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Policy

JCAS (Journal of China-ASEAN Studies) is an open-access, peer-reviewed bi-annual journal of China-ASEAN International College, Dhurakij Pundit University. It is the premiere forum for global researchers, teachers, policy makers, leaders, managers and administrators, interested in all aspects of Southeast Asian countries and China.

JCAS will publish two volumes in June and December annually, which aims to support and inform researchers, scientists, and scholars, administrators, educators, emerging and established researchers, and policy makers interested in all facets of business, education, tourism, and arts related to Southeast Asian countries and China through the publication of original research that advances knowledge, theory and practice in the field include, wellness, Future Workforce, Thai-China, Business Innovation, Tourism, Hospitality, Leisure Studies, Information Technology, Marketing, Business & Management, Finance and Accounting, Communication Arts, Public Administration, Economics, Education & Teaching, Poverty in Education, Humanities, Arts & Design, Languages, Applied Science and Engineering and Social Sciences.

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JCAS aims to support and inform researchers, scientists, and scholars, administrators, educators, emerging and established researchers, and policy makers interested in all facets of business, education, tourism, and arts related to Southeast Asian countries and China through the publication of original research that advances knowledge, theory and practice in the field. *JCAS* publishes articles exploring concepts, strategies, approaches and issues related to China-ASEAN which contributes to theory and practice significantly and originally.

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- **Review article:** The manuscripts should be about 1500-3500. The manuscripts must include the current state of understanding on a particular topic about studies of Southeast Asian countries and China by analyzing and discussing research previously published by others

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JCAS is considered as a long academic journey and mission from nowhere in the past to somewhere at present. It, thus, without considerable efforts, sacrifices, contributions made by all related committee members, would never become a reality. The very first issue of the first volume of *JCAS* is officially published. Furthermore, we solidly sail and move towards the ultimate goal of being indexed in TCI 2, TCI 1, Scopus, ERIC and SSCI or so forth. Once again, we'd extend our special thanks to all the authors who contributed and those who participated.

Your sincerely



Chief Editor
Assist. Prof. Dr. Chun-Shuo Chen
Journal of China-ASEAN Studies

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Higher Education Curricula for Ecologically Sustainable Development

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Abstract

This paper considers the practice of higher education curricula for sustainable development under ecological crises. Therefore, the deficiency of an environmentally sustainable notion in higher education curricula is first examined based on the work of American educationist C. A. Bowers. Second, borrowing from the notion of deep ecology developed by Norwegian philosopher Arne Naess, I discuss the perspective of ecological significance, and how to develop a deep ecological attitude in university learning for sustainability. Third, drawing from the concepts of both Bowers and Naess, I elaborate on possible practices of sustainable development in higher education curricula, including defining the aims of sustainable education, exploring sustainable forms of cultural practice, developing an ecologically sustainable lifestyle, and formulating an interdisciplinary curriculum structure.

Keywords: higher education, curriculum, sustainability, ecology, sustainable development, Bowers, Naess

1. Introduction

Because of the increasing ecological crises regarding complying with high industrial development, sustainable development has received growing attention worldwide. Growing awareness of sustainable development is evidenced in international conventions and national policies. Education plays a crucial role in promoting sustainable development processes, a view that is emphasised in the following statement offered by The United Nations Educational, Scientific and Cultural Organization (UNESCO):

Sustainable development cannot be achieved by technological solutions, political regulation or financial instruments alone. Achieving sustainable development requires a change in the way we think and act, and consequently a transition to sustainable lifestyles, consumption and production patterns. Only education and learning at all levels and in all social contexts can bring about this critical change. (UNESCO, 2012a, p. 13)

Accordingly, higher education is an educational level that can employ environmental innovation for sustainable development. Learners who are university educated may lead global ecological change. However, commercial logic has contaminated higher education, and economics has heavily affected its teaching and learning outcomes, fostering ecological crises. Marginson (2014) observed that higher education institutes are expected to advance the global competitiveness of a nation by preparing and attracting knowledge-intensive labour. These institutes have unconsciously become educational instruments for economic improvement. Barnett (2014) warned that higher education has been framed within a narrow band of concepts, which has typically been associated with economics.

For sustainable development at a higher education level, Stephen Sterling and Barnett conceived the sustainable notion of the university. Sterling (2013) argued that socialisation and vocational goals do not account for the challenge of sustainability. Higher education requires a transformed educational paradigm. It provides vision, image, design, and action for achieving healthy societies and ecologically sustainable lifestyles. He argued that paradigm change is a transformative learning process, and defined the sustainable university as follows:

The sustainable university is one that through its guiding ethos, outlook and aspirations, governance, research, curriculum, community links, campus management, monitoring and modus operandi seeks explicitly to explore, develop, contribute to, embody and manifest—critically and reflexively—the kinds of values, concepts and ideas, challenges and approaches that are emerging from the growing global sustainability discourse. (Sterling, 2013, p. 23)

Sterling indicated that university curricula should produce innovative values, concepts, and ideas for leading sustainable development, particularly related to critical and reflexive perspectives. Barnett claimed that the *ecological university* is emerging. The ecological university is the university that 'takes seriously both the world's interconnectedness and the university's interconnectedness with the world' (Barnett, 2011, p. 451). According to Barnett, the ecological university cannot enclose itself; it is an institute 'for the other', where 'the other' is typically outside its campus. The ecological university functions in promoting world wellbeing, and helps to create a sustainable world. The students in this type of university can be identified as global citizens who are concerned about global development. They also understand their responsibilities in the world and towards the world.

Sterling and Barnett presented an imaginative blueprint of a sustainable university by discussing the possibilities of embedding the notion of ecology or sustainability into higher education. Following their proposal, this paper explores how a university curriculum can inspire students to understand their responsibilities for improving the world. Curriculum practice is an effective channel for transforming values, concepts, and notions of environmental sustainability. Proper knowledge of ecology is essential for conducting meaningful acts that prevent ecological harm to the Earth. Education takes responsibility for solving environmental problems and facing ecological crises. However, the meaning of sustainability could be limited to internationalisation, employability, and enterprise (Sterling, 2013). Similarly, the university curriculum has been narrowly manipulated for the purpose of job-obtainment, economic production, or operational capacities. This trend is typically evident when 'graduate attributes' are formulated in university curricula (Barrie, 2006). This study primarily focused on developing a robust circulation of ecology by employing a broad concept of nature to substitute for 'society' or 'world,' which is narrow. The ecological learning related to developing ecological attitudes or values in higher education was explored in this study. Naess stated that studies 'dealing with humans' *deep attitudes* towards nature and of how they could be changed... are neglected or not even seen as relevant in most schools, universities, or privately financed research institutions' (Naess, 2005, p. 19). The possibility for creating deep attitudes was the focus of this study. In higher education, sustainable education practices primarily involve changing the physical environment or guiding institutional sustainable management, and are rarely concerned with the cultural level of ecological practices. Spiritual growth concerning human interaction with nature has also received scant attention. However, the intrinsic value of nature is a fundamental topic to be learned (or experienced) in university curricula. For exploring this notion, I first examined the deficiency of the environmentally sustainable notion in higher education curricula based on the work of C. A. Bowers, an American educationist who focused long-term attention on ecological issues. His work particularly explored the ecological crises in higher education. Second, borrowing the notion of deep ecology from Norwegian philosopher Naess, I discuss the perspective of ecological significance, and how to develop a deep ecological attitude in university learning for sustainability. Drawing from both concepts of Bowers and Naess, I elaborate on certain notions concerning possible practices in a higher education curriculum for accomplishing sustainable education.

2. Ecological crises and higher education curricula

Bowers (1993) asserted that ecological sustainability cannot avoid the influence of culture and ideology. In his view, ecological sustainability cannot be accomplished until knowledge, technological practices, and communal relationships are sustainable. Bowers reflected that American society has become a consumption-addicted society, in which higher education has unavoidably become involved in the consumptive approach. Bowers stated

The university, especially in the United States, has become increasingly oriented toward providing the knowledge for the development of new technologies, as well as educating students to equate consumerism with personal success and happiness. (Bowers, 2011, p. 15)

Universities play an essential role in scientific improvement. However, according to Bowers (2011), new scientific technology that universities support is unable to manage the crises of hyper-consumerism. By contrast, it promotes the expansion of economic consumerism, or a consumer-dependent lifestyle. To solve this problem, Bowers indicated that university curricula must examine the conceptual roots of the current ecological and cultural crisis. Certain cultural assumptions show environmental limits; however, most university faculty members are unaware of them. University academic professions have also been overly differentiated. In Bowers' view, examining the solutions of ecological crises requires cross-discipline dialogues. Nevertheless, the university curriculum reform is unable to respond to the requirement by changing the traditional curriculum structure.

Bowers posited that instead of seeking for individual success and happiness promoted by industrial culture, a curriculum reform must be guided by university faculty to 'enable current and future generations to live in more ecologically sustainable ways' (Bowers, 2011, p. 30). Bowers described this curriculum reform as follows:

The basis for the claim that curriculum reform must go beyond exposing students to the environmental sciences, and to an examination of environmental issues from the perspective of various disciplines, is that students now need to learn how to become less dependent upon the products and expert services of the market economy that are overshooting the sustaining capacity of natural systems. (Bowers, 2011, p. 31)

University students are excessively dependent on commercial products in their consumptive culture. Their desires are easily stimulated by attractive advertisements guided by the market economy. They buy more than they need, which causes a waste of resources and environmental harm. Bowers stated that, even in environmentally-oriented courses, the curricula ignore the ecological importance of cultural and environmental commonality. The industrial consumer-oriented culture has not been sufficiently examined in university curricula. University teachers engaged in improving a consumer-based economy, rather than making 'the cultural patterns that are deepening the ecological crisis part of their curriculum and pedagogy' (Bowers, 2011, p. 182). Students are taught that nature can be managed under technological and economic control.

Bowers considered the ecological crisis to be linked to a crisis of cultural values and knowledge. Cultivating ecological intelligence is therefore central to university educational reforms (Bowers, 2011, p. 182). This ecological intelligence refers to a wide range of cultural practices; however, it is always ignored in university curricula. Although Bowers' criticism was based on Western culture, following the globalisation trend, economy-based culture is also observable in numerous Asian countries, in which sustainability in higher education has been narrowly explained as economic and technological development for guaranteeing national prosperity and sustainable existence. This is a global phenomenon that compounds ecological crises.

3. Deep ecology movement

Similar to Bowers' analyses, Naess (1995a) revealed that excessive consumption and waste are primary elements causing ecological crises. Naess and George Sessions formulated the principles of the deep ecology movement as the solution to ecological crises. The inverse of deep ecology is shallow ecology, which concerns economic growth and applied technology in the strategy of maintaining healthy environment. Human interest is dominant in managing ecological problems. Following scientific perspective of the world, the concept of shallow ecology regards all objects in the ecosystem as independent fragments. This notion is generated by anthropocentrism, in which humans are considered the rulers of nature. In contrast to shallow ecology, the concept of deep ecology espouses ecocentrism. Instead of humans as owners of the Earth, they are merely one of the inhabitants, in an equal position as other living or non-living beings. Drawing from gestalt thinking, the deep ecological concept asserts that all things on the Earth constitute a systematic wholeness, which cannot be separated as many individual parts, but that 'everything hangs together' (Naess, 1995b, p. 19). Humans cannot avoid identifying themselves with all living beings.

Naess asserted that, instead of the level of economic development, an ecologically sustainable development is a vital indication of a developed country. Based on his notion of deep ecology, Naess believed that human or nonhuman life has intrinsic value, which is independent of human purposes. All creatures in the ecosystem are equal, referred to as biospherical egalitarianism (Naess, 1995c), and human interference with the nonhuman world should be reduced as much as possible. Concerning human life, rather than a higher standard of living, Naess preferred richness and diversity of life. A higher standard of living is achieved through a high capacity of economic consumption, whereas richness and diversity of life derives from a simple mode of life with less desire. The deep ecology concept teaches that sustainability is related to human development and expands its territory towards sustainable development of nonhuman or non-living forms. Rivers, mountains, and landscape are aspects of human life that belong to the environment that humans rely on. Humans do not live merely in human society, but in natural ecological communities. The human requirement is equal to the requirement of other beings in the ecosystem. The biodiversity notion welcomes an existence with all beings in nature. Naess claimed that he did not regard deep ecology as philosophy, ideology, or religion, but as a social movement or action for which people strive (Naess, 2008). He envisioned that the deep ecology concept could enlighten people's ecological practices. Initiating acts for deep change of sustainable development first requires the deep ecology attitude as a key element. I further elaborate on Naess' account for developing a deep ecological attitude as follows.

4. Understanding the intrinsic value of interacting with nature

Improving sustainable development first requires clarifying nature and human relationship with nature. Nature is generally defined as a physical environment where humans' dwell. It provides useful materials or nourishment that humans require for life and propagation. However, because of industrial development, humans demand resources from nature that exceed vital needs. Capitalists manufacture products by exploiting natural resources and exchanging for more capital, and consumption is encouraged under large amounts of industrial production. Excessive extravagance is easily observed, accompanied by economic development, the human living standard is continually rising. However, human greed has led to severe exploitation of nature. Numerous biological species are on the verge of extinction because of loss of habitat or being caught in excessive numbers. Humans have gradually alienated themselves from nature. Instead of harmony, conflict exists between humans and other beings. Humans are rich in living materials, but poor in mind; they suppose a better life has been created, but what has been created is a distorted attitude to life.

Naess argued that life quality exists in situations of inherent value, rather than adhering to an increasingly higher standard of living (Naess, 1995a). This inherent value is independent of any consciousness of interest by a conscious being. How can this intrinsic value be compatible with nature? In addition to the basic requirement for life, nature possesses remarkable power that supports human spiritual growth. Writers or artists obtain their inspiration from nature. Mountaineers enjoy walking amidst a beautiful landscape in nature. Nature has the power to comfort or inspire people's minds. In addition, nature exercises by means of a regular pattern. Human bodies work well when following this natural pattern and are not independent of the rule of nature. Sustainable development must be considered according to human requirements and nature as a whole where humans' dwell. Naess suggested that the ecology movement is 'a movement from being in the world to being in nature' (Naess, 1995b, p. 27). Naess' concern is not limited to the human world, but encompasses all beings in the ecological environment of Earth.

