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1. Introduction

1.1. Study Introduction

This research focusses on building people leadership talent within the airport industry by informing the development of a framework that supports the growth of young people leaders as they advance through their careers. Like many industries, the airport environment is complex and challenging. The airport system is kept operating in part due to several large teams and the performance of those teams determines the airport's success. Those teams cannot operate well without good leadership and good leadership must start early to set up the industry well (Levi, 2017).

1.2. Problem Definition

A current problem within the industry exists as technically strong team members are promoted to leadership positions without first understanding how to be good leaders for their teams and the business. The consequence of not understanding this results in poor staff retention, inefficient teams, disengagement within teams, and a loss of talent for the airport industry (Schyns & Schilling, 2013). The above consequences, stemming from a lack of leadership, result in two main negative outcomes: reduced safety; and increased costs for airports.

Any reduction in safety is a problem due to the critical nature that safety plays in airport operational roles. The consequence of unsafe activities can mean the loss of multiple lives. Basdola (2020) has determined through research that effective leadership styles for aviation safety are seldom practised. This is why it is crucial to get this correct from early on. In respect to the cost problem, Branham's study estimates that the cost of staff turnover to an organisation is equal to the cost of the departing employee's salary (as cited in Duda & Zurkova, 2003). Further research by Ken Blanchard Companies (as cited in Nielsen et al., 2018) determined that an organisation will receive a productivity drag of between 5% and 10% due to poor leaders. Coupled with this Gallup (as cited in Bazigos & Caruso, 2016) estimate that poor engagement driven by poor

leadership costs businesses in the United States of America 550 billion US dollars in lost productivity every year.

The above problems and outcomes are detrimental to delivering an effective airport operation. Building a framework that enables young airport operational leaders to thrive can mitigate the above consequences. This is further confirmed by Ibrahim and Daniels (2019) who determined that there is a positive relationship between good leadership and the impact of this on organisational performance. This is as a common problem within the airport industry. Equally I see this as a missed opportunity for the industry to get the best out of people leaders.

1.3. Study Relevance and Importance

By achieving the study objective of supporting young airport operational leaders to obtain traction early in their leadership careers, the industry is set up to overcome the problems identified and in turn improve staff retention, increase efficiency, reduce cost, and deliver a safer operation. This research has relevance and importance given the impacts on the airport industry seen during the COVID-19 global pandemic over the last three years. Embedding good leadership practices among young airport leaders will be a fundamental requirement to supporting aviation's safe restart across the globe. In a period

where many airports have not made profits, getting ahead of the leadership problem explained in 1.2 above allows airports to focus future costs on building the business rather than directing costs to replace talent that has left due to poor leadership. This is important for the industry's future which will significantly change over the coming years. Good leadership will be fundamental to the industry's success through this period of change.

For this research, 'young' is defined as being below 40 years of age and the research gathers the view of young leaders, along with the views of experienced leaders who are further along on their leadership journey. By focussing on this, young airport operational people leaders are enabled to deliver effectively.

1.4. Research Question

This research question informs the working title of this paper which is the 'Informing the development of a framework that supports the growth of young people leaders in airport operational roles as they advance through their careers'. The research is aimed at identifying the gaps and opportunities young people leaders in airport operational roles experience so that a framework which provides direction towards fulfilling leadership careers can be developed. The research question derived from this aim is:

Research Question 1 (RQ1): What skills and experiences are most critical for young people leaders in airport operational roles to develop?

1.5. Research Objectives

The three research objectives below support the research question. The questions help shape and form the focus for the data collection in order to be able to best create the framework for young people leaders in airport operational roles.

Research Objective 1 (RO1): Identify what skills and experiences are most critical for young people leaders in airport operational roles.

Research Objective 2 (RO2): Identify how to implement international best practice for developing young people leaders in airport operational roles.

Research Objective 3 (RO3): Develop a framework for developing young people leaders in airport operational roles.

2. Industry Review

2.1 Market and Environment Review

This section explores the market environment including the challenges, the trends, and key market information. The airport industry is an integral part of the aviation system and without airports, commercial air travel is not possible on a large scale. This scenario would have a significant impact on global economies given the reliance of key activities such as airfreighted cargo and the movement of people for tourism, immigration/ emigration, business, and other needs ("Covid impact," 2020).

The mentioned key activities are undertaken at over 41,700 commercial airports in the world. The airports play a significant role in aviation and air travel's contribution of 10% to the global GDP while creating 330 million jobs ("Covid impact," 2020). In recent years, the market environment has been challenged as the airport industry has been severely impacted by COVID-19. At its worst, the contribution to the GDP dropped significantly by 90%. This impact meant that, during the 2020, year airport revenues decreased by 57%, a total loss of 97 billion US dollars which highlights the scale of impact on the industry. ("Covid impact," 2020).

The airport industry market environment faces many other common and unique challenges where the impact has been heightened by the impacts of COVID-19.

These include challenges retaining good leadership, ever increasing operating costs, and operating in a highly dynamic policy making environment (Inemete, 1993). This research specifically focusses on the leadership problem by looking closer at frameworks that foster leadership development. The current environment post the COVID-19 pandemic saw a movement of leadership talent away from the industry driven by airports having to downsize (Serrano & Kazda, 2020). Airports now face the challenge of building this leadership talent back.

Coupled with challenges to obtain good leadership is the phenomenon of operating in an environment where operating costs have increased for airports. Airports are large infrastructure business that generate their aeronautical revenue through aircraft landing, and passengers moving through their terminal spaces. When the number of passengers reduces, the airports do not have the ability to flex the size of the terminal spaces and the running costs are supported by fewer passengers. The result of this is a higher cost per passenger to keep the airport infrastructure operating. The operational costs account for 65% of total costs, and of total costs, 30% can be attributed to staffing ("Covid impact," 2020).

3. Data Collection

3.1. Literature Review

The following literature review focuses on answering the research question of identifying the gaps and opportunities young people leaders in airport operational roles experience in order to develop a framework that provides direction towards fulfilling leadership careers. To do this, a heavy focus on RO1 and RO2 is applied as the outcomes of these support the work required for RO3.

The first research objective (RO1) is to identify what skills and experiences are most critical for young people leaders in airport operational roles. Determining what is essential is vital before understanding RO2, which discusses how the skills and experiences are best implemented. As part of understanding what skills and experiences are critical, the research also describes what negative leadership behaviours must be detected and corrected through self-awareness to enable the growth of young airport operational leaders.

Kutz (2000) identifies the key skills aviation leaders of the future will require by formulating a set of recommendations. To do this, a total of 18 in-depth interviews on the career history of successful aviation leaders was carried out. Findings determined that there are several development areas that aviation leaders of the future will need to include in their leadership growth plans. These include: understanding motivations; learning basic management skills; soft

skills; communication skills, decision-making skills; completing a student assessment; and understanding values and history. These learnings informed the below three key recommendations that Kutz suggests should be focused on:

1. Curriculum Enhancements.
2. Development of Creative Thinking Skills.
3. Improved Student Focus and Instructional Methods.

Each development area noted above falls into one of the three listed categories. This research highlights how the leaders of the future will need to be able to adapt to the rapidly changing environment. Kutz (2020) states, "Potential leaders must be able to tackle complex issues of the future, and tomorrow's leaders must be competitive in an aviation environment that is seeking people with a curious mind who take a broad view of the world".

Separately from the above, Iordanoglou and Ioannidis (2014) found that key skills for young leaders in the airport industry are:

1. Self-Management Skills.
2. Business Management Skills.
3. People Management Skills.

This sits slightly in contrast to the finding of Kutz, highlighting that research from findings will differ in the field of leadership. It is helpful to know this as it informs how valuable synthesising the learnings from the literature reviews is. One thing that has come clear through the literature review is that the best way of managing a business well is to develop good leaders who can take organisations and the industry successfully into the future (Iordanoglou & Ioannidis, 2014). Developing a framework enables this to be put into practice.

While Kutz' research, and Iordanoglou and Ioannidis' research highlight what skills and experiences are required, Young and Price (2013) have some equally valuable findings to add from their research on airport leadership development. They conclude that the fundamental components of a leadership development programme should include communication styles, conflict resolution, critical thinking, decision-making, building a business case, and negotiation, as key skills are required. With each of these explored, the individual can then learn and self-assess where they reflect with respect to their leadership style. Understanding one's leadership style is a key part of leadership as it draws on self-awareness and readiness in respect to each component (Sethuraman & Suresh, 2014).

Focusing on what essential skills and experiences are required, it is also important to consider what good leadership does not look like. These are the learnings that will not be replicated in the framework. However, there is value in understanding them and young leaders can identify those negative behaviours.The impact of not being able to identify negative leadership behaviours enables the entry of low psychological safety within teams, de-motivated employees, a poor culture, derailment and demotion (Toor & Ogunlana, 2009). Understanding what not to do is important, and being aware of what these traits are can be helpful for young airport leaders when looking to carry out self-reflective practices. This enables a broader understanding of leadership that can help inform the betterment of oneself through self-awareness (Levi, 2017).

Negative leadership behaviours create poor experiences and detract from enabling the right skills that young people leaders in airport operational roles need. Ashforth (as cited in Jha & Jha, 2015) states that negative leadership "is manifested in terms of use of authority and position for personal gains, administering organisational policies unfairly, discouraging initiatives, wilful hostility, mimicry, public criticism, silencing, undermining, public denigration, explosive outbursts, loud and angry tantrums, rudeness, inconsiderate actions,

and coercion". These dysfunctional leadership traits do not support positive team outcomes.

While RO1 focuses on what skills and experiences are critical for young people leaders in airport operational roles, it is critical first to ensure that those people are provided with the proper foundation ahead of becoming people leaders. Given that many will move into leadership roles after becoming technical experts, Quilty (2005) discusses what key skills are required to enter airport operational roles ahead of becoming people leaders. This provides insight into the requirements needed to excel in the sector initially to be recognised as the high-performing talent that can advance into people leadership. This information can also be helpful when building the foundational steps into a framework.

Quilty identifies 14 key skills required for airport operational individuals. These are critical thinking, problem solving, judgement and decision making, interpersonal, oral and written communication, conflict management/ resolution, team building, values and attitudes, ethical standards/ integrity, flexibility and openness to change, curiosity and creativity, motivation, passion, and dedication. Knowing what skills and experiences are vital to becoming a people leader in airport operations allows the individual to start their journey before formally being appointed into a people leadership role.

Determining what skills and experiences are important is a critical step in building a framework. The information in the above literature review is valuable in ordering the skills and comparing findings from the differing experts and researchers. A summary of this is provided in figure 1 below.

Having defined what skills and experiences are essential, the focus can now be applied to researching how to implement the recognised skills and experiences in line with international best practices when developing a young people leader in an airport operational role.

Day and Halpin (2001) explain this from a leadership context not specific to the industry, as opposed to an airport operational context – however it is true that when it comes to leadership, many learnings can be translated across different industries (Intagliata, 2020). Day and Halpin (2001) define what is considered normal practice concerning how identified skills and experiences are implemented. They define normal practice as including the following pathways: formal development programmes, 360-degree feedback, executive coaching, job assignments, mentoring, networking, reflection, action learning, and outdoor door challenges.

