Sustainability manager	,4877	,20286	,527	-,3324	1,2078
		Senior management	,1105	,25286	,999	-,6995	,9186
		Financial/Commercial manager	,1224	,21456	,997	-,5564	,8013
		Contract manager	,3248	,25286	,853	-,4753	1,1249
	Senior management	Procurement manager	-,6988	,26852	,247	-1,6080	,2205
		Catering manager	-,0714	,28384	,428	-1,4695	,3267
		Sustainability manager	,3571	,32775	,826	-,6799	1,3942
		Facility manager	-,1105	,25286	,999	-,9186	,6995
		Financial/Commercial manager	,0118	,29919	1,000	-,9348	,9586
		Contract manager	,2143	,32775	,994	-,8227	1,2513
	Financial/Commercial manager	Procurement manager	-,7007	,25797	,130	-1,5166	,1153
		Catering manager	-,0833	,25932	,284	-1,3754	,2087
		Sustainability manager	,3452	,29919	,805	-,6014	1,2919
		Facility manager	-,1224	,21456	,997	-,8013	,5564
		Senior management	-,0118	,29919	1,000	-,9586	,9348
		Contract manager	,2024	,29919	,993	-,7443	1,1491
	Contract manager	Procurement manager	-,6031	,26852	,357	-1,8223	,2162
		Catering manager	-,7957	,28384	,117	-1,6838	,1124
		Sustainability manager	-,1429	,32775	,999	-,8942	1,1799
		Facility manager	-,3248	,25286	,853	-1,1249	,4753
		Senior management	-,2143	,32775	,994	-1,2513	,8227
		Financial/Commercial manager	-,2024	,29919	,993	-1,1491	,7443

Based on observed means.
The error term is Mean Square(Error) = ,215.
*. The mean difference is significant at the ,05 level.

Appendix O: One-way ANOVA of dimension prioritization for procurement managers.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,335	2	1,168	2,182	,142
Within Groups	9,631	18	,535		
Total	11,966	20			

Appendix P: One-way ANOVA of dimension prioritization for facility managers.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,077	2	1,039	3,110	,052
Within Groups	20,036	60	,334		
Total	22,114	62			

Appendix Q: One-way ANOVA of dimension prioritization for catering managers.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,310	2	1,155	2,322	,123
Within Groups	10,447	21	,497		
Total	12,757	23			

Appendix R: One-way ANOVA of dimension prioritization for sustainability managers.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,359	2	,179	,322	,732
Within Groups	5,005	9	,556		
Total	5,363	11			

Appendix S: One-way ANOVA of dimension prioritization for executive management team.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,511	2	,255	,488	,629
Within Groups	4,712	9	,524		
Total	5,223	11			

Appendix T: One-way ANOVA of dimension prioritization for commercial/ financial managers.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,623	2	,311	1,331	,294
Within Groups	3,510	15	,234		
Total	4,132	17			

Appendix U: One-way ANOVA of dimension prioritization for contract managers.

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,034	2	,017	,025	,975
Within Groups	6,081	9	,676		
Total	6,114	11			

Appendix V: Post-hoc Tukey HSD test one-way ANOVA dimension prioritization for facility managers.

Multiple Comparisons

(I) Dimension	(J) Dimension	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Social	Environmental	,29918	,17834	,222	-,1294	,7278
	Economic	-,13544	,17834	,729	-,5640	,2931
Environmental	Social	-,29918	,17834	,222	-,7278	,1294
	Economic	-,43462*	,17834	,046	-,8632	-,0060
Economic	Social	,13544	,17834	,729	-,2931	,5640
	Environmental	,43462*	,17834	,046	,0060	,8632

*. The mean difference is significant at the 0.05 level.

Appendix W: Additionally mentioned criteria related to food provisioning

Criteria mentioned by respondents	**Frequency**
Increase the proportion of plant-based products and sources in the menu (protein transition).	2
Catering to employees with dietary needs based on religious beliefs and cultural fit (Halal and Kosher).	2
Provide more healthy food options (e.g., implementing Nutriscore)	2
Reducing CO2 emissions per product (i.e. high-quality, locally sourced food)	2
Enhance Social Return On Investment (SROI).	1
Alignment with Environmental, Social, and Governance (ESG) criteria, including Ecovadis ratings.	1
Achieve Participating Social Enterprises (PSO) level 3.	1

Ensure that food offerings are affordable, even for employees with smaller budgets.	1	
Open debate on healthy vs. Unhealthy foods.	1	
Implementing real-time dashboards to track key performance indicators (KPIs) and measure user satisfaction.	1	
Focus on long-term environmental responsibility.	1	
Offer seasonal menus to ensure variety.	1	