Naess raised the notion of self-realisation for exploring human intrinsic value. This concept is unrelated to accomplishing individual economic achievement or social position. Students are not educated for responding to consumerism with personal success and happiness in the aim of self-realisation. Rather than obtaining material advantage, self-realisation relies on 'relaxing from striving' (Naess, 1995b, p. 29) and is not self-centred (Bragg, 1996). For Naess, self-realisation is the inherent human capacity for embracing other beings in the self. This notion is close to what Buddhism calls compassion, which refers to care for all beings without requiring any benefit. Naess stated that 'the higher the self-realisation attained by anyone, the broader and deeper the identification with others' (Naess, 1995d). Instead of the minimal self, the Self in Self-realisation is the great Self. Naess held the interdependent view of looking at self with others. Our identification with others can occur when we recognise all beings are in oneness. The inner self becomes broader and deeper after identifying with others. What Naess referred to as a 'deep ecological attitude' (Naess, 1995e) requires this practice of identification. Naess therefore suggested the view of gestalt thinking, according to which 'the whole is greater than the sum of its parts' (Naess, 1995f, p. 241). All beings comprise the whole in an ecosystem. The gestalt notion breaks through the modernist subject-object dualism in viewing nature and inspires *spiritual interchange* (Devall, 1995) in encounters with nature. The notion of the self is expanded by identifying with others. This selfless open mind can accommodate everything in nature. When humans engage in harmonious interaction with nature, sustainable development is ensured.

5. Curricula for sustainable development

Regarding curriculum implementation, education for sustainable development is far more than teaching knowledge and principles related to sustainability (UNESCO, 2012b). Based on Bowers' reflection of the cultural roots of higher education and Naess' suggestion of a deep ecological attitude, I explore notions of higher education curriculum in this section. I begin with curriculum practices with the aim of sustainable education.

5.1 Aim of sustainable education

Regarding the aim of sustainable education, I refer to the description in UNESCO's document.

Education for sustainable development (ESD) is education for the future, for everyone everywhere. ESD enables everyone to acquire the values, competencies, skills and knowledge that are necessary to shape sustainable development. ... ESD creates active and ecologically responsible citizens and consumers who are prepared to address the complex global and local challenges facing the world today. (UNESCO, 2012a, p. 16)

According to this text, ESD guides learners to obtain necessary values, competencies, skills, and knowledge in facing current environmental challenges. Its final goal is to cultivate an ecologically responsible citizen who acts in green ways in their daily life for ecological sustainability. Hence, it is essential for learners to search for their intrinsic values in nature, an exploration that can motivate their green attitude and support their harmonious interaction with nature. Bowers indicated that higher education has been governed by market logic that conducts students to develop a minimal self (or ego-self) and to be a winner in free market competition. The notion of a minimal self is merely a narrow sense of personal growth (Devall, 1995) that emphasises individual survival; however, it causes humans spiritual loss. Students must seek intrinsic value rather than material value. According to Naess' suggestion, self-realisation is a self-realisation of all beings. Similarly, an ecologically responsible citizen is the citizen of an ecological community who assumes responsibility for the life of all beings. This thinking could guide university curricula in an alternative approach. The following section provides some suggestions for university curricula in practicing sustainable education.

5.2 Exploring sustainable forms of cultural practice

Bowers examined the industrial consumer-oriented culture in higher education (1993, 2011) and provided examples for university learners to explore various sustainable forms of cultural practice for developing ecological intelligence. First, he suggested that students listen to folk knowledge in their community for clarifying and improving upon this knowledge in curricula. Second, university curricula must 'promote an in-depth study of cultures that have developed a form of intelligence and metaphorical language that takes account of the sustainable characteristics of natural systems in their bioregion' (Bowers, 2011, p. 185). Aborigines possess more ecological wisdom than city residents do, and have an ecological intelligence of natural preservation. This consciousness of environmental protection is obtained from their traditions, as seen in their cultural rituals, poetry, or dances for deities. Ecological wisdom also exists in their indigenous language. Third, ecological wisdom can be learnt from earlier generations. Although we strive to obtain ecological knowledge from science or new technology, many ecological insights already exist in traditional culture, which are ignored or taken for granted. Certain conventional moral values consider environmental preservation, an intelligence that can be studied in university classrooms.

5.3 Developing an ecologically sustainable lifestyle

Maintaining a sustainable lifestyle is essential to sustainable education, but it is the most difficult aspect of education. A green lifestyle derives from an in-depth knowledge of ecology and nature. Nevertheless, university learners are governed by a consumer-driven lifestyle in the current industrialised society. A critical examination of students' previous experience is essential. This strategy assists them in detecting the ideology by which they have been controlled. Their thinking regarding the environment must move from anthropocentrism to ecocentrism, from individual survival to harmonious symbioses, similar to Naess' claim that 'everything hangs together'. Sustainable development must be accomplished using gestalt thinking (Naess, 2010). Enclosing ourselves will not achieve sustainability; an interactive being is the only being with ecological intelligence. Nature is an intelligent teacher for humans; however, it relies on whether humans perceive its profound doctrine. Wisdom derived from nature leads to a simple and natural lifestyle.

5.4 Interdisciplinary curriculum structure

In universities, the solution for ecological crises can be most effectively addressed using a cross-discipline approach. Bowers suggested that cross-discipline dialogues are essential. UNESCO assumes the same view, that interdisciplinary expertise is the optimal approach for supporting

sustainable development in education. However, the current curriculum structure in higher education is over-differentiated and cannot meet this requirement. Ecological crises cannot be solved using only one discipline. Students' understanding of ecology should derive from various learning resources, which promotes diverse viewpoints. In the university curriculum, general education may be an appropriate learning field for integrating various disciplines for learning sustainability. Sustainable education typically tends towards the sciences (such as ecological engineering, environmental resources, and ecological preservation) or social sciences (such as green economies, green societies, ecological education, or ecotourism). Most of these disciplines are valuable for ecological practice. However, humanities are a seemingly *null curriculum* in ecological learning. The disciplines of literature, history, philosophy, or the arts promote scant discussion on sustainable education. This is unfortunate because humanities provide critical pathways for viewing the intrinsic values of nature in culture. Humanities also help students experience rich intelligence in nature. The ecological crisis is built upon fallacious ecological knowledge. By contrast, learning in spiritual and cultural aspects can elicit positive attitudes towards supporting university learners to adopt a sustainable lifestyle.

6. Concluding

This study suggests how to manage the current ecological crises, and considers the educational purpose of supporting university learners to live a rich and diverse life. Naess noted that 'there is ecological sustainability if, and only if, the richness and diversity of life-forms are sustained' (Naess, 2008, p. 297). We live *in* nature and are part *of* nature; therefore, we should do something *for* nature. Instead of a large-scale environmental revolution, consistent practice in daily life is more influential for ecological change. For the purpose of sustainability, the intrinsic value concealed in nature, as shown in local or aboriginal cultural practices, should be compatible with economic value. For educating ecologically responsible citizens, sustainable education must facilitate university learners to renew their perspective of being a human in nature.

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Case Study of Empirical Big Data Analytic Operations for Small Trading Company

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Abstract

Data driven supply chain management is an optimized system of supply chain data which improves inventory levels, lower costs, and reduced risks. Supply chain optimization is driven by the demand for efficient use of resources to maximize delivery while minimizing excess and obsolete inventories. By improving demand forecasting systems and integrating supply chain data, risks and costs are lowered. The research will explore the big data analytic method applied in the supply chain management of small trading company in Taiwan. The volume data of case company consists of inventory, sales, cost, logistic cost, product changing, and so on. The main findings are explored and policies are made. Findings: 1. Logistic cost is at least 11%. 2. Product change will be higher margin. 3. More sales in Taiwan & ASEAN countries. 4. Sales cost and labor cost is keeping stable even service business. 5. The business direction meets the government policy. 6. Outsourcing strategy is the right policy. From the findings we made our policies as the follows: 1. Investing IT system in SCM is more important issue. 2. Gross - margin is at least 30% and up. 3. In the small trading company, labor cost should be lower than 5%. 4. Managed service is higher margin. 5. USA, ASEAN countries are the main market in coming years.

Keywords: supply chain management, big data

1. Introduction

No doubt, analytics is the new competitive driver, surely, no field of business operations promises a more challenging contest of applied imagination than supply chain management. Visionary companies in many different industries are already deploying advanced supply chain analytics to gain an edge on their competitors. (Tobey, 2008) Many business operational are directly built big data analytics as in-line decision support resources for front-line personnel, rather than off-line, after-the-fact tools for management use alone.

More than 13 years operational data of small trading and channel corporate called JIT would use to analyze the facts of supply chain management and customers including cost variation, purchasing differences, locations, payment term, products, between products and customers, marketing strategies, and logistics operations.

2. Literature review

Data driven supply chain is an optimized system of supply chain data which improves inventory levels, lower costs, and reduced risks. Without proper integration in internal and external systems, supply chain analytics can be too complex or too costly to control. Supply chain optimization is driven by the demand for efficient use of resources to maximize delivery while minimizing excess and obsolete inventories. By improving demand forecasting systems and integrating supply chain data, risks and costs are lowered. As data volume and sources increase, a quality data system facilitates near real time analytics, reduces costs, and improves delivery. Informed decisions create efficiency in managing supply, SKUs, inventory, and other resources.¹

Nada R. Sander explored that “big data is properly applied can profoundly influence the

¹ Bill, T. (2008), “Assembling the data-driven supply chain: Integrated, quality-controlled data boosts operational supply chain analytics” *Teradata Magazine*, AR-5710

marketing, logistics, operations, and sourcing sectors of a supply chain. Marketing has the most developed analytics with the focus on customer demand and behavior; prices can be optimized and customer strategies can be adjusted dynamically. Logistics analytics optimize inventory and resource allocation, identify optimal distribution locations, and minimize transportation costs.”²

Digital data are collected by real time information about events in six primary elements which are who, what, when, where, why, and how. Some of events have multiple attributes for a given element, or no qualities at all for that element. (Sanders, 2016)

Proceeding the big data driven, sometimes we should overcome hurdles that one hurdle is “Analysis Paralysis,” a fear of starting to collect and analyze data because of the seemingly overwhelming amount of information. Another concern that occurs when there is too many metrics, and can be addressed by planning critically and consolidating to measure relevant performance. Then how to build a Framework is the key process. When applying big data, there is a general framework of segmenting, aligning, and measuring. What are segmenting that is to create optimal supply chain segments with clear attributes, defining focus and competitiveness in terms of flexibility, cost, quality, and time. Alignment is one of the key steps in introducing big data that is the horizontal integration of organizational functions to support segment attributes and competitive priorities rather than producing random, fragmented explorations. Last is measurement is important to develop the right performance indicator (KPI) metrics for segment analysis. (Sanders, 2016)

Another important issue is outsourcing of big data analytics. Big data is important for the health and improvement of a company, the reality these analytics are heavy investment. Companies want to adopt the technologies but many lack the capacity to do the analytical work required. Outsourcing is possible to be taken which an external party provides specialized software, additional data bases, or an analytics consultant. (Sanders, 2014)

Lewis (2014) mentioned “97 percent of executives reported having an understanding of how big data analytics can benefit their supply chain, but only 17 percent reported having already implemented analytics in one or more supply chain functions.”³ Companies are now able to collect and amass a huge amount of data from many disparate sources since changes in technology and digital storage capabilities. How to develop and deploy the right data analysis tools and techniques to mine intelligence from that data, there are a few preliminary steps to gain visibility into your supply chain as the follows:

1. You must implement the proper controls needed to optimize all of the processes throughout your global network and you have to create a closed-loop process to gain insight into your operations.
2. You need to consider what type of business intelligence tool to implement to obtain the visibility you need to measure and monitor your business across multiple workflows. Many companies explore using a point solution to help with data analytics and day-to-day decision making, while others consider an enterprise-wide solution that enables you to capture, process, and deliver insights into key supply chain processes.
3. Understand that true supply chain visibility is an ongoing endeavor as most organizations are unable to see across the entire supply chain. The lack of visibility, or blind spots, is often due to specific events or lack of integration points with trading partners or suppliers. With these blind spots, organizations are unable to drive the proper metrics to manage day-to-day operations and generate significant business value. Collaborating with trading partners and effectively capturing critical data are key elements to the success of achieving your goal of end-to-end visibility.”

Big Data-centric architecture for SCM has been proposed that exploits the current state of the art technology of data management, analytics and visualization. The security and privacy requirements of a Big Data system have also been highlighted and several mechanisms have been discussed to implement these features in a real-world Big Data system deployment in the context of

² Sanders, N. R. (2016). How to use big data to drive your supply chain. *California Management*, 58(3), 26-48.

³ Levis, L. (2014). *How to use big data to improve supply chain visibility*. Talking Logistics with Andrian Gonzalez, <https://talkinglogistics.com/2014/09/18/use-big-data-improve-supply-chain-visibility/>

SCM. Some future scope of work has also been pointed out.⁵

3. Research design and methodology

In order to obtain an insight into big data driven in supply chain management, an exploratory approach was adopted for this research. A case study was used for exploring the big data analytics to Improve supply chain cost effective and to increase operational efficiency. Using a volume data of case-a small trading company called JIT is to explore her operational process of supply chain management and customer. Using the statistical software SPSS to analyze volume data then try to understand cost, logistic operation cost and efficiency, product change, their relationship, and etc. Big data consists of expense of sales, revenue, profit, logistic service cost, inventory cost, logistic time, procurement process and cost, products. The result will be used to make the right decision of supply chain process and best policies of supply chain management.