Following this, a deeper study of development frameworks took place in several large-scale best practice organisations including the US Army, General Electric, PepsiCo, Motorola, and Federal Express. From this, they could derive a set of fundamental leadership requirements that create a view of international best practices for developing people leaders. These are defined below.

1. Any leadership development initiative within an organisation must have an influential person within the business to champion its merit. This would ideally be the Chief Executive Officer, as the support enables the initiative to be embedded across the organisation.

2. That leadership capacity must be filtered/spread/ shared throughout the whole organisation.

3. For leadership development to be effective in an organisation, it must be tied to company objectives

4. Corporate values are understood, and culture is strengthened by using leadership development as an aid.

5. Leadership development is not a single event. It requires a systemic approach.

6. An essential part of a leader's role is to develop more leaders. This is why high-performing leaders are great at supporting or leading the design and build of training plans or delivery.

7. Embedding successful leadership development within an organisation takes time. This is why it should be considered an investment.

To summarise, Day and Halpin's (2001) approach describes how the skills and experiences identified in RO1 are best implemented. It involves an approach that is led from the top of an organisation, ties to broader company goals and values, is consistent, systemic, and covers all of the organisation. It is also essential to understand that embedding this culture will take time.

Interestingly the wider that research goes, the wider the findings are regarding how a framework for best practice is built. Richards (2008) identifies that a holistic review of developing a leadership framework that focuses on two key areas, competencies and qualities, is essential when addressing the leadership development need. This is in contrast to traditional thinking focusing only on the competency need and not the qualities needed. Hodge (as cited in Richards, 2008) states that behaviours, knowledge, and skills make up competencies. Focussing solely on the competency need is now an outdated way of thinking. For this research, this statement highlights the value of potentially separating the framework into those two components.

Richards' theory ties in closely with the 4L framework which incorporates eight dimensions, two of which are leadership development and professional skills (Scott & Webber, 2008).

The components of the 4L framework are career stage, career aspirations, visionary capacity, boundary-breaking, entrepreneurialism, professional skills, instructional design and assessment literacy, crisis management, and approaches to leadership development. Noting that this framework was built initially for leaders in educational roles. It is claimed by Scott and Webber (2008) that the framework categories are transferable.

Another proven best practice methodology in regard to how skills and experiences are formed into a development tool involves providing mentoring (Solansky, 2010). This is considered best practice and ties in with RO1 concerning experiences and RO2 regarding frameworks. A mentoring relationship can help an aspiring young leader, and the benefits of having a mentor/mentee relationship go far beyond the relationship of that of a student and a professor or an employee and a manager (Wright & Wright, 1987).

Levinson states that the benefits of doing mentoring well (as cited in Rhodes, 2005) are that, mutuality, trust, and empathy support social-emotional

development, cognitive development, and identity development are all enabled. By developing these five areas, improvements in behaviour, well-being and performance can be generated, which highlights why it is essential to include a mentoring relationship when looking to develop talent.

Aligned with the above are further benefits that can be generated for the mentee in respect to why being part of a mentoring relationship can have value in development and growth. Fagenson (1989) argues that a further positive benefit includes mentees receiving more career opportunities than those who are not part of a mentoring relationship. The study also provided evidence that these individuals were more satisfied in their jobs, received greater recognition, and had a higher promotion rate.

Conversely, in a study of 40 research papers undertaken by Hansford and Ehrich (2006), it was noted that negative experiences could be attributed to mentoring relationships. These negative experiences are most common when the mentor does not commit to making the time available. Because of this, a structure must be followed when developing a mentoring relationship. It is vital to focus on how the relationship is built and how the structure is agreed upon so that the outputs can be positive rather than negative. The structure of an effective mentoring relationship considers four key themes. These key themes are: to develop trust; to determine roles and responsibilities; to set goals – both short

and long term; and to collaborate to solve problems (Byington, 2010). These key themes will support a mentoring relationship that provides value for both parties.

Key themes described by Johnston et al. (1999) are slightly different to the above. These are focused on, socialisation, task development, and lifespan development. While it can be argued that these three themes are aligned with Byington's themes, the key piece missing is the collaborative skill that forms the forth theme for Byington. This shows us that the structure of a successful mentoring relationship has minor differences between different models. However, common themes include trust and goalsetting as a minimum. Additional themes are built into different models depending on the objective of the mentoring relationship scheme or intention. These findings are summarised below in figure 2.

Figure 2

Research Findings Identifying How to Implement International Best Practice for Developing Young People Leaders in Airport Operational Roles.

Author(s) and year	Title of Paper	Origin	Main Findings/ Outcomes	Limitations
Byington (2010)	Keys to Successful Mentoring Relationships.	The United States of America.	A mentoring relationship considers four key themes; To develop trust; To determine roles and responsibilities; to set goals – both short and long term, and to collaborate to solve problems.	Does not note comments on the research methodology.

| Day & Halpin (2001) | Leadership Development: A Review of Industry Best Practices. | The United States of America. | That best practice considers a wide approach where the development of a leader requires a systematic approach across the full organisation taking into account all company value, and this must be championed by a senior leader to ensure that the commitment is wide reaching. Doing this well enables a better culture and allows for leaders to build more leaders. It must be understood that this | The research area is the US Military only. |

			takes time. Coupled with goal building is considered best practice.	
Fagensen (1989)	The Mentor Advantage: Perceived Career/Job Experiences of Protégés Versus Non-Protégés.	The United States Of America.	A successful mentoring relationship can result in higher recognition, satisfaction, and career prospects.	Study focuses on one framework only- mentoring.
Hansford & Ehrich (2006)	The Principalship: How Significant is Mentoring?	Australia.	Mentoring relationships are not always successful. The most common reason for	The study focusses on one framework only- mentoring.

			failure includes a lack of commitment.	
Intagliata & Ulrich (2000)	Leadership Brand: Creating Distinctiveness by Focusing on Strategy and Results.	Canada.	Leadership learnings can be translated across different industries.	The study does not signal the methodology used to determine the findings.
Johnston et al (1999).	The Mentoring Model Theory: Dimensions in Mentoring Protocols.	The United States of America	The key themes of a mentoring relationship focus on; Socialisation; task development; lifespan development.	The study focuses on one framework only- mentoring.
Levinson (as cited in	A model of youth mentoring.	The United	A mentoring relationship develops mutuality, trust,	Explores only the views of

Rhodes, 2005)		States of America.	empathy, support, social-emotional development, cognitive development, and identity development. This improves behaviour, well-being, and performance.	youth, not experienced.
Richards (2008)	A competency Approach to Developing Leaders - Is This Approach Effective?	Australia.	A leadership framework requires a focus on both competencies, and qualities. Behaviours, skills, and knowledge form the competency component.	Explores a wide range of industries.
Scott & Webber (2008)	Evidence-based Leadership Development. The 4L Framework.	Canada.	The 4L framework signals the below eight components of	Explores a wide range of industries.

	a framework; career stage; career aspirations; visionary capacity; boundary-breaking; entrepreneurialism; professional skills; instructional design and assessment literacy; crisis management.

The literature review signals similarities and differences in the research findings between the two research objectives. To develop a framework for RO3 alignment needs to be created.

The skills and experiences required cover a broad range of categories. This is good as it ties into the framework where Richards (2008) suggests a holistic view of leadership development is required. This covers both competencies and qualities. The research from RO1 highlights skills and experiences that can be placed in both of these categories which suggests that there is value in building the framework to this approach.

The notion of commitment is identified as a key skill. Commitment is also highlighted as a key requirement for a mentoring framework, and without this, there is likely to be little value in a mentoring relationship. In contrast with this there lies an area where the research between RO1 and RO2 are not aligned in respect to this research. In RO1, the research showed that there is value in building a framework that starts ahead of the young operational individual leading people. The framework research did not identify this. To further research this, a question will be shared in the survey asking the value of this from the standpoint of an experienced people leader and an aspiring people leader.

Given that there were 15 skills, and 11 experiences identified as being critical, I will ask survey respondents to prioritise these skills and experiences by selecting which five from each category they see the most value in. This will help me

determine the emphasis and focus on applying these skills and experiences within the framework.

3.2. Conclusions from Literature Review

The literature review signals that leadership is a broad subject. Thematic analysis has confirmed that there are key themes that represent in the different studies. However, there are also differences between the studies.

Re-occurring themes in regard to what skills and experiences are valuable for a young people leaders in airport operational roles include: people management soft skills, business management skills, and self-management - potentially through a student assessment. In total there are 15 skills identified and considered critical, and 11 experiences considered critical that are recommended to be built into a framework. Also recommended is that a student assessment is built into the framework as it is valuable both pre and post-appointment of becoming a people leader to understand one's level of competencies and qualities. The literature recommends understanding poor/ negative leadership traits, so that the can be recognised through self-reflective practice, and then corrected.

It is considered international best practice to include a mentoring programme into a framework that looks at competencies and qualities. Layered underneath this can sit the eight components of the 4L framework. If rolling out a development programme across the organisation, it is recommended that there is a commitment to championing the programme from a senior figurehead. The programme must incorporate company values and missions so that each part of the organisation is covered and impacted positively. Benefits of incorporating mentoring into a framework include improved cognitive thinking, increased career opportunities, improved well-being and greater job satisfaction that ultimately helps solve some of the problems indicated in the introduction statement, including staff retention, cost, and inefficient and disengaged teams.

3.3. Survey Data Collection

To add to the depth of research, a survey was distributed focussing on the research question of identifying the gaps and opportunities young people leaders in airport operational roles experience. The responses from the survey will inform the development of a framework that provides direction towards fulfilling leadership careers. The survey questions related to RO1, and RO2. Coupled with this, the research collection was undertaken in order to support, validate, and expand on the research collected though the literature review.

A total of 10 questions were asked and the survey took respondents an average of 4 minutes and 16 seconds to complete. Figure 3 below details the questions and the motivation behind why the questions were asked.

Figure 3

Survey Questions, and Motivators for Asking.

Question Number	Question	Motivation for asking
One	Which of the below best describes your airport operational people leader experience.	The options are a selection of either 1) Experienced, 2) young, 3) nil. The response to this question will help sort data from the further questions and allow the research to understand the difference in thinking between experienced and young people leaders.
Two	Using a scale of 1-5, from	The response to this question supports the

	your experience what level of support is offered to young airport operational people leaders.	research in understanding whether there is, or is not support in this development space already. Using question one, the research can determine if the different groups reflected the same thinking or different thinking.
Three	Do you think that the skills and experiences required for people leaders in airport operational roles now differ from skills and	This question allows the research to understand if there has been a change in best practice. The literature review determined that there had been a change, so asking the experts within industry will confirm whether the literature review was in

	experiences built into a traditional development framework.	line with those that responded to the survey.
Four	Please select the top 5 skills that you think are critical for developing a young airport operational people leader.	A total of 15 skills are listed for the survey respondents to select from. These skills are identified in the literature review. Selecting the top five skills prioritises the skills based on industry thinking. This will be done using thematic analysis.
Five	Please list any additional skills that you believe are critical for the development	This enables the survey respondents to add to the research by signalling critical skills that had not been listed. This question allows for common

	of young airport operational people leaders.	thinking to be identified through thematic analysis and then those skills added to the framework.
Six	Please select the top 5 experiences that you think are critical for developing a young airport operational people leader.	A total of 11 experiences are listed for the survey respondents to select from. These skills are identified in the literature review. Selecting the top five skills prioritises the skills based on industry thinking. This is done using thematic analysis
Seven	Please list any additional experiences that you believe are critical for the development	This enables the survey respondents to add to the research by signalling critical experiences that have not been listed. This question allows for common thinking to be

	of young airport operational people leaders.	identified through thematic analysis and then those experiences added to the framework.
Eight	When do you believe is the best time to start a development framework for young operational people leaders.	The question allowed four responses, 1) Before they become leaders, 2) once they become leaders, 3) never, 4) none of the above. The intent of this question is to validate the finding from the literature review that determined a framework should start ahead of the individual becoming a people leader.
Nine	On a scale of 1-5 how committed to using a development	The literature review signalled that commitment was essential for a development framework to be successful,

	framework for young airport operational people leaders would you be if you were asked to be part of the relationship.	particularly with a mentoring programme. If there is a lack of commitment then there will likely be negative impacts that could transpire. This question aims to determine what level of commitment there is from each group.
Ten	Please note any other supporting comments you would like to add.	This question supports the research by providing survey respondents with an opportunity to feed anything else of value in to the research.

The medium that the survey was shared through was on was LinkedIn, and the target group was separated into two categories:

1) Those experienced in people leadership within airport operational roles
2) Young people leaders in airport operational roles.

A minimum of 15 respondents from each group were sought, with the total number of actual respondents being 41 for the experienced category, and 22 for the young/ aspiring category. Three people started the survey but did not identify with either category so their survey was closed after question one, and their results were discarded. The survey was open for a period of one week between the 17th of September 2022 and the 24th of September 2022.

3.4. Survey Results

Research objective one focussed on identifying what skills and experiences are most critical for young people leaders in airport operational roles. Research undertaken in the literature review highlighted that 15 skills and 11 experiences were critical. Of these skills and experiences, respondents were asked to identify the top five skills and the top five experiences that they saw as being the most critical.

The results reflected that communication, decision-making, problem-solving, people management, and critical thinking skills were the top five skills when looking at the skill options identified by respondents. When considering the top five experiences critical for young people leaders in airport operational roles the results reflected that mentoring relationships, 360-degree feedback, team building, self-reflective practice, and action learning, were the most critical. Figures 4 and 5 below identify how survey respondents ranked the complete set of skills and experiences based on criticality.

Figure 4

Skills Ranked by Survey Respondents as Being Most Critical to the Young People Leaders in Airport Operational Roles.
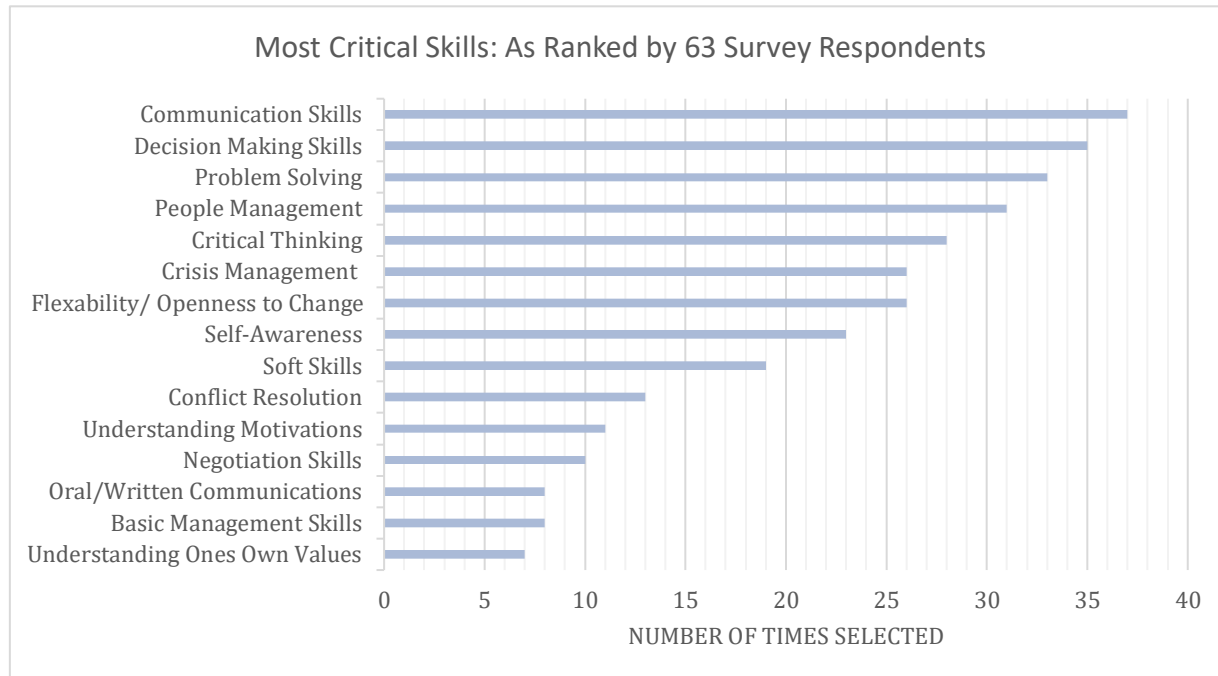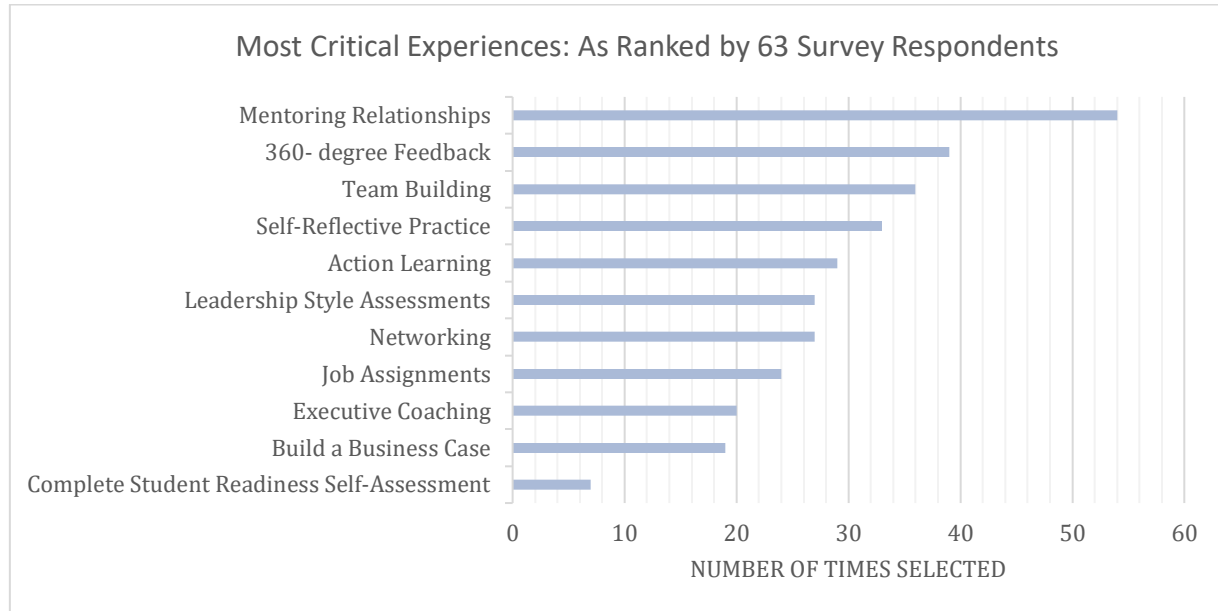

Most Critical Skills: As Ranked by 63 Survey Respondents

Figure 5

Experiences Ranked by Survey Respondents as Being Most Critical to the Young People Leaders in Airport Operational Roles.

Most Critical Experiences: As Ranked by 63 Survey Respondents

(Bar chart, "NUMBER OF TIMES SELECTED" on x-axis from 0 to 60)

- Mentoring Relationships — ~54
- 360- degree Feedback — ~39
- Team Building — ~36
- Self-Reflective Practice — ~33
- Action Learning — ~29
- Leadership Style Assessments — ~27
- Networking — ~27
- Job Assignments — ~24
- Executive Coaching — ~20
- Build a Business Case — ~19
- Complete Student Readiness Self-Assessment — ~7

While survey respondents were asked to rank the skills and experiences that the literature review determined as being most critical, they were also asked to identify other skills and experiences that were not identified by the literature review. The findings showed that six skills reoccurred as a common theme that were not identified by the literature review, and six experiences reoccurred as a common theme that were not identified by the literature review.

Figure 6
Additional Skills and Experiences Identified by Survey Respondents.

Skill Identified	Re-occurrence	Experience Identified	Re-occurrence
Empathy	6	On the Job Training	6
Time Management	4	Exposure to Leaders at Meetings	5
Accountable	3	Lead a Project	4
Cultural Awareness	2	Shadowing Leaders	3
Emotional Intelligence	2	Exposure to Other Business Areas	2
Resilience	2	Stretch Opportunities	2

While the above data focuses on the data collection as one group, the research highlighted some interesting learnings between what the experienced airport operational people leaders considered critical, and what the young people leaders in airport operational roles considered critical. Sharing these differences is relevant as it

shows the difference in thinking between the two groups regarding what is critical to developing young airport operational people leaders.

The key difference the research highlighted was that while 32% of experienced airport operational people leaders saw basic management skills as critical, only 2% of the young people leaders in airport operational roles signalled that this was in the top five required critical skills. Another main difference was that 32% of those in the young category marked conflict resolution within the top five critical skills compared to 15% in the experienced category. Interestingly, only 27% of the young category marked self-awareness as being in the top five critical skills compared to 42% in the experienced category. This highlights that there is some difference in thinking between the two groups, showing the value in having surveyed both experienced and young to ensure that the framework is well rounded.

Research objective two focused on implementing international best practices for developing young people leaders in airport operational roles. The survey confirmed that 89% of respondents state that a framework should begin before the people leadership journey begins. When breaking this down amongst the two responding categories, 82% of young airport operational people leaders believe the framework should begin before the people leadership journey begins, whereas 93% of the experienced category believe this.

The survey data also showed that there was nil difference in thinking between the two categories for the current level of support offered to young airport operational people leaders. On a scale of one to five, both categories responded by signalling an average of three. This means that young people leaders in airport operational roles are 'somewhat supported' in their development using current development systems and frameworks. Therefore, there is room for improvement.

The literature review signalled that a mentoring framework was critical for supporting the growth of young people leaders in airport operational roles as they advance through their careers. This is supported by the survey responses and is reflected in the experience graph (figure 5) which shows that respondents marked a mentoring programme as the top experience. The literature review also discusses that for a mentoring relationship to be effective, there must be a commitment from both the mentor and the mentee. Survey question nine asked, "how committed to a framework for a young airport operational people leader would you be if asked to be part of the relationship." The average response was four out of five, with nil variability between the two categories. This outcome signals that following international best practices for implementing a mentoring framework would likely be successful.

Additional to seeking responses to RO1, and RO2 through the survey, a focus was applied to seeking further information from the survey respondents regarding their thinking as to how a framework could be built that supports the growth of young people leaders in airport operational roles. The research highlighted three further insights valuable when building the framework through feedback. Figure 7 shows these findings that had not been identified through other research.