4. Analysis

4.1 Introduction to Research Firm

Taiwan Just In Time Global Enterprise Co., Ltd. (JIT) is located at Kaohsiung Taiwan. Its business consists of international trade, logistics services and consultancy. JIT income was about one million from 3PL services and about seven and half millions every year created by 2-3 staffs.

(1) Core competence of JIT

Well-qualified human resources and well-qualified value chain of logistics service such as customs broker, transportation, forwarder, warehouse, IT service provider, insurance, bank, and so on are JIT's partners. James Lee is the president of JIT who is an integrated international logistics specialist and a professional of international distribution management. All JIT's staffs have much and long experience in logistics service.

(2) JIT 3PL operational Model (Fig. 1)

JIT 3PL operational model, according to experience and in-house resources an operational model to provide great service for SMEs will be explained as the follow. Good IT system, experienced and integrated capability staffs, and experienced logistics service providers are basic team members in this operational model. Naturally, highly efficient & standard operation procedures being formulated are very important.

⁵ Biswas, S., & Sen, J. (2016). A proposed architecture for big data driven supply chain analytics. *International Journal of Supply Chain Management (IUP)*, 13(3), 7-34.

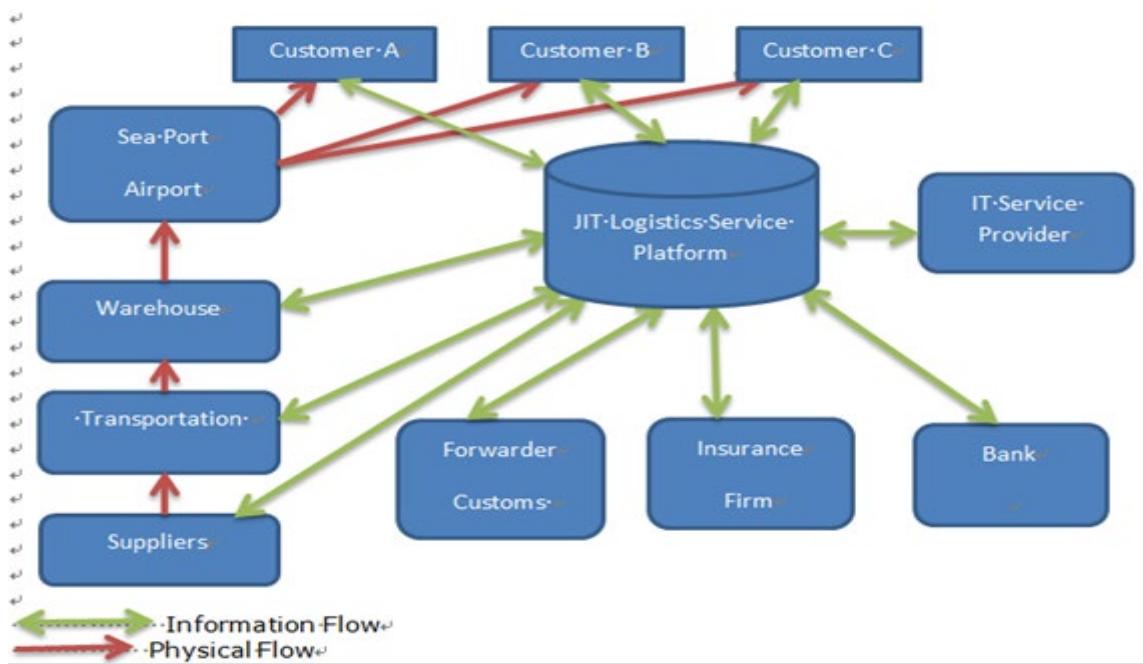


Figure 1:
JIT 3PL Operational Model

4.2 Big data analysis

Using more than 16 years data consists of business revenue, product change of time series, logistic service fee, customers' orders, location of customer, cost variation, so on. In this research, business transformation, cost of logistic service, and operational process will be exploring through the data analysis. The results will be display as the following charts.

(1) Product change

Product	Electronic	Biotech	Logistics Service	Hardware	Commodity	Others (knowledge service)
Year						
2004	80%	0%	3%	10%	5%	2%
2005	85%	0.2%	4.8%	6%	3%	1%
2006	75%	3%	5%	12%	2%	3%
2007	52%	5%	13%	8%	10%	12%
2008	40%	12%	12%	5%	12%	13%
2009	48%	11%	10%	11%	10%	10%
2010	44%	15%	11%	10%	6%	14%
2011	36%	19%	15%	10%	8%	12%
2012	32%	20%	18%	8%	12%	10%
2013	24%	32%	14%	10%	8%	12%
2014	30%	35%	10%	5%	7%	13%
2015	10%	42%	11%	8%	13%	16%
2016	10%	45%	15%	5%	5%	20%
2017	0%	20%	10%	5%	10%	55%
2018	0%	15%	5%	5%	15%	60%
2019	0%	20%	3%	3%	5%	69%

Management & knowledge service is more important product, then biotech product. According to the statistics, we found that service products including logistic service, management service, training service, and etc. are more important business items since profit and assistance of SMEs and Vol. 1 No. 1 2021

creating a service team.

(2). Countries

Countries	Taiwan	USA	Africa	Europe	ASEAN	Other (South America,....)
Year						
2004	70%	2%	5%	3%	13%	7%
2005	65%	5%	5%	5%	15%	5%
2006	70%	6%	4%	7%	12%	5%
2007	55%	10%	3%	2%	18%	12%
2008	45%	8%	7%	8%	20%	12%
2009	40%	10%	5%	5%	25%	15%
2010	37%	15%	8%	10%	28%	12%
2011	30%	16%	4%	12%	30%	8%
2012	28%	12%	5%	10%	35%	10%
2013	25%	10%	5%	10%	45%	5%
2014	25%	8%	7%	12%	38%	10%
2015	18%	20%	4%	15%	40%	3%
2016	15%	18%	2%	15%	40%	10%
2017	35%	10%	0%	10%	30%	15%
2018	45%	5%	0%	5%	35%	10%
2019	50%	0%	0%	0%	40%	10%

Taiwan and ASEAN countries are more and more since JIT provides more service products and Taiwanese government south bound policy. Taiwanese business sectors are more and more. Most of customers are Taiwanese companies in ASEAN countries. We consider the travel cost & times of consultants and real time service.

(3). Cost Analysis

Cost	Logistic	Product	Sales Expense	Human Resource	Others (travel cost, ...)	Gross Profit
Year						
2004	17%	53%	5%	5%	1%	19%
2005	17%	52%	4%	6%	1%	20%
2006	16%	51%	4%	5%	2%	22%
2007	15%	50%	5%	5%	1%	24%
2008	15%	48%	4%	3%	2%	28%
2009	14%	47%	4%	4%	2%	29%
2010	14%	47%	4%	4%	1%	30%
2011	13%	47%	4%	4%	2%	30%
2012	13%	48%	4%	4%	2%	29%
2013	12%	40%	4%	3%	2%	35%
2014	12%	40%	3%	4%	3%	38%
2015	11%	45%	4%	4%	2%	34%
2016	11%	44%	4%	4%	2%	35%
2017	15%	10%	5%	30%	10%	30%
2018	10%	0%	10%	35%	10%	35%
2019	5%	0%	5%	40%	10%	40%

Logistic service cost is lower, product cost is lower, gross profit is higher. Business items are change to service, the man power expense is more and profit is increasing.

5. Conclusion

The main findings from analyzing the empirical data and the existing theory are in order to understand the practical current business status as the follows:

1. Logistic cost is at least 11%.
2. Product change will be higher margin.
3. More sales in Taiwan & ASEAN countries.
4. Sales cost and labor cost is keeping stable even service business.
5. The business direction meets the government policy.
6. Outsourcing strategy is the right policy.

From the findings we made our policies as the follows:

1. Investing IT system in SCM is more important issue.
2. Gross margin is at least 30% and up.
3. In the small trading company, labor cost should be lower more than 5%.
4. Managed service is higher margin.
5. USA, ASEAN countries are the main market in coming years.

To meet the above policies, we found that human quality, SCM capability,

Outsource policy, the human relationship are the most important factors. The business of JIT is changed to the service including logistics and management diagnosis and assistance to SMEs. The relationship with government and business top management are the key issues now. In the meantime, the best service consultant team is also important successful factor for management business. Then the creation of service KPIs is the basic job of service business. The market research is the most important thing before kicking off the new business.

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The Impact of Organic Food's Corporate Image and Electronic Word of Mouth on Asian Consumers' Purchase Intention: The Moderating Effect of Moral Identity, Self-efficacy and Impression Management Motivation

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Abstract

Organic food consumption has become a hot topic in the academic field. There is still a gap in the literature on marketing and consumer psychological motivation, and the moderating effect of psychological factors has not attracted enough attention. In the future, marketing and psychological drivers are likely to play an important role and are subject to discussion. In this context, based on the TRA and SOR model, this paper aims to discuss: Does corporate image and electronic word-of-mouth affect the intention to buy organic food under the moderating effect of moral identity? Does impression management motivation and self-efficacy have a moderating effect on the "attitude-behavioral intention" transformation process in organic consumption? This study expands the factors affecting organic food consumer behavior, affirms and enriches the application of the two theoretical models in the field of organic food consumption, and confirms the role of psychological regulatory factors. It has important practical significance and management enlightenment to enterprise marketing management mode.

Keywords: corporate image, moral identity, self-efficacy, impression management motivation, purchase intention

1. Introduction

The International Federation of Organic Agriculture defines organic food as the foods that have been certified by organic food certification organizations and issued certificates according to organic food planting standards and production and processing technical specifications Xu (2017). Paul and Rana (2017) reviewed the literature on the consumption behavior about organic foods in the past 30 years through the literature review. The intention people purchase organic foods is influenced by the characteristics of organic foods (safety and nutrition, etc.) and the characteristics of consumers (cognition and income, etc.). And distribution, marketing, ethical consumption and other areas may help develop the organic food market in the research in the future. Marketing and psychological drivers are likely to play an important role and are subject to discussion (Ryan & Casidy, 2018; Yen, 2018). Consumer behavior is the process of receiving information of goods, the circumstance to purchase, and depositing of goods or services. Ultimately, if the person feels that he or she has the ability to meet the demand, the person will form a strong intention and are more likely to engage in that behavior (Kouy et al., 2016).

Corporate image and electronic word of mouth have a significant impact on consumer perception and behavior in the marketing arena (Teng & Lu, 2016; Li et al., 2018). Since the concept of corporate image has been proposed, it has always been a topic of concern for market management researchers and practitioners (Ko et al., 2013). According to the existing public data of the network, the Sanlu Dairy Group's melamine incident caused the corporate image to plummet and eventually went bankrupt. Corporate image is the vitality of the enterprise, with outstanding guiding force and strong influence on consumers. Establishing a good corporate image as determined by consumers is an important mission for green companies (Ko et al., 2013). At the same time, electronic word-of-mouth is widely spread as a new marketing type because of its speed and accessibility (Michelle, 2018). As

an important online information channel, it has an important impact on individual purchasing decisions and is considered to be the driving force of most industries (Kudeshia & Kumar, 2017). According to Nielsen's survey, 52% of Internet users search online for product or service reviews before making a purchase decision. Marketers should design better communication strategies for specific market segments to achieve effective communication and sales (Sahelices et al., 2018). Besides, moral identity may play a regulatory role in moral judgments and moral behaviors (Aquino & Reed, 2002). Impression management motivation is one of the hotspots for behavioral research, it can promote prosocial behavior (Grant & Mayer, 2009). Self-efficacy is the individual's perception for environmental and behavioral control (Li et al., 2018). The regulatory effects that these factors may play have not received sufficient attention. The organic food industry in China has maintained a relatively fast development trend and as the fourth largest organic food consumer in the world. Therefore, this study examines the consumers' purchase intention to buy organic foods in the Chinese market with great development potential.

In summary, the specific motivation for this study is based on The Theory of Reasoned Action (TRA) and the Stimulus–Organism–Response (SOR Model), which are widely used to predict organic food consumption (Lee & Yun, 2016). Based on the above-mentioned "attitude-intension" model, this paper explores the impact of external factors and psychological motivation factors on the purchase intention towards organic foods in order to increase the market share and competitiveness in the market. The purpose aims to explore the influence of the corporate image and electronic word-of-mouth on the purchase intention of organic food under the regulatory effect of moral identity. At the same time, this paper analyzes the moderating effect of impression management motivation and self-efficacy on the transformation process of "attitude-behavior intention" in organic consumption. This study finally expands the theoretical research on the influencing factors of organic food consumption, provides a new theoretical perspective, puts forward targeted and specific marketing suggestions to promote the consumption of organic food, and expands and improves the marketing approaches and methods of organic food consumption. Research questions include: 1. Does corporate image affect the attitude of consumers? 2. Does electronic word of mouth affect the attitude of consumers? 3. Does consumer attitude affect purchase intention? 4. Does moral identity regulate the impact of corporate image on consumer attitudes? 5. Does moral identity regulate the impact of electronic word-of-mouth on consumer attitudes? 6. Does self-efficacy regulate the impact of consumer attitudes on purchase intentions? 7. Does impression management motivation regulate the impact of consumer attitudes on purchase intentions?

2. Theory and Hypothesis Development

2.1 Theory of reasoned action (TRA)

Fishbein and Ajzen (1975) proposed the TRA rational action theory, which argues that behavioral intention is the direct factor determining behavior, and it is determined by two subjective factors: behavioral norms and attitudes. Attitude is influenced by the potential earnings beliefs from individuals and the relative importance of individual perceptions. It is the overall evaluation from consumers based on comprehensive cognition. Subjective norms are the criteria for judging objective things formed by individuals in the social life process. They come from the individual norms and the observance motives. The two theoretical assumptions on TRA are: first, consumer rationality, intention and behavior are closer; second, the will control consumer behavior, and the specific intention of individuals to form in a given environment will dominate their subsequent behavioral performance. In the study of Mei (2007); Lee and Yun (2016) and Yadav and Pathak (2016), they discussed the purchase intention of organic food with the framework of planned behavior theory. Therefore, this study materializes the factors that influence attitude (corporate image, electronic word-of-mouth), establishes a research framework with consumer attitude as the mediating variable,

and considers the moderating effect of self-efficacy and impression management motivation on the transformation of "attire-behavioral intention" of consumption.

2.2 *Stimulus-organism-response (SOR Model)*

In 1926, Woodworth first proposed the "Stimulus-Organism-Response" model, as the S-O-R model, which explained that external physical stimuli affect human emotional state and influence its subsequent behavior (Jacoby, 2002). The basic S-O-R model consists of three elements: stimulation, body and response. Stimulation is usually considered to be external to the individual. An organism is an intrinsic state produced by environmental stimuli. The response is the final result, which is divided into proximity behavior and avoidance behavior. The S-O-R model has also been applied to explain the buying behavior of organic food, two different types of stimulus have been described in previous literature: object stimulus and psychosocial stimulus (Lee & Yun, 2016; Ryan & Casidy, 2018). The corporate image and electronic word-of-mouth of organic food are regarded as external stimulating factors. When this factor stimulates the psychology and emotions of consumer groups, there will be obvious changes in emotions, attitudes, and internal states, and they will quickly respond to whether to make a purchase. In this process, individual consumers will actively understand whether the company's products meet their own needs and are important to themselves. Therefore, this study selects consumer moral identity as the moderating variable to verify the corporate image of organic food and the attitude of electronic word-of-mouth to consumers. At the same time, considering the self-efficacy and impression management motivation of the two consumers' own psychological factors on the adjustment of the "body-reaction" transformation link in the SOR model.

2.3 *The impact of electronic word of mouth on consumer attitude*

Electronic word-of-mouth (EWOM) is the actual or potential consumer's comments on products, services or companies through blogs, product online forums, and comments are passed to other groups through the network or organization (Hennig-Thurau et al., 2004). Firms should start EWOM campaign as early as possible in order to obtain early mover advantage (Bao & Chang, 2016). The significance of EWOM communication research lies in that it has considerable commercial influence because it can influence and determine consumer perceptions, evaluations, and behaviors of products, services, brands, or organizations (Sahelices et al., 2018). In his research on mobile phone brand attitudes and intention to pay, Kudeshia and Kumar (2017) confirm that positive electronic word-of-mouth will positively influence consumers' attitudes on mobile phone brand and their intention to pay. EWOM has a positive predictive effect on consumption (Michelle, 2018; Chu et al., 2018). Based on the TRA theory and the S-O-R model, active EWOM communication will promote consumers' in-depth and extensive understanding on organic foods, and then it will generate good attitudes towards them. Therefore, the hypothesis 1 in this study is proposed as follows:

H1: Electronic word of mouth asserts a significantly positive impact on consumer's attitude.

2.4 *The impact of corporate image on consumer attitude*

Corporate image is the end result for all the experiences, impressions, beliefs, feelings and knowledge in a company (Worcester, 2009). Corporate image in green marketing is the ultimate result for people's knowledge, beliefs, thoughts, feelings or impressions from an organization in terms of social responsibility, product image and corporate reputation (Ko et al., 2013). Consumers will have a preconceived attitude based on different perceptions in the company and influence the final products choice (Kang et al., 2003). The corporate image in the catering industry will significantly affect consumer satisfaction and will influence consumer intention (Wu, 2013; Ashraf et al., 2018). Good corporate reputation positively affects the consumption on organic foods (Mohd, 2018), and most scholars believe that corporate image and corporate reputation are synonymous (Gotsi & Wilson, 2001). Based on the TRA theory and the S-O-R model, if an organic food company has a good

corporate image, it will enhance the positive and positive effect on the consumer attitude. Therefore, the hypothesis 2 in this study is as follows:

H2: Corporate image has a significantly positive impact on consumer's attitude.

2.5 The impact of consumer attitudes on purchase intention

Consumer attitudes are consumers' evaluations on products, purchase processes, or themselves based on a comprehensive perception (Burton et al., 1998). When consumers are stimulated by relevant information about a product, they will generate attitudes based on past experience (Sengupta and Fitzsimons, 2000). Consumer attitudes are the determining factor in the intention to buy green products (Arli et al., 2018). Consumers' intention to buy organic food is determined by utilitarian attitudes ((Lee & Yun, 2016)). Therefore, the hypothesis 3 in this study is presented as follows:

H3: Consumer's attitude has a significantly positive impact on purchase intention.

2.6 The moderating effect of moral identity

Moral identity is a moral trait that can be organized in relation to ethical behavior, and that people with the same qualities will take this behavior (Aquino & Reed, 2002). Green consumers are ecologically conscious, consumers with high moral identity have stronger green preferences, and moral identity causes different perceptions (Laroche et al., 2016). Individuals with higher moral identity are more concerned with moral-related self or contextual information, and their moral identity is more likely to serve as a moral self-regulation mechanism to stimulate moral judgment and behavior (Lapsley & Lasky, 2001; Matherne et al., 2018; Patrick et al., 2018). The higher the consumers have moral identity, the better the image a good organic food company have and the goodwill that electronic word-of-mouth on the green level. Therefore, the hypotheses 4 and 5 in this study are as follows:

H4: Corporate image has a significantly positive impact on consumer attitude under different consumer's moral identity level. With increasing consumer's moral identity level, corporate image has a stronger impact on consumer's attitude.

H5: Electronic word of mouth has a significantly positive impact on consumer attitude under different consumer's moral identity level. With increasing consumer's moral identity level, electronic word of mouth has a stronger impact on consumer attitude.

2.7 The moderating effect of self-efficacy

Self-efficacy refers to the individual's perceived control for the environment and behavior (Rodgers et al., 2008). Consumers with high self-efficacy have confidence in their abilities and will work hard to complete the purchase. Individuals believe that they have the ability to dominate specific behaviors (Li et al., 2018). Self-efficacy has a strong explanatory power for consumers' environmental consumption behaviors (Straughan & Roberts, 1999). Consumers with higher efficacy, the correlation between environmental consumption attitudes and environmental consumption behaviors will stronger (Berger and Corbin, 1992). Regarding organic food consumption, people with high self-efficacy tend to pay more for paying premiums and environmental protection. Therefore, the hypothesis 6 in this study is as follows:

H6: Consumer's attitude has a significantly positive impact on purchase intention under different consumer's self-efficacy level. With increasing consumer's self-efficacy level, consumer's attitude has a stronger impact on purchase intention.

2.8 The moderating effect of impression management motivation

Impression management motivation reflects the desire to create a particular impression in the minds (Wooten & Reed, 2000). Finkelstein and Penner (2004) define impression management motivation as "hoping to maintain a positive image and appear more in contexts related to the

environment. When a person has a strong impression management motivation, they will do something characteristic to make them seem more moral (Jones et al., 2017). When consumers buy green products in public, they will increase their purchases because it is an altruistic behavior approved by the society (Griskevicius et al., 2010). People buy organic foods in the hope of getting credit for pro-social behavior. Therefore, the hypothesis 7 in this study is presented as follows:

H7: Consumer's attitude has a significantly positive impact on purchase intention under different motivation of consumer's impression management level. With increasing motivation of consumer's impression management level, consumer's attitude has a stronger impact on purchase intention.

3 Research Methodology

Section headings: should be left justified, with the first letter capitalized and numbered consecutively, starting with the Introduction. Sub-section headings should be in capital and lower-case italic letters, numbered 1.1, 1.2, etc., and left justified, with second and subsequent lines indented.

3.1 Conceptual framework

Based on the "attitude- Purchase Intention" model in the theory of rational behavior and the SOR theory, this study constructed an organic food purchase intention model by taking the two variables of organic food corporate image and electronic public praise as external stimulus and consumer attitude as the mediating variable. Considering the moderating effects of self-efficacy, impression management motivation and moral identity, the following research framework is proposed. Figure 1 presents the conceptual framework of this study.

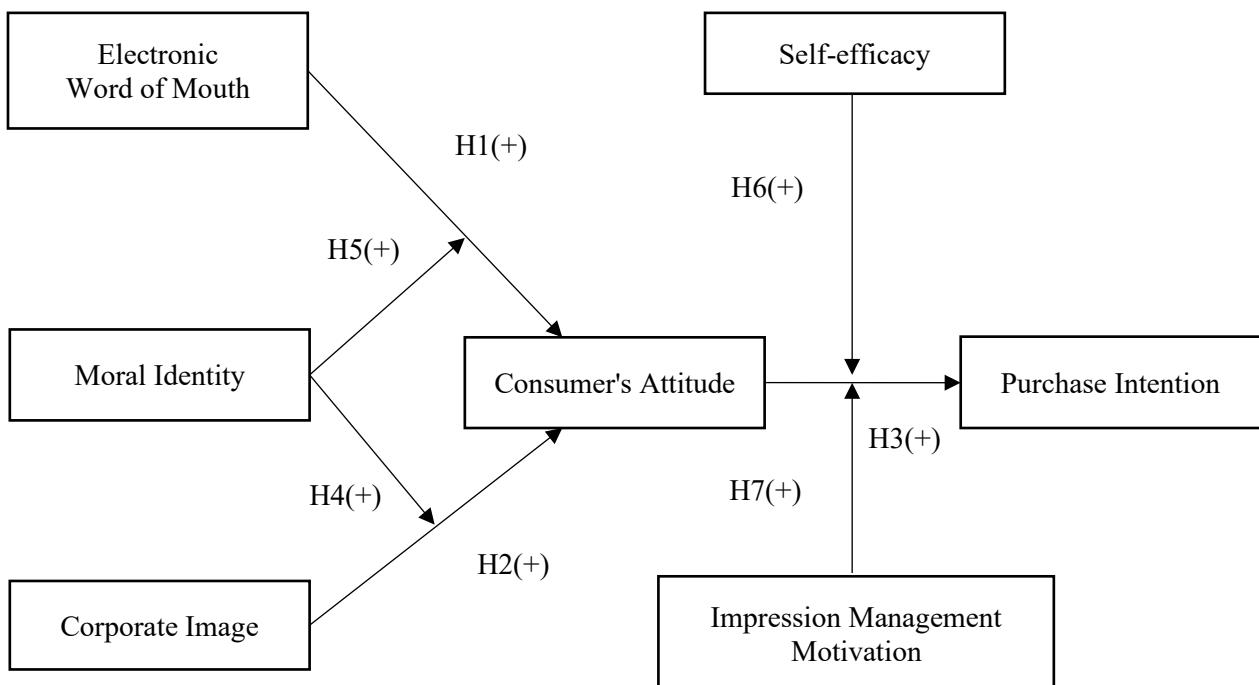


Figure 1

Conceptual framework

3.2 Operational definition of variables

The definitions of this study are summarized in table 1.

Table 1
Definition of variables

Variables	Definition	Resources
Electronic Word of Mouth	Any comments made by real, potential or past consumers about organic foods will have a broader impact on the web.	Hennig et al. (2004)
Corporate Image	It is the final result of people's knowledge, beliefs, thoughts, feelings or impressions on organic food companies.	Ko et al. (2013)
Consumer's Attitude	When consumers are stimulated about organic food-related information, they evaluate the product, the purchase process, or itself based on a comprehensive perception.	Sengupta and Fitzsimons (2000); Burton et al., (1998)
Purchase Intention	The possibility of consumers buying organic food.	Yadav and Pathak (2016)
Moral Identity	It is a self-concept formed around a series of moral characteristics, a psychological representation on a person's moral traits.	Aquino and Reed (2002)
Self-efficacy	Consumers' confidence in their own abilities	Rodgers et al. (2008);
Impression Management Motivation	Consumers want to maintain a positive image	Finkelstein and Penner (2004)

3.3 Measurement

Regarding the measurement project on electronic word-of-mouth, this study combines the scale of Bambauer and Mangold (2011) to design an 8-item scale for electronic word-of-mouth. Regarding the corporate image measurement project, this study combines the Ko's (2013) scale to design a 9-item scale for corporate image. With regard to the measurement project on consumer attitude, this study combines with the scale of the Wang (2015), designs the consumer attitude 6-item scale. Regarding the measurement project on purchasing intention, this study uses Teng and Lu's (2016) 5-item scale for purchase intention. For measuring moral identity, this study uses the 13-item scale developed by Aquino and Reed (Aquino & Reed, 2002). Since the general self-efficacy scale is intended to broadly and steadily measure consumers' beliefs about responding effectively to stress situations, this study uses the 10-item scale GSES developed by Schwarzer and Born (1997). For measuring impression management motivation, this study takes the Scheier and Carver's (1985) 7-item scale. For each item uses the Likert five-level scale to measure the respondents' responses. The tone is from objection to approval. The scores range from 1 to 5, where 1 means strongly disagree, and 5 means strongly agree.

Previous studies on organic food consumption have shown that consumers' social statistical characteristics have an impact on organic food consumption, including: the education level and consumers income, which significantly affect consumers' demand for organic food (Paul & Rana, 2017). Age and female respondents have an impact on organic food preferences (Xu, 2017). Therefore, the above statistical features are used as control variables in this study.

3.4 Sampling design and data analysis

Beijing is China's political, economic, and cultural center. With a large population, urban residents are more likely to afford high-level consumption and better understand organic food (Prentice et al., 2017). In the sample selection, this study adopts the convenience sampling method in non-random sampling. The investigators collect the data through questionnaires in various supermarkets, organic food stores and community websites.

In the sample calculation formula derived by Dillman (2000), a valid sample size of 384 persons is required to achieve a 95% confidence level with a sampling error of less than 5% in the case of a large maternal range. If it is a regional study, the average sample size should be between 500 and 1000 (Sudman, 1976). In this study, the convenience sampling method of non-random sampling was adopted to complete the collection of consumer data through questionnaire survey at the entrances and exits of supermarkets and residential community networks. In this study, 500 questionnaires were collected and set through the questionnaire star, and electronic questionnaires were distributed in shopping malls, organic food sales areas and residents' community networks. At the top of the questionnaire is the following: "please recall any organic food products you have purchased or are planning to purchase in the last year and answer the following questions.