Figure 7

Framework, Additional Insights Captured from Survey Data

Additional Insight	Insight
One	It's important to differentiate between high potential young leader's vs all aspiring young leaders
Two	There are different leaders needed and present within organisations. Some people are better operators and facilitators than leaders. So the framework needs to identify what the organisations leadership needs are, and have a framework to identify them and nurture each type.
Three	Small regional airports don't have the resources to undertake full effective development training. A vehicle for collaboration and sharing between airports facilitated through airports association could be useful if supported

3.5. Conclusions from Survey Data Collection

The data collection was able to prioritise the most critical skills and experiences based on the views of both experienced airport operational people leaders and young people leaders in airport operational roles. Having prioritised skills and experiences enables the framework to focus on the right areas when built. Coupled with this, qualitative

data was collected through thematic analysis and an additional six skills and six experiences were identified. These were skills and experiences that did not reflect in the literature review which suggests that the data collection has added depth to the research.

The skills that were identified as being the most critical were communication, decision making, problem-solving, people management, and critical thinking. The most critical experiences identified were mentoring relationships, 360-degree feedback, team building, self-reflective practice, and action learning. It is recommended that these skills and experiences are prioritised in the framework.

Survey research confirmed some vital points from the literature review. It is recommended that these are built into the framework and the points include that a framework should start from before the young people leader becomes a people leader and that two way commitment is imperative. While it is imperative, the survey highlighted that it is also likely to be achieved given the average rating of four out of five when respondents were asked if they would support a development framework if requested.

The survey data also showed that there was a difference of thinking in some areas between the two categories. This was particularly evident in respect to where critical

thinking and self-awareness sat in the prioritised list of skills and experiences. This was expected and proved the value of reaching out to both young and experienced. During the survey, no skills or experiences were left unselected. This confirms that the literature review research is aligned with the survey research. During the survey research, the data highlighted additional skills and experiences considered critical. These findings will be used when building the framework.

4. Recommendations, Impacts, and Outcomes

Research objective three (RO3) focuses on developing a framework that develops young people leaders in airport operational roles. The outcome of this is informed by the learnings generated through the research for RO1 and RO2. Subsequently, RO1 and RO2 also inform the following recommendations that support the building of the framework.

4.1. Recommendations

A total of eight recommendations have been developed from this research. These are listed below. Adopting these recommendations enables for a robust framework to be developed that meets the needs of young people leaders in airport operational roles as they advance through their careers.

Recommendation One: That a framework for young people leaders in airport operational roles should start from before the identified talent becomes a people leader. This enables the requirements identified by Quilty (2005) to be fostered and grown. The benefit of the recommendation is that this allows for a solid foundation to be built ahead of the leader being accountable for people leadership. To support this approach it is recommended that a phased development plan to be developed.

Recommendation Two: That a framework for young people leaders in airport operational roles should include all identified skills, with a focus on prioritising the following: communication, decision-making, problem-solving, people management, and critical thinking skills. Research suggests that these skills are the most critical. Having these prioritised through RO2 enables a focus to be applied with the impact of forming the best development framework based on industry feedback.

Recommendation Three: That a framework for young people leaders in airport operational roles should include all identified experiences, with a focus on prioritising the following: mentoring relationships; 360-degree feedback; team building; self-reflective practice; and leadership style assessments. Research suggests that these experiences are the most critical. Having these prioritised through RO2 enables a focus to be applied with the impact of forming the best development framework based on industry feedback.

Recommendation Four: For a framework to be effective there must be a commitment from both the young airport operational people leader and the support that is entrusted to develop that leader. It is recommended that an avenue to provide commitment is included in the framework. Doing this enables the framework to succeed, with two-way commitment the development programme will stall or may result in negative outcomes (Hansford & Ehrich, 2006).

Recommendation Five: It is recommended that a framework allows for the development of both competencies and qualities. By doing this, a move away from traditional methods that focus only on the competencies can be achieved. By including both competencies and qualities, a more holistic approach can be developed which enables all of the skills and experiences to be built in (Richards, 2008).

Recommendation Six: A framework should help young people leaders in airport operational roles identify negative leadership behaviours, this can be built into the self-reflection component. The impact of this enables the young people leader in airport operational roles to self-reflect, and detect negative traits. Self-detecting these then allows the young leader to correct the behaviour (Toor & Ogunlana, 2009).

Recommendation Seven: It is recommended that a mentoring experience is part of the framework. This enables trust to be developed, goals to be set, clarity of roles, and the ability to collaborate. Because this relies on a two-way commitment, the relationship best sits in the latter part of the framework, although it is recommended that goal setting starts earlier. Research suggests that the impact of this enables the young people leader to achieve more promotions, have increased job satisfaction, greater recognition, along with improved wellbeing (Fagenson, 1989).

Recommendation Eight: It is recommended that the framework identifies an executive sponsor for the young people leader from within the business, and that there is an opportunity to build the company goals, values, and mission into the framework. Doing this enables an aligned view of success as the young people leader develops their career and growth within the company. Equally, this adds value to the business and ensures that the next generation of people leaders have behaviours already endorsed by the business (Day & Halpan, 2001).

5. Conclusion

This research has been undertaken to support the industry and to inform a framework that can be developed to support young people leaders in airport operational roles as they advance through their careers.

There are eight recommendations that have been developed by this research, these are built on learnings from literature reviews, survey responses, and thematic analysis between the two. With the restart to aviation beginning, a reliance on good leadership is evident, and the eight recommendations supports industry by informing the build of a framework. Embedding these recommendations into an organisations framework will enable young people leaders in airport operational roles to be developed and supported as they advance through their careers. In turn, this supports industry by focussing on one of the most critical aspects of a successful operating model, leadership.

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Sustainable e-commerce packaging:
What should New Zealanders care about?

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Introduction

Consumers, defined for this study as the final end-users of packaging, are becoming increasingly concerned about the effects of packaging on the environment. As the packaging of any e-commerce ('etail') delivery is the first tactile interaction a consumer usually has with a company's product, it is important that it not only positively reflects the company's brand, but that it evokes a positive response from the consumer. With the recent explosion in etail shipping (D'Adamo et al., 2021), decision-making in this area has never been more important given its size, growth and therefore importance to the retail sector.

Most companies have developed sustainable packaging (SP) solutions whose objective is to satisfy consumer demand for SP attributes while maintaining acceptable trade-offs against other packaging requirements such as cost and fitness-for-use.

The problem is that general SP attributes are not well understood by packaging decision-makers, defined for this study as having the responsible and authority to make commercial decisions on behalf of the companies they are employed by (or have ownership of), as there have been no recent New Zealand (NZ) studies of this topic. Due to our unique regulatory, social, environmental, cultural, and geographic ecosystem, the large bodies of international research into this topic, while they can inform this research, cannot be directly translated and applied to NZ. Although conditions such as population density, island size and logistics, political climate, ethnic makeup etc are not individually unique to NZ, when combined they represent a uniquely NZ condition which prevents direct comparison with overseas studies.

Through a series of interviews with NZ etail packaging decision-makers and influencers (i.e those who are stakeholders in what SP investment and purchasing decisions are made), this research paper aims to identify NZ-specific, current etail SP attributes. The findings of this research will help guide supply-side investment

decisions by NZ packaging manufacturers and demand-side packaging choices by SP purchase influencers such CX Managers, Marketing Directors, and Channel Owners.

Background

As Escursell et al. (2018) states, sustainability has become a top priority for most packaging decision-makers and influencers. From that time, there have been numerous shifts in consumer perceptions, from compostable packaging being the answer to plastic problems, to it then becoming a contaminant in the recycling process (i.e., it continues to degrade in an application such as fence posts where durability is required).

In NZ, Life Cycle Analysis (LCA, whereby the environmental impact of a product is measured, see Ghosh, & Sadhu, 2022 for a recent relevant explanation) has started to gain consumer acceptance (e.g., NZ Post, 2021 LCA of courier bags), and triple-bottom line reporting, including Environmental, Social and Governance (Bose, 2020), is becoming more widely adopted. NZ central government-led changes such as banning thin plastic carry bags in July 2019, banning polystyrene

in certain areas by 2025, and a potential Container Deposit Scheme (CDS), have all been made that much more urgent by COVID-19-accelerated retail growth.

The NZ packaging industry must invest, develop and market proactively to meet these changing demands.

This research will clarify the SP attributes to aim for, and provide packaging decision makers guidance on current, local requirements.

Problem Statement

New Zealand consumer SP attribute preferences are not known due to inaccurate data and personal bias. Data inaccuracy is caused by either outdated information (Sonneveld, 2004) or data based on other jurisdictions such as Boylston (2009), Dilkes-Hoffman (2019), Escursell et al. (2021), Jedlicka (2009), Lo et al. (2017), and Rauch et al. (2022).

In speaking with many of my overseas colleagues in Australia, Singapore, the US and Europe, packaging decision-makers (brand owners, marketers, packaging

engineers and operations managers) do not seem to be talking about SP at anywhere near the frequency that those in NZ are, or if they are, they are placing much less weight on them as important buying attributes.

Without an understanding of local attribute requirements, NZ packaging manufacturers cannot align themselves to need, and SP purchase influencers cannot strive for best practice.

Aim and Thesis

Packaging decision-makers make decisions every day based on assumptions regarding the perceived needs of the sustainably minded New Zealander. The aim of this research project is to explore these assumptions by undertaking qualitative research on current, NZ SP attribute preferences. Recommendations based on this data will enable NZ packaging suppliers commercial teams to challenge our customers' sustainability assumptions and ensure they are more closely aligned with their customers' (that is, the end-users / consumer) actual attribute preferences, thereby helping them to avoid costly mistakes.

The thesis of this paper is that packaging decision-makers' assumptions are outdated, and with better understanding of current NZ SP attribute preferences, packaging suppliers can invest more profitably in order to help customers solve problems, add value to our customers' businesses and leave the world better than found by taking steps towards a lower footprint, more circular economy.

To explore this thesis this research will answer the question; What attributes of sustainable etail packaging should New Zealanders care about?

Research Objective

The objective is to identify the most preferred features of sustainable secondary (i.e., what protects the contents within a box or mailer) packaging for NZ industrial etail consumers in order to influence NZ packaging suppliers' investment decision-making and build NZ packaging suppliers' brands. This will be achieved by:

1. Identifying international SP trends and attribute preferences
2. Identifying NZ sustainable secondary packaging trends and attribute preferences for NZ industrial retail consumers

As the objective of this research is to change the decisions that NZ industrial retail secondary packaging buyers make, as such, the orientation of this project is change.

Literature Review

This literature review covers definitions of the sustainable packaging as they are not universally understood. It then delves into packaging attribute preferences as this is an important building block of the research method, then a brief thematic analysis of research yields possible attribute preference topics, including an overview of the cost trade-offs and an investigation of greenwashing. This list is then cross-referenced against influences that may have skewed research such as country, industry, or material type.

What is sustainable packaging?

The term 'sustainable packaging' needs to be defined, and attribute preferences related to this must fit within the study parameters. These parameters are: sustainability, packaging, secondary, retail, e-commerce, and NZ. As Jedlicka (2009, p. 268) quotes the pivotal 1987 Brundtland Commission, sustainability in a

broad sense means "meeting the needs of the present without compromising the ability of future generations to meet their own needs". This inter-generational sentiment was reflected in other sources (such as Johnston et al, 2007 and as recently as Rauch et al., 2022) so was used as a reference point when further investigating narrower definitions as attribute preferences become more defined.