The SPSS and AMOS are used for data analysis and comparison. Using Cronbach's α value to examine if the measure of variables in this paper meets the requirements of consistency, using AVE and CR value to examine convergent validity and using the square root of the AVE and correlation coefficient to examine discriminant validity, and using stepwise regression analysis to test hypothesis.

4 Data Analysis

4.1 Sample description

A total of 413 valid sample data are recovered in this study, and the effective recovery rate is 82.6%. The sample characteristics are: the number of women is slightly higher, the number of young and middle-aged people is slightly higher, and most consumers are of higher education and upper income. This is consistent with the sample distribution characteristics surveyed by scholars who have studied organic food consumption in the past (Lee & Yun, 2016; Yen, 2018).

4.2 Reliability and validity analysis

The purpose of reliability is to examine the level of non-error in measurement, which means to examine the consistency of measurement. This study adopts Cronbach's α value as a tool for reliability examination. The examination result of this study shows that, Cronbach's α value in every variable is higher than 0.8 (Cronbach's α value of Electronic Word of Mouth is 0.891, Corporate Image is 0.913, Moral Identity is 0.93, Consumer's Attitude is 0.898, Impression Management Motivation is 0.878, Self-efficacy is 0.924, Purchase Intention is 0.868), which means high reliability. It also shows that every variable has a fairly good internal consistency (Fornell & Larcker, 1981).

Validity means measuring tool can measure the level of intended-to-measure object. The content validity, convergent validity, and discriminant validity were used in this paper to examine the validity of the questionnaire. Content validity is performed based on the researcher's professional ability to judge subjectively if the selected scale can measure the researcher's intended-to-measure feature correctly. The items explored in this study are based on relevant theory. This inventory or measuring item was used by many scholars. In addition, we carried out a pre-test and did some revises before setting out the questionnaire. Therefore, the questionnaire as a measuring tool used in this study should meet the requirement of content validity.

According to the statistical results, the model fit indexes are as following: chi-square degree of freedom ratio is 1.432, less than 2, indicating that the model fitting is acceptable (Carmines & McIver,

1981). GFI is 0.866, AGFI is 0.847, AGFI is 0.833, IFI is 0.950, CFI is 0.950. The model fit indexes are all greater than 0.80, indicating that the model fitting is acceptable (Bentler, 1987). SRMR is 0.039, less than 0.5, RMSEA is 0.032, less than 0.08, indicates the well model fitness (Browne & Cudeck, 1993).

This study applies further confirmatory factor analysis to examine the convergent validity and discriminant validity. The result is shown as following and table 3. The minimum factor of the normalized factor loading of all variables is 0.663, the minimum value of CR (Composite Reliability) is 0.870, and the minimum value of AVE is 0.508, which means has good convergence validity (Bulut & Karabulut, 2018). And compared with the correlation coefficients of the two variables, the square root of the average variation extraction of each observation index is greater than the correlation coefficient, which means this study has good discriminant validity (Fornell & Larcker, 1981). The analysis data is shown in the table 2.

Table 2
Discriminant validity and correlation analysis

Factor	Electronic Word of Mouth	Corporate Image	Consumer's Attitude	Moral Identity	Self-efficacy	Impression Management Motivation	Purchase Intention
Electronic Word of Mouth	0.7123						
Corporate	.359**	0.7342					
Consumer's Attitude	.536**	.562**	0.7727				
Moral	.403**	.329**	.524**	0.7389			
Self-efficacy	.222**	.191**	.109*	.225**	0.7143		
Impression Management Motivation	.365**	.355**	.321**	.353**	.292**	0.7423	
Purchase Intention	.559**	.569**	.636**	.520**	.312**	.515**	0.757

Note: Significance level : *p<0.05; **p<0.01; ***p<0.00

C. Hypothesis Testing

The data collected in this study adopts stepwise regression analysis to verify the hypothesis. 22 stepwise regression models were developed to test hypothesis. The hypothesis testing result is shown as Table 3 and Table 4.

Base on the testing result from model 2 in Table 3, the explanatory power of model 2 is 25.5%, and p value that determines the good of fitness is $0.000 < 0.001$, which means it reach statistical significance. This also means that electronic word of mouth does significantly influence the consumer's attitude, and the regression coefficient is 0.541, which shows that the electronic word of mouth has a significantly positive impact on the consumer's attitude. Therefore, the H1 is strongly supported. Meanwhile, based on the testing result from model 3 in Table 3, the explanatory power of model 3 is 30.2%, and p value that determines the good of fitness is $0.000 < 0.001$, which means it reach statistical significance. This also means that corporate image does significantly influence the consumer's attitude, and the regression coefficient is 0.554, which shows that the corporate image has a significantly positive impact on the consumer's attitude. Therefore, the H2 is strongly supported. Furthermore, based on the testing result from model 7 in Table 3, the explanatory power of model 7

Table 3
Stepwise regression analysis of direct effect and mediating effect

	Consumer's Attitude					Purchase Intention			
	M1 β	M2 β	M3 β	M4 β	M5 β	M6 β	M7 β	M8 β	M9 β
gender	-0.144**	0.037	-0.137**	-0.155**	0.033	-0.149***	-0.066	0.016	0.088*
age	0.112*	0.015	0.09*	0.104*	0.003	0.820*	0.035	-0.004	-0.042
Education level	0.012	-0.019	0.033	0.051	0.019	0.073	0.044	0.028	0.058
Average monthly income	0.107*	0.037	0.046	0.162**	0.089*	0.100*	0.096	0.072	0.080*
Electronic Word of Mouth		0.541***			0.563***			0.310***	
Corporate Image			0.554***			0.558***			0.313***
Consumer's Attitude							0.619***	0.468***	0.442***
R ²	0.036	0.291	0.339	0.048	0.324	0.354	0.417	0.479	0.483
Adjust R ²	0.027	0.282	0.330	0.038	0.315	0.346	0.410	0.471	0.475
ΔR ²	0.036	0.255	0.302	0.048	0.276	0.306	0.369	0.431	0.435
F	3.835**	33.434***	41.673***	5.118***	38.957***	44.557***	58.241***	62.113***	63.241***

Note: *: p<0.05; **: p<0.01; ***: p<0.001; The independent variable of M1-M3 is consumer's attitude and The independent variable of M4-M9 is purchase intention

Table 4
Stepwise regression analysis of moderating effect

	Consumer's Attitude								Purchase Intention				
	M10 β	M11 β	M12 β	M13 β	M14 β	M15 β	M16 β	M17 β	M18 β	M19 β	M20 β	M21 β	M22 β
gender	-	0.037	0.028	0.036	-	-	-	-	-0.066	-0.061	-0.052	-	-
age	0.112	0.015	0.024	0.025	0.09*	0.077*	0.085*	0.104	0.035	0.021	0.024	0.015	0.012
Education level	0.012	-0.019	-0.019	-0.02	0.033	0.02	0.026	0.051	0.044	0.03	0.029	0.048	0.051
Average monthly income	0.107 *	0.037	-0.018	-0.016	0.046	-0.017	-0.018	0.162 **	0.096*	0.08*	0.08*	0.097*	0.105*
Electronic Word of Mouth		0.541* **	0.391* **	0.425* **									
Moral Identity			0.369*	0.348*		0.373*	0.400*						
Corporate Image					0.554*	0.438*	0.421*						
Electronic Word of MouthxMoral Identity				0.113* *									
Corporate ImagexMoral Identity						0.100* *							
Consumer's Attitude							0.619*	0.596*	0.599*	0.509*	0.554*		
Self-efficacy							0.238*	0.183*					
Impression Management Motivation										0.347* **	0.285* **		
Consumer's AttitudexSelf-efficacy										0.241* **			
Consumer's Attitudex Impression Management Motivation											0.154* **		
R ²	0.036	0.291	0.402	0.414	0.339	0.402	0.468	0.048	0.417	0.473	0.528	0.525	0.544
Adjust R ²	0.027	0.282	0.393	0.404	0.330	0.393	0.458	0.038	0.41	0.465	0.520	0.518	0.536
ΔR ²	0.036	0.255	0.111	0.012	0.302	0.111	0.009	0.048	0.369	0.056	0.055	0.108	0.019
F	3.835	33.434	45.488	40.838	41.673	45.488	50.832	5.118	58.241	60.648	64.657	74.692	69.026

Note: *: p<0.05; **: p<0.01; ***: p<0.001; The independent variable of M1-M16 is consumer's attitude and The independent variable of M17-M22 is purchase intention

is 36.9%, and p value that determines the good of fitness is $0.000 < 0.001$, which means it reaches statistical significance. This also means that consumer's attitude does significantly influence the purchase intention, and the regression coefficient is 0.619, which shows that the consumer's attitude has a significantly positive impact on the purchase intention. Therefore, the H3 is strongly supported.

According to the above result, it is consistent with previous studies, such as Lee and Yun, (2016) and Sahelices et al. (2018) found that electronic word-of-mouth can influence and determine consumers' cognition, evaluation and behavior of products. The accumulation of good electronic word-of-mouth can make information be transmitted to all corners and kept for a long time, and positive electronic word-of-mouth can promote consumers to have a good evaluation or attitude towards products. Due to consumers' different cognition of corporate image information, consumers' understanding of corporate products and other information will be affected, and then preconceived attitudes will be generated. If an enterprise has a good corporate image, it will improve its cognition and evaluation of consumption, that is, improve the positive and positive attitude of consumers. The consumption attitude of organic food is mainly based on the subjective cognitive results of individual consumers. The consumption tendency of consumers can be reflected by the consumption attitude, and the positive consumer attitude can accurately predict the positive purchase intention of consumers.

Base on the testing result from model 5 to model 8 and model 6 to model 9 in Table 3, after added the consumer attitude, the significant effect of electronic word-of-mouth and corporate image on purchasing intention decreased from 0.563 to 0.310 and from 0.558 to 0.313, however, both p value that determines the good of fitness are $0.000 < 0.001$, which means it reaches statistical significance. Therefore, consumer attitude has partial mediating effect (Baron and Kenny, 1986). So the electronic word-of-mouth and corporate image of organic food can have an impact on the purchase intention through consumer attitude, and can also directly affect the purchase intention.

Base on the testing result from model 13 in Table 4, the regression coefficient of interaction term of electronic word of mouth and moral identity on consumer attitude is 0.113 and determines the good of fitness is $0.000 < 0.001$, which means it reaches statistical significance. Base on the testing result from model 16 in Table 4, The regression coefficient of interaction item of corporate image and moral identity on consumer attitude is 0.100 and determines the good of fitness is $0.000 < 0.001$. Therefore, moral identity plays a significant positive regulating role in the influence of electronic word of mouth and corporate image on consumer attitude. This is consistent with previous research of Aquino and Reed (2002) and Lapsley, and Lasky (2001): As a moderating variable, moral identification plays a moderating role in moral judgment or moral behavior. If a consumer has a higher moral identity, his subjectivity of paying attention to moral information and moral responsibility will be stronger, and he will even stimulate his moral judgment through the interactive adjustment effect. The purchase of organic food belongs to the category of moral consumption. The higher the consumers' moral identification, the more sensitive they are to altruistic moral factors and behaviors. In other words, the corporate image and electronic public praise of organic food will enhance the goodwill of consumers in the level of moral consumption. Therefore, H4 and H5 in this study are supported. The analysis data is shown in the table 4.

Base on the testing result from model 20 in Table 4, the regression coefficient of interaction items of consumer attitude and self-efficacy on purchase intention is $\beta=0.241$, $p<0.001$. Meanwhile, Base on the testing result from model 22 in Table 4, the regression coefficient of interaction items of consumer attitude and impression management motivation on purchase

intention is $\beta=0.154$, $p<0.001$. Self-efficacy and impression management motivation have a significant positive regulating effect on the influence of consumer attitude on purchase intention. This is consistent with previous studies, such as Li et al. (2018) and Straughan and Roberts (1999), both they point out the sense of efficacy possessed by individual consumers can have a positive regulating effect on their attitudes and behaviors of choosing consumption. That is to say, the stronger their sense of efficacy is, the higher their initiative in choosing consumption will be, and they will try their best to complete the purchase. When consumers have a stronger sense of self-efficacy, they are more optimistic to deal with problems in the consumption process, have more confidence in the cost of organic food consumption or environmental protection, and thus have a higher tendency in purchase intention. In addition, when a social individual has strong impression management motivation, he will often carry out some behaviors that make others see him as having very moral qualities. Impression management motivation can promote consumers' moral consumption behavior. That is to say, consumers with high impression management motivation are more willing to use moral products to reflect their responsibility image, so as to win others' favor or even appreciation and maintain their reputation and social status. While buying organic food is an altruistic behavior and closely related to their social status. Therefore, H6 and H7 in this study are supported. The analysis data is shown in the table 4.

5. Conclusion and Discussion

5.1 Conclusion

In the field of organic food consumption, the conclusion is that corporate image and e-word-of-mouth positively affect consumer attitudes, and consumers with higher moral identity have stronger influence. At the same time, the stronger the consumers' sense of self-efficacy and impression management machine, the stronger the positive influence of consumers' attitude on purchasing intention will be. All the hypotheses in this study are supported. The results of this study are consistent with those of previous scholars.

5.2 Contribution

Firstly, this study determines the effects of corporate image, electronic word-of-mouth, moral identity, impression management motivation, and self-efficacy in this field. The two theoretical models are further enriched by the introduction of regulating variables. This study also further confirms the role of the psychological regulatory factors of consumers in the transformation process of "attitudinal - behavioral intention" of organic consumption. Therefore, this study enriches the research content of organic food consumer behavior theory and provides a new theoretical perspective for the research of organic food consumer behavior. Secondly, the competition in the industry is becoming increasingly prominent. This research has important practical significance and management enlightenment to the marketing management methods of enterprises. Marketing suggestions based on theoretical basis can provide a wider range of means for the promotion and marketing strategies of organic food companies, and can standardize and guide consumers' organic food purchase decisions.