The definition of SP was ably summarised (and used by later researchers such as Sonneveld, 2005) by the Sustainable Packaging Alliance, which argues that "SP should meet the following four sustainability principles:

1. effective - provide social and economic benefits;
2. efficient - provide benefits by using materials, energy and water as efficiently as possible;
3. cyclic - be recoverable through industrial or natural systems; and
4. safe - non-polluting and non-toxic."

As part of the SP attribute preferences investigation, public perception of what constitutes 'good' SP was considered, however given that the public is driven by 'polar' and 'uniformed' views (Dilkes et al., 2019), rigour was applied to analysis at this point.   Public perception is an important part of research as "in order to direct efforts, a clear understanding of consumer dynamics in ecological material preferences … are essential", (Boz et al., 2020, p. 1). It is clear from this argument

that the public are making decisions based on their perceptions; therefore, their SP attribute preferences must be understood. Furthermore, a wide international net was cast to ensure all possible preferred SP attributes are captured for consideration. Over-arching descriptions such as those published by the Sustainable Packaging Coalition to local efforts such as Sustainable Business Network (2020) are used in the literature review to ensure a current and complete set of SP attribute preferences are compiled.

Public Preferences

What are these public preferences? In order to answer this question, an international database search on the topic of sustainable etail packaging, with an emphasis on advanced industrialised markets similar to NZ, yielded many studies (for example Brunetti et al., 2018, Feber et al., 2020, and James & Kurian, 2021) and publicly available documents, from declarations such as The Warehouse Group (2020) to guides which touch on sustainable themes such as Amazon's guide to frustration free packaging (Amazon, 2021).

Thematic analysis (Bougie & Sekaran, 2020) of these sources mentioned above yield possible attribute preference topics including:

- Circularity of packaging
- Overpacking
- Life Cycle Assessment (LCA)

- Recyclability

- Recycled content

- Marine litter

- Greenwashing

- Price premiums attached to SP

All of the above are very familiar in my experience in dealing with NZ retailers and are directly applicable to this research topic.

This list of possible attribute preference topics was then cross-referenced against influences that may skew research such as country-specific (Muthu, 2021), or industry (Jestratijevic et al., 2022) and found to fit the themes explored in the interviews.

Other considerations

Recent research by Rauch et al (2022, p. 93) stated that in their investigation, "the costs (of packaging) should possibly remain the same or, in the case of a highly sustainable solution, be only slightly (max. 5%) above the costs of the current solution. This shows that the path to a greener and more socially responsible production still depends heavily on cost and efficiency." Contradicting this research is earlier work such Jerzyk (2016, p. 708) who found that "sustainable

packaging was not a primary determinate in purchasing decisions". Given this apparent contradiction, this argument was further investigated in the interviews. The term 'green-washing' (an unsubstantiated claim designed to deceive consumers into believing that a company's products are environmentally friendly) was also investigated as "biases and misinterpretations of the packaging elements by consumers can prevent success in the marketplace" (Boz et al, 2020, p. 9).

Changing customer perception

The timing of this research could not be more apropos. As mentioned previously, consumer demands for SP attributes have changed so drastically (such as the market trend shifting from compostable packaging (Stark & Matuana, 2021) to closing the loop via a recycling process, Benuing et al., 2021), and so quickly that research quickly becomes outdated. These consumer perception changes seem to be due to the intersection of two powerful trends – increasing consumer awareness which has been accelerated by a pandemic-induced "incredible impulse to e-commerce" D'Adamo et al., (2021, p. 1). NZ is not alone in experiencing a similar explosion – not only have NZ packaging suppliers seen a dramatic increase in the demand for etail packaging but the largest NZ e-commerce postal and courier provider, NZ Post (which regularly reports online spending) reported online shipment growth in 2021 over 2019 of 52% (NZ Post, 2021).

Research value

The literature review described above proves the requirement to understand public SP attribute preferences, especially given pandemic etail-fuelled growth in this area. As this research has not been done before in NZ and has not focused on the specific problem of e-commerce secondary packaging.

It has also highlighted the need for a broader investigation of not only what constitutes a SP solution, but also its antithesis – greenwashing. Finally, further research is required into the attendant cost which must be factored into interview questions so as to retain the practicality of the research.

Findings

The nine interviewees provided a broad representation of sustainability professionals working in the etail sector in NZ:

- 67% Female
- Average age was 44 (youngest 26, oldest nearing retirement)
- Average 37% percent of their time was spent on sustainability work in the last 12 months (ranging from 5% to 100%)

- Average tenure was 8 years (ranging from just started to 30+ years)

Although tenure was important, some interviewees made the point that as sustainability (and the packaging implications thereof) becomes more important, the portion of time spent on this subject as a percentage of their work time has gradually increased, usually without a concomitant reduction in their other duties. Only three interviewees could confirm that their job description included the word sustainability and that this was their main (>80%) responsibility, and these were also the interviewees that were specifically hired or promoted into their sustainability role. This was considered relevant as it was a topic that three of the interviewees raised in relation to the amount of time that could be committed to working on their sustainability responsibilities. The degree of emphasis placed on these responsibilities was a function of company commitment, customer pressure and personal passion.

Their companies also represented the broad etail sector in NZ:
- 80% were Auckland-based (being involved in this sector for a number of years I would estimate that more than 80% of etail packaging decisions are made in Auckland)
- Average company revenue approximately $170M NZD per annum (ranging from $6M to over $800M)

- Average company age was 30 years (ranging from 3 years to over a century)

- Most companies were unlisted on the NZX

The main themes identified were:

- End of life considerations (paper vs plastic, compostables, recycling / Soft Plastics NZ)

- Material inputs (recycled content, carbon footprint, cost considerations, functionality, indirect control of decisions and labelling)

- Education (suppliers and SP decision-makers)

- Local and central regulation and waste infrastructure

The findings for each theme are detailed below.

End of life considerations

As Boz et al (2020, p. 1) states, "an understanding of consumer material preferences … are essential", and this is what is driving the move away from plastic, towards paper for some etail companies. Interviewees experience is best summed up by the quote "We had much less noise once we moved away from plastic", but it was not just direct customer feedback prompting this change. Some interviewees acted on known customer preferences "Paper is better for many of our

rural and business customers (because recycling of paper is universal)", and paper can be "composted, or even used to light a fire". This is countered by other feedback that "a paper bag is not always the best option given the larger carbon footprint" which led to a bemoaning of the general publics' understanding of material footprints (covered below under material inputs). The other sustainable implication of moving from plastic to paper, that of increased damage rates, was raised by only two interviewees, with one interviewee volunteering that they had not seen an appreciable increase in damages, or at least not at a level that would drive them back to plastic.

Some interviewees saw pollution as an even more visible end of life issue than recyclability and had turned to compostables to provide the solution (a well-worn path, with ample research dating back years, for instance O'Brine & Thompson, 2010). However, other interviewees (that, on average, had more experience in the sustainable packaging space and had done more thorough research) had considered that the negatives involved in compostables outweighed the litter (and more specifically, ocean pollution) considerations, quoting the following examples:

- Compostables cause Soft Plastics NZ (SPNZ) contamination
- Concerns over durability claims and level of compostability

- Industrial composting limitations (here WasteMINZ (2019) was twice quoted as a reliable source of information "Almost all greenwaste processors are unable to accept compostable packaging", and the example was given of a compostable plastic label on an apple in the retail grocery sector being "relevant to the end-of-life conversation" whereas a compostable courier bag in the etail sector provided little benefit and only added cost to any commercial operation without adding nutrient benefit)

- Lack of labelling clarity ("meaning that it all goes into landfill as it's too confusing")

- "Some e-commerce companies turn to compostables as a 'tick-the-box' exercise, they don't necessarily think about the downstream implications"

- SPNZ was mentioned (unprompted) in most interviews, with a generally supportive stance taken, however criticism was levelled here too:

- SPNZ is "not well known amongst the general public"

- SPNZ does "not service 100% of NZ, therefore is not a universal solution, therefore not relevant to 100% of our customers, therefore we cannot include SPNZ as a universal recommendation"

- The fact there are environmental trade-offs of downcycling in the circular economy (Glogic et al, 2021), specifically that "SPNZ is not circular – it is downcycling", and the catch-all of "recycling is hard and reductive"

- SPNZ was lauded by four interviewees for attempting to reach the final 20% of the NZ population with their new recycling bag (Recycling Kiwi, 2022). These new bags were also seen as etail friendly given the fact that as more online shoppers are starting to buy their groceries and most other consumer items without visiting a retail outlet, they appreciate the ability to recycle their soft plastics online as well, and the success so far of the trial shows that "online shoppers are willing to pay to do the right thing".

Finally, some packaging professionals are also beginning to understand that contamination of soft plastics in the SPNZ scheme is not just down to consumers' education and meticulousness but needs to be thought through at a design stage (which is investigated in depth by Hahladakis & Iacovidou, 2018), with a goal of the secondary packaging being "as close to 100% LDPE as possible, with minimal ink (colours), tapes, labels etc".

Material inputs

Where interviewees understood that paper cannot fulfil the practical requirement of the package either functionally or financially (or both), recycled content plastics were seen as the next best thing "recycled plastics are used where we need to use plastics, and these fit our long-term sustainability roadmap". However,

"recyclability still beats recycled content as people (general public) don't understand the implications of a recycled content product".

Carbon footprint was also mentioned by all but one interviewee as being something that was critical in their material choice but did not figure highly in either their customer complaint data or their perception of its importance to the general public ("in the current environment, plastics in the ocean get more cut-through than carbon footprint"). To further detract from a more balanced view of material choice that carbon footprint offers, Life cycle Assessment (LCA's) were seen as "hard, expensive and time consuming to do well". Additionally, it was suggested that the investment required to determine carbon footprint was better spent on etail transport carbon footprint calculations which, as could be expected, was "significantly" larger than any secondary packaging impact. The carbon footprint required to import some bulkier packaging was also raised as an issue, and all but two interviewees referenced the work done by NZ Post (2021) on their LCA, although one interviewee did point out that there didn't seem to be much difference between imported and NZ-made recycled content, and that this was more of a "NZ-Inc discussion".

Several interviewees referenced work done recently by OfficeMax on their "box maker which makes boxes just big enough so no packaging is even needed"

(Youtube, 2021), although two of these interviewees also suggested that the capital cost would be prohibitive and fail to produce an adequate return on investment given their volume. One interviewee also provided a mitigating factor – that of labour availability, which can dramatically change capital payback expectations (or even make them mute) given the current, and forecast, low-skilled labour shortages.

Material cost was a consideration, with a general sentiment summed up in the following quote that "the cost of compostables or paper over plastic is prohibitive". One interviewee was hopeful that the "profit erosion could be recovered via efficiencies or price" or the slightly alternate "efficiencies can help fund some increased packaging costs".

The lack of control over secondary SP choice was raised by three different interviewees for two different reasons:

- "Direct ship models which are becoming increasingly common dictates that we are one more step removed from the choice of what packaging is used", i.e., their supplier ships directly to their customer,

- "Difficulty in encouraging our primary (mainly overseas) suppliers to change given our relatively small scale on the global stage", i.e., unless a company is of an influential size (WallMart or Costco for example), the

ability to dictate secondary, or even primary packaging to suppliers is problematic.

Labelling was also an issue raised which relates to material choice as "people don't know what a 4 or 5 plastic is", and "people don't know what to do with their packaging unless it's very clear – APCO is only just starting to have an impact and we need this for the clarity it provides". One interviewee raised an issue regarding the inconsistent recycling practices experienced across NZ which meant that labelling can't "by definition be consistent".

The size of the NZ market was also referenced as an issue in that local economies of scale hampered development and that "availability and logistics are major issues". The plethora of retail SP options was also referenced when compared to the relative dearth of industrial SP options such as those utilised in retail packaging.

Education

Suppliers of packaging were universally derided by interviewees. "Lack of transparency", "Suppliers only pushing the positives and ignoring the negatives – who the hell is recycling limestone in NZ?!" (in reference to Stonepaper, 2022)

and "local companies pitching a bespoke solution that you find out is off-the-shelf internationally – it comes across as self-serving".

This "lack of transparency" included not divulging actual data on percentage claims "a plant-based bag might only contain 40% PLA, the rest is PBAT from a petrol-chemical source", or "100% recycled content – what they actually mean is 100% of the virgin resin is now recycled content, but the bag isn't 100% recycled content". It also covered the lack of in-depth information that can be traced back through the international supply chain using verifiable or even visitable (virtual or in-person) sources.

Suppliers were also criticised for not covering one of the three critical factors – price, functionality, and sustainability, e.g., "it may be within an acceptable price range, tick the SP box but it doesn't work".

Industry groups were also mentioned, with SPNZ criticised for lack of public awareness but WasteMINZ (a representative body for NZ's waste, resource recovery and contaminated land sectors) was seen as a reliable and excellent source of information.

The last point raised related to the time taken to research the field of SP. Not only is it difficult to find the information required, but as the field is constantly evolving, current and relevant information is sometimes scarce.

Regulation and infrastructure

While some interviewees had adopted national standards "100% reusable, recyclable or compostable packaging by 2025", others bemoaned the lack of regulation, quoting "in Australia we have to report our packaging waste" and "there is no governing body in NZ" (there are two, The Packaging Forum and The Packaging Council, but both are voluntary organisations).

NZ recycling infrastructure was universally found wanting as it was inconsistent ("SPNZ does not cover 100% of NZ") and antiquated "waste infrastructure is better than it was 20 years ago, but not 20 years better".

Discussion

End of life considerations

As mentioned in the findings, Boz et al (2020, p. 1) states, "an understanding of consumer material preferences … are essential", and this is what is driving the move away from plastic, towards paper for some etail companies. This theme correlates to that identified by Bougie & Sekaran (2020) in their thematic analysis and therefore warranted discussion with the trusted expert packaging practitioners. All three of the trusted expert packaging practitioners sympathised with the interviewees but suggested some further areas for study, such as:

- Calculations of damage rate change (before and after the move from plastic to paper) and the implications for the product life cycle,
- Actual percentage of paper that is recycled in NZ (58% according to Packaging New Zealand, 2022) to be included in any nett benefit review,
- Progress that SPNZ is making to improve circularity,
- The carbon disparity between the two materials causing other goals to be missed.

The debate on compostables in the etail, postal and courier sector seems over (Office of the Prime Minister's Chief Science Advisor, 2019), however the expert

packaging practitioners consulted did express concern that these materials were still being actively considered.

One of the chief concerns was the impact of compostable plastic on the fledgling but growing SPNZ network. This concern seems to be the sole domain of practitioners – in their opinion it is a technical detail that the "general public find uninteresting". This, combined with the lack of profile that SPNZ is seen as having means this issue will not be addressed soon. The new SPNZ recycling bags (Recycling Kiwi, 2022) were thought an excellent idea, and one expert packaging practitioner commented that an additional benefit of the new recycling bags seems to be that these same consumers are particularly careful to only send dry, clean, soft plastics in these bags, with 0% contamination, which further enhances the value of this offering to the recycling system. This new addition to the scheme is being expanded and was considered a success by interviewees and expert packaging practitioner alike.

Material inputs

Recycled content provoked discussions with the expert packaging practitioners regarding the unintended consequences of actions, especially when the feedback from one interviewee was shared: "as I go up in recycled content percent, I need to increase the weight (thickness) of the plastic (film) I am using, which is actually

contrary to the 3R's – reduce first, then re-use, THEN recycle". Although this is true in simple film structures, manufacturers of multiple layers films have more success in mitigating this particular problem (Boylston, 2009). This thinking also indicates that the inverted waste hierarchy model is still referenced and used, and correlates with recent research by Holden (2022).

The number of interviewees that referenced the NZ Post LCA is encouraging and shows what an important piece of work that was. One expert packaging practitioner suggested that it was the "only reliable data point in the NZ industrial packaging sector when it comes to carbon footprint". One interviewee pointed out that as there didn't seem to be much difference between imported and NZ-made recycled content, thus making the difference mute and relegating it to "more of a NZ-Inc discussion". The expert packaging practitioners disagreed, making several salient points including the importance of improving the circularity of NZ's waste plastic (both post-industrial and post-consumer), the lack of high-quality recycled material needed for thin-film SP (and it's cost relative to virgin resins, discussed under cost below), and the importance of recovering high-quality recycled material to enable true circularity and not a degradation of same.

Material cost consideration covered a wide gamut, from "part of doing business" (i.e., using SP either as a minimum requirement to maintain market share or used

as a competitive advantage to grow market share), to finding efficiencies as part of the packaging review to enable a cost neutral position to be reached. The expert packaging practitioners' thoughts included investment in SP required now to avoid potential regulation in the future (and referenced the container deposit scheme as an example), the unavoidable consumer perception shifts that will leave laggards with little choice, but more optimistically, that the SP sector is constantly evolving and improving so that the "hike" required today to become more sustainable may in the future be more like a "simple stroll".

Education

This theme was not surprising as the topic of SP has only been in the public consciousness in recent years, there are no clear guidelines and even fewer rules. This has led to a surfeit of suppliers making claims and being labelled "opaque" by the interviewees, which further impedes the flow of information as interviewees found it difficult and time consuming to determine which claims were "verifiable, or even relevant".

In conclusion, more work is required of SP decision-makers than ever before, and the complexity of end of life and material choice implications is not helping this resource-constrained group. Experience counts in this field but the acquisition of this experience is hampered by information gaps and multiple sources of 'truth'.

Recommendations

The objective of this research paper is to identify the most preferred features of sustainable secondary packaging for NZ industrial etail consumers.

Practical Application

If investment decisions made by NZ packaging suppliers (product management, sales management, specialists, and engineers) are based on research and not merely opinion, superior returns should be expected from investments. This could include fewer instances of failed campaigns (where offer is misaligned to need), better and more timely capital expenditure and faster, more focused (and successful) product development.

If NZ packaging suppliers can provide insight-driven recommendations to our customers on their packaging choices, we add value to our customers by helping them to augment their customers' (i.e., consumers) experience and therefore the chance they will maintain and grow their consumer base. In doing so, NZ packaging suppliers become a more valuable supply partner, which enhances our long-term relationships, builds our brand, and attracts new consumers.

Investment recommendations for NZ packaging suppliers

This research shows that etail SP decision-makers are still searching for the ultimate recyclable, 100% recycled content, closed loop, low carbon, cost effective and functional SP. They are demanding not only a return to the inverted triangle of "Reduce, Re-Use, Recycle" (Holden, 2022) but they are becoming more savvy regarding the end-of-life choices and claims made by suppliers.

The NZ Post LCA is a good starting point to begin a review of the carbon footprint of NZ packaging suppliers offering, however this should be expanded to include a broader range products, and the supplier willing and able to do this will be more valuable to SP decision-makers than not.

Improving the circularity of products should be investigated, especially for plastic products. given the feedback on this area. Engaging with SPNZ on the results of this research paper may provide insights, however recovering industrial plastic waste and using this same material to create NZ-made SP not only improves circularity but reduces the loss of functionality, avoiding downcycling.

A critical review of current product design is also warranted to ensure all products are recycle-friendly and end-users understand easily and quickly the products' end-

of-life journey. This review should cover such topics as ink coverage, product gauge / weight, packaging of packaging, and labelling (both retail and product).

Limitations and Scope

Industrial packaging will exclude food packaging, although some results from the industrial secondary packaging market should be transferrable to food packaging consumers.

Although the corrugated cardboard container industry dominates the tonnage of industrial packaging, there is significantly more consumer debate regarding secondary industrial packaging. Therefore, corrugated cardboard containers will be excluded from this research.

Due to time constraints, nine packaging decision-makers were interviewed, and further surveying will be an area for future action-based research.

The qualitative feature and attribute data gleaned may not be representative of etail consumer concerns outside of NZ.

Due to time and resource constraints, the depth and scope of this research paper was limited. Further study may be required in order to verify some findings.

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Appendix 1

Interview Questions:

Interview - Sustainable e-commerce packaging - what should New Zealanders care about?

Run-through of rules of engagement – ethical conduct and confidentiality (see letter sent)

Interviewee:

Name	_____
Company	_____
Job title	_____
Responsibilities	_____
Percent spent on sust.	_____
Tenure with company	_____
Size of company (rev)	_____
Location	_____

Explanation of research aim, methodology.

Define the scope of the interview:

1. E-commerce retail (i.e., direct to end-user who is usually the payee, via the postal / courier network)
2. Industrial packaging (i.e., not cold-chain or security packaging)
3. Secondary packaging (i.e., not the outer box itself but how your company chooses to protect the contents of the box, or via a bag option)

Open questions:

1. How is sustainability defined by your company and how does this translate to secondary e-commerce packaging?
2. How would you describe your sustainable packaging journey?
3. How did you come to the conclusions you did regarding the choices you made about secondary e-commerce packaging?
4. What future plans do you have to ensure your secondary packaging is more sustainable?
5. What investment do you think might be needed locally to give you the sort of packaging you need?

Closed questions:

1. Examples of packaging seen as sustainable
2. Compostable v recyclable v recycled content v closed loop examples and thoughts

Sweeper:

Is there anything else you'd like to mention?

Unveiling the Wholesomeness of Whole Foods: A Comprehensive Analysis

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Abstract

The organic farming industry has experienced significant growth in recent years, driven by increasing consumer demand for healthier and sustainably produced food products. This case study explores the opportunities, challenges, and technological solutions within the organic farming sector. With an annual growth rate of 16.25

percent projected for organic farming, aspiring entrepreneurs are presented with a promising market to venture into. Learning from successful case studies, such as Whole Foods Market (WFM) provides valuable insights into the problems and challenges faced by organic stores, enabling entrepreneurs to make informed decisions and capitalize on this expanding industry.

One of the key challenges in organic farming is traceability, as consumers are becoming more conscious about the sourcing and rearing of their food. Blockchain technology offers a potential solution by providing a transparent and immutable system for tracking products from farm to fork. Implementing accurate labeling processes and integrating blockchain across the value chain can enhance transparency, build consumer trust, and mitigate traceability issues.