5.3 Management implication

The shaping of corporate image is the basis for organic food enterprises to maintain long-term vitality and vitality. Enterprises should establish good external relations (government, media and users) and maintain multiple social relations. Enterprises should assume more social responsibilities and participate in more social public welfare undertakings. If you do not want to invest too much energy and money in corporate image, the most basic thing is to maintain the existing corporate image level, in order to avoid the competition from the industry. Organic

food enterprises are particularly important for the cultivation of electronic word of mouth, which can be carried out in the following aspects: first, enterprises enter into high-quality e-marketing platform. Second, enterprises should provide good online marketing services and after-sales services to accumulate positive electronic reputation. Third, it is recommended to promote professional electronic word of mouth sender, and cooperate with nutrition experts, doctors and other personnel with high professional knowledge. Organic food enterprises should pay attention to the experience and publicity of interaction and perception. Enterprises can carry out organic food knowledge lectures, cooking contests and organic food base experience to increase the involvement of consumers. The purpose is to promote organic food to establish a good corporate image and electronic reputation.

In addition, considering the psychological characteristics of consumers, enterprises should strengthen the dissemination of the universal, self-interested and altruistic characteristics of organic food consumption. Let consumers feel the normalization of organic consumption and perceive the influence and recognition of their behavior on the environmental protection cause and the whole society. For example, the media advertisement displays the moral related elements, the packaging design conveys the advantage information of organic food, and the consumers in different regions adopt targeted marketing methods (environmental protection and pro-social characteristics), expand the sales channels of community franchised stores and takeaway stores, and conduct appropriate promotion or purchase.

5.4 Limitations and prospects of the study

First of all, this study uses the method of situational experiment and conducts research through questionnaire survey. There is no distinction of organic food, so there may be deviation. It is suggested that future research can analyze the category of organic food in detail, such as brands or enterprises, and study it in the real market environment. Secondly, this study takes the Chinese market as the research center. Although the number of samples meets the statistical requirements, the survey samples are effective. However, there are some regional limitations and sample singleness. Thirdly, people often publish or inquire about the evaluation of a certain product on the Internet. In the future, the impact of the potency of organic food and the quality of delivery platform on consumers' purchasing intention can be carried out in the research.

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Research on Design and Marketing of Stray Animal Adoption Platform

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Abstract

In order to resolve the issue of abandoned stray cats and dogs in Taiwan, this study designed the “Pet Relay Station” multi-functional auxiliary adoption platform. This platform uses the App as the interface and the Internet of Things Technology which allows stray animal shelters to update stray animal information in real time. The platform provides a question-and-answer system combined with social interaction to answer user adoption questions. If people want to adopt stray cats and dogs, they can carry out one-stop adoption procedures on this platform which are very easily completed. This research hopes to improve the situation of stray animals sleeping on the streets through the establishment of an innovative business technology platform. At the same time, the owners who wish to adopt pets can watch the status of stray animals reported on the platform without being restricted by the shelter’s business hours, making the process much more convenient.

Keywords: stray animals, euthanasia, internet of things, pet keeping, O2O e-commerce model

流浪动物领养平台设计与行销之研究

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摘要

本研究为了解决路上随处可见被遗弃的流浪动物问题，设计了「浪浪宠物中继站」多功能领养辅助平台。本平台以 App 为介面，利用物联网科技，让流浪动物收容所可即时更新流浪动物资讯，并由本平台结合社交互动提供问答区，解答饲养宠物的疑问。民众如果想要领养流浪猫狗即可在本平台进行一站式地领养程序，让领养者很方便地完成领养手续。本研究希望透过 O2O 电子商务模式平台的建置，改善流浪动物露宿街头的状况，同时给予期望领养宠物的饲主无须受收容所时间限制，在平台上就能观看各收容所的流浪动物现况，使领养过程更加便利。

关键词：流浪动物、安乐死、物联网、饲养宠物、O2O 电子商务模式

1. 绪论

流浪动物议题近年来在台湾逐渐被受到重视，也促成了 2016 年台湾流浪动物零安乐死政策的上路，全台湾流浪动物收容所也逐渐爆满，收容所内的人力与环境渐渐无法负担，造成收容所内猫狗互咬与交叉感染的情况增加，导致流浪动物被领养的机率微乎其微。

本研究以自行开发的「浪浪宠物中继站」平台为基础，利用线上到线下 (OTO, Online to Offline) 的电子商务模式以节省领养流程。将物联网概念带入去解决流浪动物所引发的多项社会议题，并进一步得知利用物联网对这些问题能达到多大的改善以及效益。本研究希望能达到以下三项研究目的：

一、 透过平台功能，爱心领养饲主可以缩短领养的时间与流程，平台并能与爱心领养饲

主建立起一个沟通与讯息无障碍的媒介。

二、透过平台可认购或捐赠物资，让无法饲养宠物却想帮助的人，也能尽一份力。

三、藉由本平台的功能，让爱心饲主发挥全部的爱心在流浪动物收容所上。

2. 文献探讨

一、流浪动物与安乐死

李文铃 (2013) 指出宠物在成为流浪动物之前，可能是家庭中重要的一份子，受到喜爱与照顾，但当人们将它们遗弃后，牠们便失去了照顾，成为了人类不负责任下的牺牲品。杨静贤 (2012) 认为这也意味著，弃养问题是流浪动物产生的关键因素。若被捕犬队捕捉至收容所，十二天内无人认养，就会被执行安乐死。陈碧真 (2010) 及杨静贤 (2012) 皆提到，近年来动物保护及关怀生命观念盛行，流浪犬的问题逐渐备受重视，这导致正反两方对于流浪动物的安乐死议题产生激辩。其中主要可以分为两大派：一派是主张人类并没有决定动物生死的权利，因此即便收容所品质不佳也不应该将其安乐死；另一派则基于「动物福利观点」认为动物除了维持生命之馀也应将其生命品质纳入考量，具体上包括：收容所环境、动物身体状况等。从上述内容可以得知，对于动物安乐死之议题，似乎这两大派的想法相差甚远。但刘承伦 (2014) 认为，流浪动物的问题除了安乐死外，还是要从根本面来解决，具体上包括：透过动物绝育的方式来降低其持续生长的趋势，以及郭小绫 (2014) 认为需要地方主管机关对于动物收容所的监督与指导以及法规的执行。

胡纯绫 (2018) 提到政府与民间在近年来积极思考此问题，在各方的努力之下，「零安乐死政策」终于在 2015 年通过立法，2017 年正式上路。从生命的价值来看，看似保障了动物维持生命的权力，但王淑卿、林雅容、严国庆与邱怡瑄 (2018) 认为这样的政策在实施后必须有相当完整的配套措施才行。因为在流浪动物没有降低、收容所不足的前提下，「零安乐死政策」将导致收容所的负担增加，使问题更加严重。

综观上述可知，如何建构一套完整的动物管理及妥善解决流浪犬问题的体制，以促进人类与动物的和谐关係，是当前迫切的重要课题。而这样的课题，本研究认为应该以问题的根本来解决，就是必须增加领养流浪动物的人群并优化有意愿饲养流浪动物的对象，有鑑于此，本研究将发展出一个方便人们领养动物的平台，以解决相关问题。

二、饲养宠物

陈钦雨、吕博裕、陈琰如 (2017) 的研究指出，当人们生活压力充满负担时，会提高宠物饲养意愿，因人们的生活压力对宠物饲养意愿具有显著正向影响。陈嫣芬、杨英钦、邱钰涵、陈凯婷、王昭胜 (2014) 研究指出，饲养狗的饲主会藉由饲养宠物的义务及责任感，促使饲主养成散步、规律的运动习惯，进而改变饲主的生理健康及心理放鬆。李鸿昌 (2006) 指出在缺乏子女的家庭中，宠物会影响健康及生活品质，亦即宠物能扮演子女的角色，紧密了人与人之间的关係。若进一步以人们身心健康的观点来看，游婉婷、汤幸芬 (2012) 认为，饲养宠物的过程中，人们会因为其对宠物情感依附的关係，降低寂寞感与忧鬱情绪的产生。

若以如何提升宠物认养意愿的观点来看，林新沛与吴明峰 (2010) 认为，宠物认养网站促进使用者认养与减少弃养宠物的可能性。探究其因在于现在资讯科技发达，若可以透过网路的方式将资讯放在上面有助于有兴趣的领养者进行相关资料的查询。此外，Lepper, et. al. (2002) 发现，其实人们领养动物的意愿与动物的特徵有所关联，人们会依照不同的喜好去选择他们所领养的动物。因此该研究认为收容所应充分瞭解领养者会领养的关键因素与想法，以提升领养率。

综观上述文献可知，宠物饲养是促进人与人间互动关係的重要因素之一。柯澍馨与李孟芝 (2017) 认为，有宠物饲养的家庭，不仅可以排解个人与家庭的寂寞感，亦可使人有较多的快乐

感受。有鑑于此，本研究认为在宠物领养平台的设计中，应该考量到消费者的使用意图与偏好，并且在设计介面上具有操作容易的特性以提升其使用意愿。

三、物联网

物联网 (Internet of Things, IoT) 并非单一网路的延伸，它是与网际网路、行动通讯等网路并存的体系。庄祐轩、罗乃维 (2013) 认为物联网是以无线感测技术让物体感测以便取得环境状态参数，并传输资讯至网路连结的系统平台，让物体本身因为附加资讯而增加价值，进而透过物体所汇集的资讯，创造更高价值的应用。王淑卿、王顺生、张智明、王信杰 (2014) 发现透过网际网路的应用，物联网的发展使智能物件 (Smart Object) 与现实生活之间能够相互沟通，加上物件的结合搭配各种类型的感测器 (Sensor)，促进多元化应用程序发展。张源庆 (2014) 认为物联网的兴起，提供了人们舒适、节能与健康的智慧生活。

Fleisch (2010) 认为若进一步以商业应用的观点来看，物联网可说是一个透过网络连结以达到服务创新的一种新概念，因为它主要是将不同领域的供应商做整合以设计出完整服务方案的一种策略。韩慧林、王贵民、牛景婧、刘艾娟、锺赋谚、宋伟弘 (2017) 提到物联网使人们可以透过网路搜寻、评选和消费之结合资讯及移动通讯平台的创意行销方式进行互动式的消费模式。不过在物联网兴起的同时，吕执中、梁直青 (2017) 则担忧其资讯的安全性与隐密性恐怕具有相当大的争议，Collier and Endler (2013) 则认为网路骇客也会随著资讯科技的发达而在技术上日益提升，导致网路诈骗频传。

综观上述文献可知，物联网技术的进步，将现实世界数位化，并拉近分散的资讯，统整各方资讯，让日常生活提升了便利性。有鑑于此，本研究拟透过上述概念，去设计一个领养平台 App，期许整合民间与政府之动物收容中心以及有意领养流浪动物的人群，一起为这个社会贡献心力，最终达到流浪动物、领养者、收容中心、本平台四赢的局面。

四、O2O 电子商务模式

O2O 电子商务模式意指透过网际网路或行动装置成功带动消费者至实体商店消费之行销模式。江义平、林家毅与黄智彙 (2018) 认为随著行动装置使用的普及与电子商务经营环境的激烈，企业开始思考新一代的数位行销策略，试图发展出一套成功整合虚实通路的营销模式，称之为 Online to Offline (O2O)。林淑琼、张银益与张宏裕 (2016) 认为 O2O 可分为 Online to Offline，即为消费者在虚拟商店购买商品或服务，或是 Offline to Online，即是在实体商店购买商品或服务而于线上付费等两种类型。本研究主要探讨为前者，在虚拟商店购买产品或服务。

何彥宏 (2017) 提到 O2O 商务模式係透过线上营销带动线下消费，或是由线下实体活动引导消费者到线上进行活动与消费，O2O 商业模式有助于实体商店整合到网路市场，透过网路进行行销与顾客开发，可以有效地开发市场与经营顾客。陈玠吟 (2015) 认为 O2O 商务模式导入目的源自于顾客需求，纯电子商务企业为了满足顾客需求，进而发展 O2O 商务经营模式。

综观上述文献得知，透过 O2O 商务模式可吸引消费者积极参与，创造新的消费价值，并减少运输所需成本，让购物变得更便利，也改变了以往需要到实体店面购物的观念。

综合上述文献之内容，本研究推论近年来政府及民众更加重视流浪动物议题，甚至废除安乐死政策，因此流浪动物逐渐受到重视。本研究将利用稳定的物联网科技结合最新的 O2O 电子商务模式，提供想要领养流浪动物的人们一个快速又方便的创新平台。

3. 研究方法

一、评估研究法

本研究透过文献探讨发现，如果能够透过 O2O 商业模式和物联网去创造全新商业模式，即

可接触到蓝海市场。为了进一步了解本研究所发展之创新平台在市场上是否真的有需求或商机，因此採取评估研究法 (Evaluation Research)。该方法主要目的为探讨一个方案的过程、结果甚至是效益分析 (赵碧华与朱美珍, 2000)。有鑑于此，本研究将先透过次级资料，找寻产业情报分析与相关学理依据，再透过上述观点进一步发展出营运流程及系统概念。为了要确切了解所发展的系统与营运模式是否符合市场需求，将以质性访谈与量化研究发展出具体的行销 7P 战术以及营收预估与财务规划，并于研究最后提出建议与结论，以利后续的研究。

二、研究流程

(一) 次级资料分析-文献探讨

依据次级资料分析搜寻过去相关研究，并从中整理学理依据，以探讨创新平台的商机，并进一步发展具体的产品与系统概念。

(二) 产品与系统介绍

为了要提升平台具备更好的服务，本研究会先透过文献探讨之结果去发展出产品系统概念图，以利后续 App 的撰写。而在开发工具上则透过 App Inventor 软体来撰写平台，期许能给予使用者最好的使用体验。本研究主要参考樊祖烨与潘博宇 (2019) 的观点，在功能模组的流程设计上，透过 App 平台的方式，在线上整合供需双方的营运模式，，以达到本平台、需求者以及供给者三赢的局面。更准确的说，是达到流浪动物、领养者、收容中心、本平台四赢的局面。