Additionally, automation plays a vital role in streamlining organic farming processes. By reducing human intervention and minimizing errors, automation enhances efficiency, productivity, and overall operational effectiveness. By embracing these technological solutions, entrepreneurs can meet consumer demands for organic products while promoting transparency, traceability, and health-conscious practices in the organic farming and retail sector.

Introduction

At present, there is a growing trend towards the increased popularity of organic food. Organic food refers to food that is cultivated without the utilization of synthetic fertilizers, pesticides, or genetically modified organisms. The consumption of toxic food has started to impact the well-being of the overall population. Consequently, organic food is renowned for its nutritious value and overall wholesomeness. The surge in the demand for organic food can be attributed to the public's increasing awareness of its beneficial impact on health, as well as the negative consequences of consuming food laden with toxins that flood the market and contribute to various health issues.

A captivating analysis by Techsci Research predicts a remarkable future for the global organic food market, with a projected value of $110.25 billion by 2025 and a promising annual growth rate of 16.25 percent. This flourishing industry, driven by the increasing demand for a healthy lifestyle among the general public, opens up vast opportunities for ambitious entrepreneurs to venture into unexplored business territories (TechSci, 2020).

Delving into the fascinating world of organic food, the focus narrows down to Whole Foods Market IP, Inc. The case study illuminates various aspects of their

operations, agri-food production methods, expansion strategies, growth potential, challenges to overcome, and the plethora of opportunities that exist within the organic food industry. Its primary objective is to provide valuable insights to the students, acquainting them with both the potential rewards and difficulties that lie ahead in this dynamic sector. Furthermore, the case serves as a gateway to the realm of organic agriculture, propelled by sustainable farming practices. These practices not only promote environmental stewardship but also bestow a competitive advantage upon companies that embrace them. By exploring this exciting new field, businesses can leverage these practices to stand out in the market and seize success.

Background

Back in the groovy year of 1978, two trailblazers named Ranee Lawson and John Mackey breathed life into Safeway, a revolutionary food store specializing in natural vegetarian fare. But the story doesn't end there! In a stroke of brilliance, Safeway joined forces with Clarksville Naturals in 1980, birthing a whole new entity known as Whole Foods Market (WFM).

With its vibrant headquarters nestled in the heart of Austin, Texas, the WFM has sprouted into a flourishing empire, boasting a dazzling constellation of 500 supermarkets that stretch across the United States, the United Kingdom, and Canada. What sets this company apart from the rest is its coveted certification as an organic grocer, proudly bestowed upon it by the ever-discerning United States Food and Drug Administration (USFDA). This means that their tantalizing goods are free from preservatives, flavors, synthetic colors, and notorious hydrogenated fats.

Armed with a dedicated workforce of 19 individuals, WFM embarked on a remarkable journey of growth, expanding its presence across diverse regions in the United States, United Kingdom, and Canada. This awe-inspiring expansion was made possible through the company's strategic approach of acquiring pre-existing natural food stores, paving the way for its extraordinary success.

By the year 1999, WFM achieved a monumental milestone, proudly unveiling its 100th store nestled amidst the sunny landscape of California. To document its trailblazing journey of merger and acquisitions, Table I showcase the company's growth.

In 2005, a pivot chapter unfolded as WFM shifted its central operations to a grand flagship store sprawled across an impressive 80,000 square feet in Austin, This move signified a new era of progress and innovation for the company. Fueling its operation with a touch of environmental consciousness, WFM introduced a groundbreaking concept in 2008- the revolutionary "green distribution centers.' The first of these eco-friendly hubs was established in Bridgeton, Georgia, heralding a new approach to sustainable practices within the industry.

As the company's reach expanded rapidly throughout the United States and Canada, managing and overseeing operations posed a unique set of challenges. To streamline the business and ensure efficiency, certain stores underwent transitions, with 35 Lentry's Farmers Market changing hands and select branches of Smart & Find Inc. being divested. Additionally, three stores in Atlanta, Everette, and Landover were regrettably closed.

Within a decade, WFM solidified its position as America's go-to destination for healthy groceries, proudly embracing its "natural" identity. The company made a solemn promise to its cherished customers, offering minimally processed food products that were free from undesirable ingredients such as hydrogenated fats, artificial flavors, sweeteners, colors, and preservatives. This commitment to quality and sustainability became the cornerstone of WFM's ethos, captivating the hearts and palates of health-conscious individuals nationwide.

International Expansion

Venturing beyond borders, WFM embarked on an international odyssey in 2002, setting its sights on the enchanting land of Canada. The inaugural store, a beacon of healthful goodness, emerged in the city of Toronto, Ontario. Since then, a delectable bouquet of 12 stores has bloomed across the country, gracing the cities of Vancouver, Greater Toronto, Victoria, Calgary, Edmonton, and Ottawa. Each location adds its own touch to the tapestry of WFM's Canadian presence.

In the quest to conquer new horizons, WFM crossed the Atlantic in 2004, with the United Kingdom beckoning with open arms. It expanded its operations by acquiring Fresh and Wild stores, marking a significant milestone in the company's global expansion. Soon it unveiled a retail marvel on Kensington High Street, proudly boasting the title of the world's largest store, spanning a colossal 80,000 square feet. Presently, WFM runs 9 stores across the United Kingdom and it envisions multiplying the number of stores to the lofty count of forty with an unwavering commitment to providing quality, organic food to the populace. In the year 2011, WFM entered Scotland with its first store in the bustling streets of Glasgow. The path to success is not without hurdles. Some stores in the UK faced financial challenges. For instance, the Bristol branch was unable to meet its profitability goals and bid farewell to its loyal patrons by 2008. The company weathered the storm of the global recession, with the UK subsidiary grappling with

a significant impairment charge of $ 27 million. But true resilience shines through the face of adversity, as WFM remains steadfast in its pursuit of spreading the gospel of wholesome living across the globe.

Major Milestones

Despite enduring the heart-wrenching blow of losing a staggering $400,000 worth of inventory to the wrath of devastating floods in 1981, WFM rose from the ashes like a resilient phoenix. With an indomitable spirit and strategic vision, the company embarked on an acquisition spree, breathing a new life into previously established businesses. The tenacious effort not only allowed WFM to reopen its stores but also resulted in a remarkable financial turnaround, reaping profits of a whopping $188 million within two years of the disaster. Truly a tale of triumph against all odds.

In a defining moment of its journey, WFM took a bold leap and became a publicly traded company in 1992, opening up new avenues for growth and expansion. As the years rolled by, the company set its sights on international horizons, crossing borders to establish its very first store outside the United States in Canada in 2002. This marked the dawn of a thrilling chapter in the company's global presence, as it

began to spread its philosophy of mindful consumption to new corners of the world.

WFM's unwavering commitment to sustainability and eco-conscious practices garnered well-deserved recognition in 2004 when it secured the third spot on the prestigious U.S. Environmental Protection Agency (EPA) top 25 Green Power Partners list. These sustainable efforts not only earned the company the EPA Green Power Partner Award for two consecutive years but also cemented its position as the second-largest green power purchaser and generator, proudly relying on renewable energy sources to fuel its operations.

Unveiling a grand flagship store in Downtown Austin, WFM continued to redefine the concept of grocery shopping. In 2008, the company embraced innovation with the inauguration of its first green distribution center. The groundbreaking facility aimed to minimize the environmental impact throughout the entire supply chain, introducing a multitude of green initiatives, from warehouse restructuring to sustainable packaging and final-mile delivery, effectively reducing carbon footprints.

The path of WFM intertwined with another industry giant in 2017, as Amazon acquired the company for a staggering $ 13.7 billion. The alliance sought to

revolutionize the shopping experience for WFM customers by integrating online shopping with the convenience of an Amazon Prime account. The novel concept allowed Amazon Prime holders to place orders online and collect their groceries in-store, all at no additional cost. Demonstrating its commitment to growth and innovation. Amazon further expanded the WFM in 2019 by acquiring and transforming Sears and Kmart stores into thriving WFM locations.

The year 2022 ushered in yet another wave of innovation as Amazon introduced an advanced payment system, enabling customers to conveniently settle bills by simply scanning their palms. This cutting-edge technology aimed to create a seamless customer service experience, ensuring that each interaction with WFM remained effortless and delightful.

Through trials and triumphs, WFM has emerged as a symbol of resilience, sustainability, customer-centricity, and commitment to providing wholesome nourishment to communities across the globe.

Sustainable Initiatives

WFM stands resolute in its mission to offer environmentally responsible and ecologically friendly products, embodying the essence of a truly healthy grocery store. With a steadfast commitment to quality, WFM abstains from selling genetically modified organism (GMO) animal meat and milk, ensuring that all products adhere to the rigorous standards of USFDA-certified organic certification. To maintain the integrity of its offerings, WFM diligently upholds the stringent guidelines set by the United States Department of Agriculture (USDA). Any product claiming to be organic must meet the criteria of containing at least 95 percent organic content, adhering to the principles of sustainability and mindful consumption.

Harnessing the power of knowledge, WFM empowers its customers by implementing in-store rating systems for various products. For instance, a comprehensive sustainability rating system has been developed, accompanied by aquaculture standards for seafood and farm-raised fish. These standards are verified by independent third-party auditors, ensuring transparency and accountability. WFM's dedication to sustainable practices extends beyond its shelves, reaching into the realm of marine conservation. Through its collaboration with the Marine Stewardship Council (MSC), a noble not-for-profit organization.

WFM actively promotes sustainable fishing practices and endeavors to safeguard endangered species for generations to come. As a testament to this commitment, WFM exclusively sells MSC-certified fish in its stores.

Embracing renewable energy sources, WFM has joined forces with SolarCity to revolutionize its energy requirements. By installing solar panels and utilizing biomass, geothermal, small hydro, and wind energy sources, WFM pioneers the way toward a greener, more sustainable future. WFM took bold steps to minimize environmental impact and became the first supermarket in the US to eliminate disposable plastic grocery bags from its stores. This visionary move seeks to conserve resources and foster a culture of reusability, offering customers reusable bags made from recycled plastic bottles or paper. Through initiatives such as Bring Your Own Bag (BYOB) and a bag refund program, WFM aims to combat pollution and reduce waste.

With an unwavering commitment to animal welfare, WFM has established rigorous standards for its natural meat products. Prohibiting practices such as feather pulling, bill heat treatment, bill trimming, slitting webs of feet, toe punching, and the use of antimicrobial agents, antibiotics, and genetically modified or cloned animal meat, WFM ensures that the meat it sells adheres to the highest ethical standards. In an age of increasing concern over genetically modified

organisms. WFM launched a groundbreaking GMO transparency program in 2018. This initiative urges growers to disclose the use of GMO materials or seeds in the cultivation of their products, promoting transparency and enabling customers to make informed choices.

WFM also shares vital information with customers, ranging from farm environmental practices and worker safety measures to labor welfare initiatives, enhancing transparency and fostering greater awareness.

WFM's Whole Trade Guarantee (WTG) program embraces social responsibility by sourcing products from developing countries. By offering fair prices to farmers in these nations and prioritizing eco-friendly cultivation practices. WFM ensures that the products it offers are not only of the highest quality but also contribute to the betterment of communities worldwide. Through the WTG program, WFM even extends micro-loans to developing countries under the auspices of the Whole Planet Foundation, allocating 5 percent of its profits towards charitable causes across the globe. WFM embodies a holistic approach to business intertwining sustainability, transparency, and social responsibility.

USPs

WFM proudly showcases a magnificent array of products certified by the USDA's National Organic Program (NOP). This esteemed program, a guardian of the organic farming industry in the US, ensures that WFM adheres to the highest standards of quality and purity. Delving deeper into the realm of organic, WFM shows an extraordinary assortment of animal products, including meat, milk, cheese, honey, and more. The distinction lies in the fact that these delectable offerings are crafted without the use of growth hormones or antibiotics. In an effort to ensure that every product gracing its shelves meets the rigorous standards set forth by USDA, NOP, and WFM conducts regular audits, WFM is no stranger to pushing boundaries and embracing innovation. Standing at the forefront of this revolution is their pioneering adoption of green distribution centers. Embracing the concept of green logistics, WFM navigates the intricate web of supply chain management with the utmost care and consideration for the environment. Waste reduction, emission control, and carbon footprint mitigation are guiding principles that shape their every decision. WFM integrates sustainability into every aspect of operations from order processing, packaging, and final-mile delivery. By harnessing automation they deliver a seamless and delightful shopping experience to their customers. For instance, with online orders by Amazon Prime members and Amazon's innovative one system, the shopping experience reached

unprecedented heights with a simple scan of the palm, the payment process becomes effortless. WFM has elevated the concept of organic living to extraordinary heights, breathing life into the principles of sustainability, quality, and innovation.

WFM Controversies

WFM has encountered its fair share of controversies, encompassing various aspects of its business practices, relating to labor relations, sourcing of food products, etc. Some of the controversies are:

Inhumane treatment: In 2006, WFM made publicly declared that it would cease the sale of lobsters and crabs. However, the following year, they resumed selling lobsters that were kept in separate compartments, rather than being piled on top of one another. This decision ignited a storm of criticism as concerns were raised regarding the inhumane treatment of these crustaceans, another point contented was with regard to the method used to capture the lobsters. Rather than the conventional practice of boiling them in a pot of hot water, WFM employed the use of a 120-Volt shock. This method drew intense scrutiny and sparked debates surrounding the ethical treatment of creatures. Critics argued the way the lobsters

were confined to private compartments lacked transparency in terms of traceability, raising the questions about overall welfare and quality of the product (Kelly, 2023).

In 2014, WFM made a bold move by introducing rabbit meat into its stores. However, this decision ruffled the feathers of the House Rabbit Society, a passionate group advocating for vegetarianism. The organization, appalled by the notion of consuming rabbits, which happened to be the eighth most common household pet in the US, swiftly initiated a boycott against WFM. The following year, brought another wave of controversy crashing upon WFM. Direct Action Everywhere (DxE), an activist group with a knack for shining a light on animal welfare issues, released a gripping video clip. This exposed delved into the world of a laying hens farm that supplied eggs to WFM, revealing a distressing reality. The footage vividly showcased the cramped and unsanitary conditions in which these hens were raised, including distressing images of injured and suffering animals.

People for Ethical Treatment of Animals (PETA) and DxE seized to voice their concerns and condemn WFM for its alleged lack of animal welfare standards. Accusations of animal cruelty were hurled at both the company and its suppliers, creating a heated debate surrounding ethical practices within the industry. Adding

fuel to the fire, a diligent food safety inspector conducted an inspection and uncovered gross violations that not only tainted the reputation of the products but also posed potential health risks. Inspector found contaminated food, unsanitary conditions, and filth on food (Kelly, 2023).

Anti-labor practices: WFM has found itself entangled in a web of controversies when it comes to employee relations. Some worker groups consider the company to be anti-labor, with the number of instances reinforcing this perception. One such incident unfolded in Albuquerque, Mexico store, where two workers were suspended for conversing in Spanish. WFM's policy dictated that English should be spoken to customers and team members while on the clock. This enforcement of an English-only rule drew criticism and ignited debate regarding language diversity and inclusivity(Kelly, 2023).

Further scrutiny revealed troubling practices within WFM. A Business Insider investigation shed light on excessive monitoring of stores with the aim of identifying and targeting employees involved in unionization efforts. The metrics used to gauge employees loyalty, turnover, and racial diversity raised concerns about the company's commitment to fair labor practices.

The year 2020 witnessed yet another controversy when two workers were sent home for wearing masks bearing powerful slogans such as "I can't breathe" and "Black Lives Matter." The masks were deemed a violation of the dress code, which prohibited visible slogans, messages, logos, or advertising not directly related to WFM. This decision triggered a backlash on social media, sparking conversations about freedom of expression and the company's stance on social justice issues (Kelly, 2023).

In addition to these labor-related incidents, WFM faced backlash for naming a restaurant "Yellow Fever", a name that some perceived as carrying racist undertones and demeaning Asian women. The controversy highlighted the importance of sensitivity and awareness in the branding and marketing decisions made by the company.

Across the border in Canada, a female worker at a WFM store encountered resistance when she sought to wear a Remembrance Day poppy – a symbol of honor and remembrance – on the designated day. The ban on wearing the poppy, a longstanding tradition in Canada, drew significant public outcry. The House of Commons of Canada unanimously adopted a motion condemning the WFM and its owner, Jeff Bezos, for this decision. Eventually, WFM rectified its policy and

allowed employees to proudly wear poppies in honor of Remembrance Day (Kelly, 2023).

Anti-competitive pricing: WFM faced criticism and accusations related to anti-competitive pricing. One notable issue revolves around the promotion of in-house brands at the expense of smaller or local independent brands. This strategy prompted a boycott of WFM products, with consumers expressing their dissatisfaction over the company's favoritism towards its own brands. In 2014, WFM faced penalties and was required to pay $800,000 following allegations that it charged more per weight than what was labeled on certain products. The New York City Department of Consumer Affairs uncovered evidence suggesting that this practice persisted even after a settlement was reached. Such findings further fueled public skepticism and eroded trust in the company's pricing practices (Kelly, 2023).

Unsustainable products: WFM came under scrutiny for its involvement in the sale of body care products containing high levels of 1,4-Dioxane, a chemical known to be carcinogenic. The Organic Consumers Association's findings raised concerns about the sustainability and safety of these products, while the company spokesperson, Libba Letton, maintained that these products did not pose a health risk beyond the safe harbor level defined by California's Proposition 65, the

controversy surrounding the use of such chemicals heightened consumer apprehension(Kelly, 2023).

These instances highlight the importance of transparency, fair practices, and responsible sourcing in the booming organic food industry. The concerns raised by consumers regarding the anti-competitive pricing, presence of potentially harmful substances, and inhuman treatment of animals underline the need for companies like WFM to prioritize ethical considerations and address sustainability issues.

Road Ahead

According to a recent research report by TechSci (2022), the organic farming industry is projected to experience a remarkable annual growth rate of 16.25 percent. These promising statistics present a lucrative opportunity for aspiring entrepreneurs to venture into the thriving organic farming sector (TechSci, 2020). By delving into the case of WFM, one can gain valuable insights into the challenges and obstacles faced by organic stores, paving the way for informed decisions and successful business ventures. As consumers increasingly prioritize the sourcing and rearing of food products, the issue of traceability has emerged as a significant concern. However, the integration of blockchain technology has the

potential to alleviate this problem effectively. By implementing a robust labeling process and harnessing the power of blockchain technology throughout the entire value chain, many of the existing challenges faced by WFM and other organic retailers can be resolved. This approach would ensure transparency and traceability, providing consumers with the confidence and reassurance they seek when making conscious food choices.

Furthermore, automating various processes within the organic farming and retail industry can yield substantial benefits. By reducing human intervention and minimizing errors, automation enhances the efficiency of operations across the board. This not only streamlines processes but also increases overall productivity and effectiveness.

By embracing blockchain technology, implementing accurate labeling systems, and harnessing the power of automation, the organic farming industry can navigate its challenges and forge a path toward a sustainable and transparent future. This in turn, will empower entrepreneurs and enable them to capitalize on the growing demand for organic products, creating a win-win situation for both businesses and consumers alike.

References

Kelly, D. (2023, Feb 2023). https://www.mashed.com/169625/scandals-whole-foods-can-never-live-down/. Retrieved from www. mashed.com: https://www.mashed.com/169625/scandals-whole-foods-can-never-live-down/

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TEACHING NOTE

SUMMARY

The organic farming industry has experienced significant growth in recent years, driven by increasing consumer demand for healthier and sustainably produced food products. This case study explores the opportunities, challenges, and technological solutions within the organic farming sector. With an annual growth rate of 16.25 percent projected for organic farming, aspiring entrepreneurs are presented with a promising market to venture into. Learning from successful case studies, such as Whole Foods Market (WFM) provides valuable insights into the problems and challenges faced by organic stores, enabling entrepreneurs to make informed decisions and capitalize on this expanding industry.

One of the key challenges in organic farming is traceability, as consumers are becoming more conscious about the sourcing and rearing of their food. Blockchain technology offers a potential solution by providing a transparent and immutable system for tracking products from farm to fork. Implementing accurate labeling processes and integrating blockchain across the value chain can enhance transparency, build consumer trust, and mitigate traceability issues.

Additionally, automation plays a vital role in streamlining organic farming processes. By reducing human intervention and minimizing errors, automation enhances efficiency, productivity, and overall operational effectiveness. By embracing these technological solutions, entrepreneurs can meet consumer demands for organic products while promoting transparency, traceability, and health-conscious practices in the organic farming and retail sector.

BASIC ISSUES

- Problems faced by organic stores like WFM.

LEARNING OBJECTIVES

The case will help students to understand

- Value chain of Organic farming

- Benefits of organic farming

- Green distribution channel, green warehouse, green packaging, and green transportation

- Difference between organic farming and sustainable farming

- Issues and challenges of organic farming

SUGGESTED TEACHING APPROACH

The students may be asked to read the case thoroughly and list the key issues. The instructor can first introduce the case with a brief illustration of the growth prospects and benefits of organic farming and stores. The instructor can divide the class into groups and instruct each group to analyze objectives in detail. After the analysis by each group, they may be asked to present their findings to the class and the instructor can take forward the discussions by raising relevant questions and issues.

PROPOSED SESSION PLAN

Introduction of the case – 10 minutes

Class discussion to understand the issues of the case – 15 minutes

Discussion for question 1: 10 minutes

Discussion for question 2: 10 minutes

Discussion for question 3: 10 minutes

Discussion for question 4: 10 minutes

Discussion for question 5: 10 minutes

Summary of the case: 15 minutes

Total expected session time: 90 minutes

SUGGESTED QUESTIONS FOR DISCUSSION

1. Elucidate the value chain of organic farming.

2. Critically examine the benefits of organic farming.

3. Comment on sustainable practices adopted by WFM.

4. Differentiate between organic and sustainable farming.

5. Elucidate the challenges faced by WFM and suggest how to overcome the challenges.

SUGGESTED ASSIGNMENTS FOR STUDENTS

Preparatory Assignment:

Before the actual discussion of the case, the students may be divided into groups and given the following assignments and may be asked to prepare a note of any two questions given here:

- Prepare a note on organic farming

- Analyze the sustainable initiatives undertaken by different organizations similar to WFM.

Follow-up Assignment

- Identify the best sustainable initiatives.

Nature of the case

The case has been developed through secondary research. The information has been gathered from published sources and the literature available.