(三) 次级资料分析—产业情报分析

本研究将透过产业相关的情报分析与次级资料找寻，了解目前内外部环境与产业趋势，并进一步透过 PEST 分析、五力分析、SWOT 分析、竞争者情报分析、STP 分析等工具加以彙整资讯，找到本平台的市场定位与目标客群属性。

(四) 消费者情报分析

本研究希望能具体了解创新平台的目标客群与具体行销方式，故会进一步以质性访谈与量化问卷的方式进行消费者情报分析，具体之流程如下：

1. 深度访谈：本研究之访谈对象为本平台之「目标客群」。访谈时间不超过一小时 (陈向明, 2002)，并以半结构访谈为主，透过较弹性的访谈方式以了解受访对象的真实感受 (袁方编, 2002; Berg, 1998)，最后依照访谈结果彙整出研究命题。
2. 量化研究：依照研究命题设计问卷，再针对目标客群进行问卷调查。此研究将确认目标客群的真实想法，以了解行销战术拟定之方向，并加以拟定 7P 行销策略。

(五) 行销 7P 战术拟定

针对产业情报与消费者情报进行分析后，接下来会针对平台使用者进行短期的行销策略规划以提升整体平台流量与知名度，最后即可进一步拟订出 7P 行销策略。具体之策略内容将包括：产品、价格、通路、推广、人员训练、有形展示以及服务流程等七项策略。

(六) 营收预估与财务规划

本研究为了确保未来营运上的财务状况健全，故在行销 7P 战术拟定后会再做进一步的营收预估与财务规划，具体内容包括：资本形成、营收预估以及预估未来三年损益表等内容。

(七) 结论与建议

在上述研究的最后，将对此研究提出结论与建议。内容包括：本研究之结论、学术与实务意涵、研究限制以及给予未来研究者之建议。

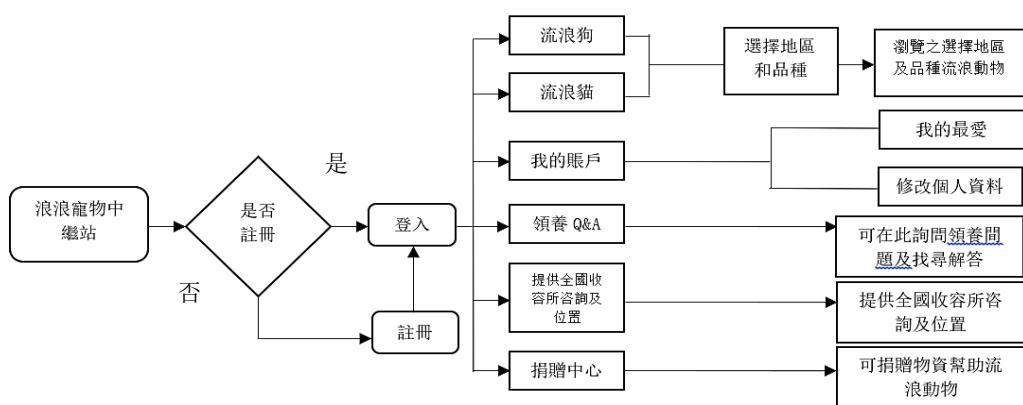
4. 系统产品介绍

一、系统架构

本研究将平台命名为「浪浪宠物中继站」。本平台主要是提供各收容所中的所有流浪猫、狗的完整资料，提供平时没时间到现场或行动不便但又想要领养流浪猫、狗的领养者使用。本系统架构主要是由线上、线下系统以及手机系统所架构而成的，线上端主要提供一般使用者所使用；线下端则是平台管理者进行维护及更新，利用O2O电子商务模式结合物联网，平台上会随时显示相关资讯并随时更新流浪猫、狗的最新动态，提供使用者进行线上即时浏览。

二、系统说明

图一为「浪浪宠物中继站」的系统流程图。由图一可知，欲领养流浪动物者可以直接在系统中填写个人资料完成手续，在流浪猫狗的资讯方面，本平台运用选单功能供使用者选择地区及品种，也有相关资讯让平台使用者能更加瞭解流浪动物的领养及收容所的运作。



图一 系统流程图

三、功能模组流程

创新平台「浪浪宠物中继站」最初画面为首页，用户须先注册本软体，以确保为真人在使用。详细流程如表一。

表一 系统登入与注册

1. 登入画面	2. 注册画面	3. 首页系统流程图
如已注册即 立即登入。		

登入后画面即变为【功能列表】画面。详细流程如表二。

表二 功能列表

1.功能列表	2.功能列表流程图
<p>使用者可依照自己使用需求选用功能。</p>	<pre> graph TD A{是否註冊} -- 否 --> B[註冊] A -- 是 --> C[登入] B --> D[流浪狗] B --> E[流浪貓] C --> D C --> E D --> F[我的帳戶] D --> G[領養Q&A] D --> H[提供全國收容所資訊及位置] D --> I[捐贈中心] E --> F E --> G E --> H E --> I </pre>

「浪浪宠物中继站」第一个功能为【流浪猫、流浪狗】。此界面为各地区收容所内的流浪猫、狗浏览。详细流程如表三。

表三 流浪猫、流浪狗操作说明表

1.选择页面	2.浏览页面	3. 流浪猫、流浪狗流程图
<p>以流浪狗为例，选择欲浏览之收容所地区及品种。</p>	<p>以流浪狗为例，选择后即可浏览选择区域收容所及宠物品种。</p>	<pre> graph TD A[浪浪動物中繼站] --> B[流浪狗] A --> C[流浪貓] B --> D[選擇地區和品種] C --> D D --> E[瀏覽之選擇地區及品種流浪動物] </pre>

「浪浪宠物中继站」第二个功能为【我的帐户】，细分修改个人资料及我的最爱。详细流程如表四。

表四 我的账户界面操作说明表

1. 我的账户页面	2. 修改个人资料页面	3. 我的最爱页面	4. 我的帐号流程图
进入我的账户页面选择欲使用之功能。 	如需修改个人资料可至此页面做修改。 	点选我的最爱后，可参考全部喜爱的流浪动物。 	<pre> graph TD A[浪浪動物中繼站] --> B[我的帳戶] B --> C[修改個人資料] B --> D[我的最愛] </pre>

「浪浪宠物中继站」平台第三个功能为【领养 Q&A】，提供使用者询问及讨论领养相关问题。详细流程如表五。

表五 领养 Q&A 界面操作说明表

1. 领养 Q&A 页面	2. 领养 Q&A 流程图
使用者可提出问题做询问也能在他人问题中提出一些看法，内部也会安排收容所工作人员为使用者解答。 	<pre> graph TD A[浪浪動物中繼站] --> B[領養 Q&A] B --> C[可在此詢問領養問題及找尋解答] </pre>

「浪浪宠物中继站」平台第四个功能为【收容所资讯网】，提供全国收容所资讯及位置。详细流程如表六。

表六 收容所资讯网界面操作说明表

1. 收容所资讯网页面	2. 收容所资讯网流程图
让使用者更加了解全国收容所位置及联繫资讯。 	<pre> graph TD A[浪浪動物中繼站] --> B[收容所諮詢網] B --> C[提供全國收容所諮詢及位置] </pre>

「浪浪宠物中继站」平台第五个功能为【捐赠中心】，提供快速的捐赠管道。详细流程如表七。

表七 捐贈中心介面操作說明表

1. 捐贈中心頁面	2. 捐贈中心流程圖
包括金錢與物資上的认购及捐赠，提供给无法领养动物但还是希望能帮助到流浪动物的人群。	 <pre> graph TD A[浪浪動物中繼站] --> B[捐贈中心] B --> C[可捐贈物資幫助流浪動物] </pre>

5. 市场环境与竞争分析

一、大环境趋势情报分析

PEST 即政治 (Political)、经济 (Economic)、社会 (Social) 和技术 (Technological) 的缩写，这是四大类会影响企业的主要外部环境因素。Aguilar (1967) 原先是提出「ETPS 分析」的架构，而后被改称为「PEST 分析」。本研究在分析方式上採用次级资料分析法，并提出具体分析结果，如表八所示。

表八 PEST 分析表

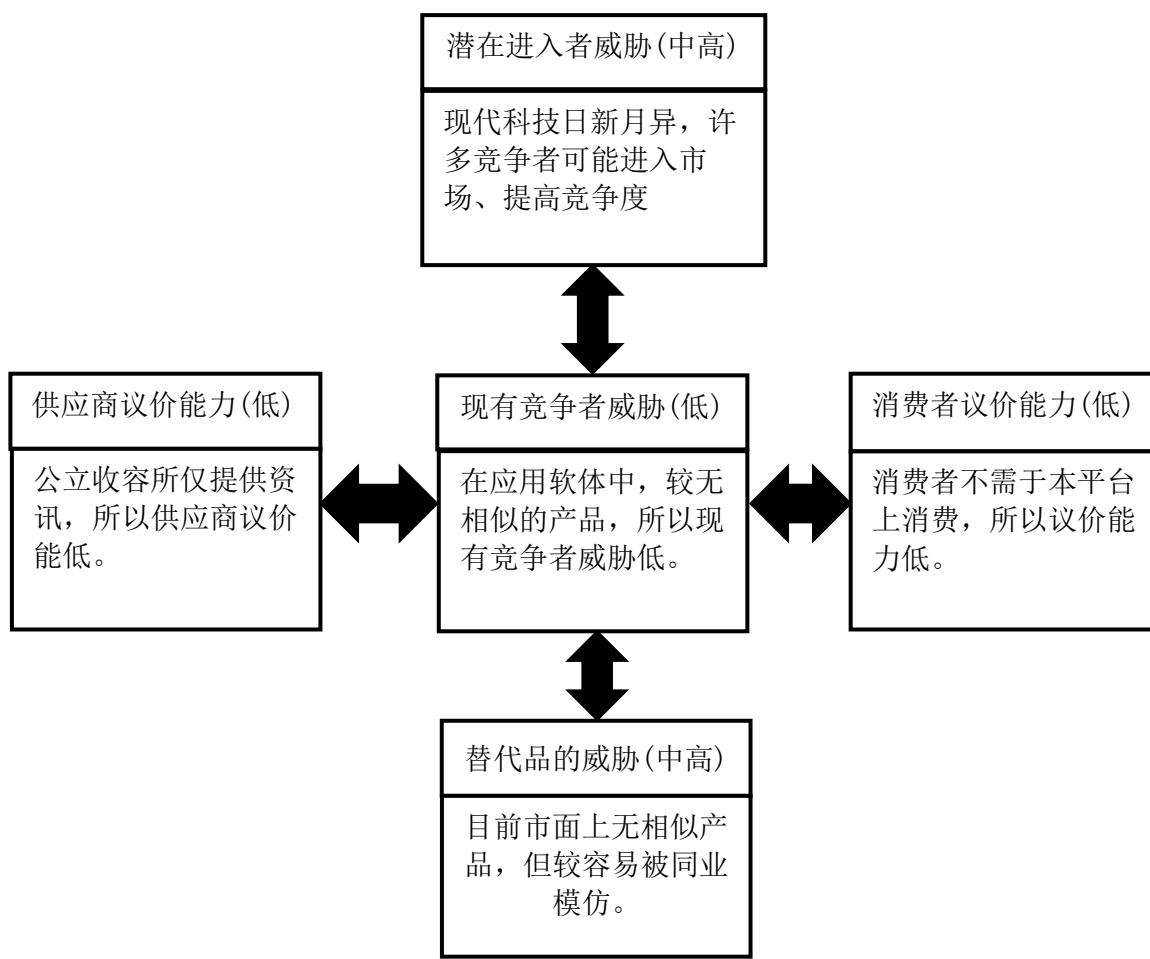
政策/法律趋势情报:	经济/消费趋势情报:
1. 台湾在 1998 年 11 月 4 日订定了「动物保护法」研订，保护动物不受伤害。 2. 流浪动物零安乐死政策规定，12 日后仍无人认领的流浪动物，不会被进行人道处理。 3. 动保单位近年来极力呼吁以领养取代购买，教育饲主善尽责任，以及推动民众的动物保护观念等。	1. 根据台湾农委会 (2013) 估计，台湾的宠物市场已有 200 亿元产值/160 万隻宠物，估计现在已到 500 亿产值。 2. 对于想领养动物及时间无法配合的族群，透过此平台能随时上网关注。 3. 动物保护法于 2015 年起规定饲主必须为家中宠物结扎，因此各县市推出猫狗绝育补助、免费结扎等活动。
社会/人口趋势情报:	科技/技术趋势情报:
1. 2017 年台湾约有 251 万隻宠物，2021 年约有 296 万隻宠物，呈逐年增加趋势。 2. 有意愿领养宠物的饲主可依喜好与需求，选择地区及品种。 3. 经过饲养者生活统计结果，得知饲养宠物对于生活品质有正向影响。	1. 整合线上领养平台，使平台成为 O2O 电子商务产业。 2. 许多宠物产品增加智慧化科技功能，让没时间饲养的民众能安心饲养。 3. 透过物联网，提供民众流浪动物基本资料及健康资讯。

由表八可知，在政治/法律方面，制定政策也不能完全改善流浪动物收容所空间不够、设备经费不足等的问题，待领养的流浪动物在等待领养期间无法得到完善的照顾；在经济/消费方面，对于在这些宠物身上的花费，能够带动一个经济体的金钱流；在社会/人口方面，饲养宠

物的民众日多，且认为这对生活品质有正向影响；在科技/技术方面，结合物联网与 O2O 的电子商业模式，使想领养流浪动物的人群能了解状况。另一方面，后台所蒐集的大数据，也能依此了解现今想领养流浪动物人群的需求取向。

二、产业情报分析

本研究接下来以 Porter (1980) 提出之五种相对竞争作用力进行产业情报分析，如下图二所示）。由于本研究主要是建置一个平台来解决问题，但是现在平台的建置不会困难，故潜在竞争者的威胁与替代品的威胁都为中高，另外，也因主要使用者不算多，且因无相似平台，加上市场成长潜力高，所以目前竞争者的竞争力相对来说是较低的。其他方面来说，因为所需资讯皆由收容所提供，故降低了与其他技术供应商的议价能力，其议价能力较低。此外消费者能选择的系统并不多，加上不需付费使用，所以消费者议价能力偏低。



图二 Porter 的五力分析

三、竞争者情报分析

Porter (1990) 提出竞争者分析，本研究将本创新平台与现行的竞争对手进行比较与分析，从表九可以看出本平台与其他竞争者佔有优势。

表九 竞争者情报分析

竞争者	全国动物收容系统	现场参观	浪浪宠物中继站
选择地区及种类资讯	有	有, 但还是偏限	容易选择
随时了解、更新资讯	有, 但无详细资讯	不能随时	可以随时随地
捐赠资讯	无此功能	有	有捐赠资讯与管道
讨论领养知识	无此功能	有	有讨论区

四、消费者情报分析

接下来, 本研究将透过 Wehrich (1982) 所提出之矩阵分析方式, 将组织内部的优、劣势与外部环境的机会、威胁进行呈现。亦即透过 SWOT 分析, 去了解「浪浪宠物中继站」如何应用优势掌握机会、克服/防范重大威胁、提出隐藏/风险管理的有利对策, 并将善用逆向思考转化劣势为优势的作法去了解外部环境及内部资源。SWOT 分析如表十所示:

表十 SWOT 分析

		O 机会	T 威胁
1. 第一年: 成功领养率 70%, 并提高平台曝光度, 年营收额达到美元 13 万。	2. 第三年: 成功领养率增加至 80%, 并增加平台更多功能, 巩固现有使用者, 年营收额达到美元 26 万。	<p>1. 智慧型行动装置普遍, 现代人习惯使用手机或平板上网。</p> <p>2. 台湾还是有不少爱心饲主, 例如明星艺人等可邀请他们领养宠物。</p> <p>3. 平台有经验分享讨论区, 能解决领养饲主的疑问。</p> <p>4. 饲养宠物人口逐渐增加, 相关产业产值也逐渐提升。</p> <p>5. 无类似平台, 具有独特性。</p>	<p>1. 后续饲养宠物, 低收入家庭或许因经济状况而无法扶养。</p> <p>2. 领养人与领养宠物体质和个性可能与预期有所不同, 进而影响平台评价。</p> <p>3. 根据个人资料无法有效判断是否为爱心人士领养或有其他企图。</p>
S 优势	<p>1. 可在平台上确认宠物的生理数据与状况。</p> <p>2. 集资民众捐赠饲料、爱心商品协助收容所流浪动物。</p> <p>3. 减少流浪狗衍生的社会议题。</p>	<p>(SxO) 去除策略</p> <p>1. 现代人使用智慧型装置普遍, 再加上明星艺人的大力推动, 可达到更高的社会效益。</p> <p>2. 无类似平台, 因此具有创新的优势, 可提高领养率。</p>	<p>(SxT) 去除策略</p> <p>1. 创建领养人纪录, 确定期追踪其身分</p> <p>2. 透过本平台的宠物资料, 让领养人能找到适合自己的宠物。</p>
W 劣势	<p>1. 前期推广成果效益不大, 曝光率不够。</p> <p>2. 透过网路观察流浪动物与现场有差异。</p> <p>3. 平台资金不足且缺乏行销资源, 不易提高平台知名度。</p>	<p>(WxO) 补足策略</p> <p>1. 利用拍摄微电影等活动进行推广, 争取爱心相关人士支持, 提高其曝光率。</p> <p>2. 透过损赠物资与募款活动获取资源, 使用社群推广活动增加曝光率</p>	<p>(WxT) 放弃策略</p> <p>1. 定期举办大型认养活动, 并配合宠物周边商品厂商共同举办。</p> <p>2. 尽量利用网路进行整合行销, 减少行销费用的支出。</p>

五、STP 定位

Kotler and Keller (2015) 提出 STP 分析, STP 是为了满足不同消费者的需求, 将不同属性、需要、特徵或行为群体的消费者加以区分为不同的市场, 然后针对需求一致的区隔市场提供行销组合。

(一) 市场区隔

本研究主要针对使用者的流浪动物资讯需求, 不用受时间地点的拘束, 依据整个市场区隔分析之后, 再决定目标市场及产品行销之商品定位。详尽的市场区隔如表十一所示:

表十一 市场区隔

消费者市场区隔变数	项目	分析
人口统计变数	年龄	20岁以上者、中年层、老年层
	职业	上班族、家管(无业)、退休人员
	收入	低收入者、中产阶级、高收入者
地理变数	地区分布	北部、中部、南部、东部、离岛
心理变数	生活型态	计画饲养宠物的人
行为变数	获得利益	挑选到自己喜欢的流浪猫狗、发挥对流浪动物的爱心

(二) 目标市场

本研究经由市场区隔分析, 可确定目标客户及市场定位如表十二。「浪浪宠物中继站」针对有意愿领养流浪动物的使用者提供一个资讯平台, 让使用者可以透过平台了解收容所中流浪动物的所有资讯; 并结合「浪浪宠物中继站」平台, 提供各式功能让使用者能获得更多相关资讯, 例如: 提供捐赠之连结、全台地区收容所资讯、领养 Q&A 等等…, 日后也希望能增加更多功能方便使用者使用。详尽的目标市场如表十二所示:

表十二 目标市场

消费者市场区隔变数	项目	分析
人口统计变数	年龄	20-50岁之青壮年层
	职业	上班族、退休人员
	收入	中产阶级、中低收入者
地理变数	地区分布	北部、中部、南部、东部、离岛
心理变数	生活型态	宠物满足陪伴的需求、计画饲养宠物的人
行为变数	获得利益	能随时随地利用时间浏览欲领养的动物

(三) 商品定位

「浪浪宠物中继站」是针对喜爱宠物、希望想领养宠物的客群, 为了让使用者不再需要辛苦找寻资讯, 本创新平台将收容所内流浪动物资料整合, 搭配相关专业资讯及讨论区让整个平台的流量能够长期经营(资料、使用者), 不再需要到现场就能选择喜爱之宠物, 提供一个更加方便的平

6. 市场环境与竞争分析

一、研究方法与流程

本研究为了要确知最新的消费者情报，将先以 20-50 岁且经济能力能承担宠物费用之欲领养宠物民众进行访谈。为了瞭解访谈对象真实感受，本研究採用访谈法的半结构分析法，希望精准地分辨研究结果的差异。本研究在访谈后会针对语句进行归纳统整成为研究命题，再依据文献探讨的内容及研究命题，拟定出问卷加以分析，以便对 7P 行销策略的发展提供方向。

二、深度访谈

(一) 访谈对象筛选

本研究以大台北地区为研究范围，针对 20-50 岁欲领养流浪动物的民众做深度访谈，以确定研究命题，访谈对象的选择标准为：

1. 20-50 岁，经济独立。
2. 个人年所得为美元 1.5-3 万之间。
3. 有预期领养流浪动物并对饲养宠物有基本概念。

(二) 访谈结果与命题

本研究接下来针对 4 位 20-50 岁欲领养宠物民众进行深度访谈 (时间为 2020 年 10 月)，确认访谈结果符合预期后，将所有的访谈内容录音并做成逐字稿 (访谈彙整表请参考表十三，以推导得出研究命题)。

表十三 访谈彙整表

基本资料	经济能力	平时有关注流浪动物资讯吗	使用浪浪中继站平台的意愿	对于「浪浪中继站」平台的期望
23 岁 作业员	年所得约 美元 1.5 万	有在关注	如果是免费的，应 该可以	线上客服服务，可了解猫 狗讯息还有健康状况
30 岁 虾皮客服	年所得约美 元 2 万	有，且有捐款 资助流浪狗。	有这个意愿，会想 要帮助流浪狗，但 家裡的空间有限	能够利用资助流浪动物帮 助流浪动物
25 岁 销售员	年所得约美 元 3 万	知道！有留意	会	无
36 岁 宠物保母	年所得约美 元 2 万	大概知道	会	待领养动物的影音资讯及 后续可配合的兽医院资讯

(三) 访谈命题

本研究彙整受访者的访谈结果后，经由逐字稿归纳整理，推导出四个研究命题如下所示：

命题 1：使用者因上班忙碌，因此希望透过此平台随时线上浏览，更新流浪动物相关资讯。

命题 2：使用者因家中因素而无法领养，也想为流浪动物出一份力，若能够以资助方式帮助流浪动物会更好。

命題 3：使用者想更进一步了解流浪动物资讯，认为在平台上设有讨论区，并有了解民众及动物之专业人员提供谘询，可提升使用意愿。

命題 4：使用者认为从社群网路、广告、兽医以传送资讯，或是透过发放传单较为可信，同时也能增加使用者意愿。

三、问卷设计

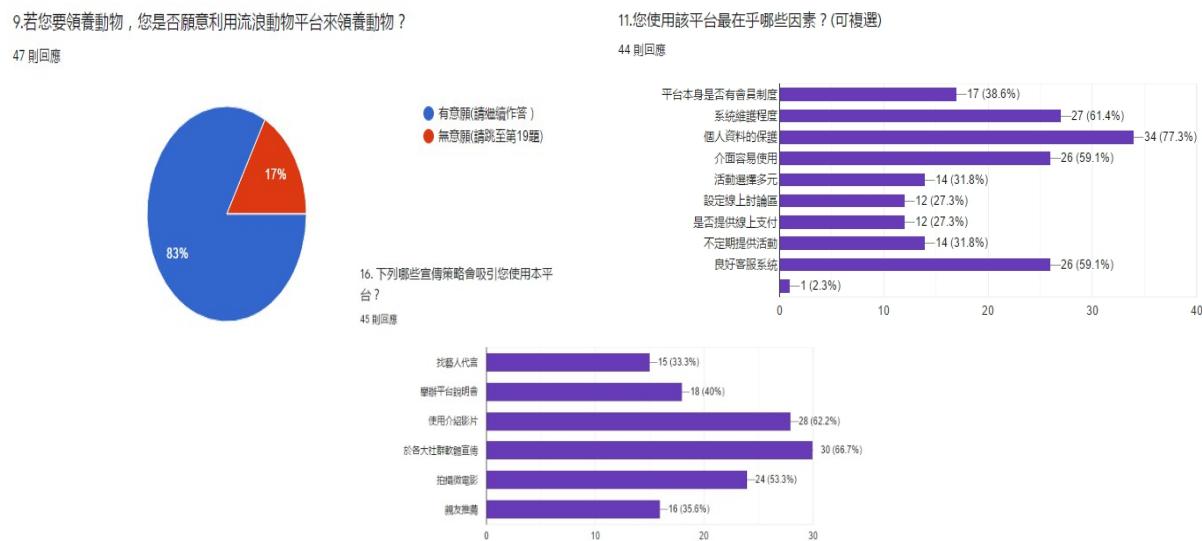
(一) 问卷设计流程

本研究将文献探讨之內容与深度访谈中获得的命题整理后，发现受访者大多认为如果个资无安全疑虑、系统操作便利以及平台设有讨论区等前提，会大大提高他们对于平台使用意愿。有鑑于此，本研究依照上述观点拟定后续进行的问卷调查。本研究之问卷调查抽样对象为 20-50 岁欲领养宠物民众（经济独立者）。为了顺利找到符合目标客群的受访者，本研究採滚雪球抽样法之抽样方式，透过受访者的人际网络去找寻符合条件之受访对象，再由研究者亲自进行受访者问卷的填答与回收。问卷发放数量则参考 Sekaran (2003) 的观点将样本数控制于 30 至 500 份之间。因此本研究预定发放问卷数为至少 50 份，实际上于 2021 年 1 月共发放了 50 份，回收了 47 份有效问卷，有效问卷回收率达 94%。

(二) 问卷设计结果

问卷分析结果（如图三）指出，有 83% 的受访者乐于领养流浪动物。受访者最在乎的就是个资的安全性与平台系统使用的方便性。有鑑于此，本研究将依照上述结果进一步制定出行销策略，以利平台的稳定经营与成长。

图三 问卷分析结果



7. 行销策略

郑启川、赵满玲与洪敏莉 (2013) 提出 7P 行销策略，本研究对消费者行为、内外在环境及竞争对手做了调查分析后，拟订出 7P 行销策略，针对使用者进行短期之行销策略规划，并分为 7P 拟定其行销策略如下：

一、产品策略

「浪浪宠物中继站」为了让使用者在使用此平台时能更快速便利、更清楚地上手，以及满足使用者在本平台中各种需求，平台的主要功能如以下五点所示

- (一) 流浪动物地区及品种选择，让使用者方便自行做选择。
- (二) 设置资料库储存顾客喜爱的流浪动物，且随时能修改个人资料。
- (三) 能藉由捐款帮助流浪动物。
- (四) 提出领养相关问题即有专业人士协助回答。
- (五) 嵌入 GPS 定位系统让使用者快速找到离自身最近的收容所。

二、价格策略

本平台之目标客群的年龄层较广，因此本研究依照不同年龄及需求分别採取渗透策略或吸脂策略，对商家则採取成本加成策略。以下是本研究所提出的价格策略：

- (一) 渗透策略：使用者中 80% 顾客终身免费使用。
- (二) 吸脂策略：20% 使用者依照进阶功能需求收费。
- (三) 成本加成策略：提供商家推广活动及广告刊登。

三、通路策略

本平台採零阶通路，透过网路平台提供下载连结或者 Facebook 粉丝专页提供下载连结，与知名网红合作传达流浪动物领养理念及分享此平台。目前主要通路如下：

- (一) 官方网站与各大路口网页的关键字搜寻连结。
- (二) 与宠物 Youtuber 合作，平台连结放置影片说明
- (三) 建立粉丝专页，即时更新平台状况，增加与使用者互动机会。

四、推广促销

在社群行销及活动行销部分，本研究依据问卷调查结果（参图三）以平面与网路媒体广告，邀请实况主和宠物 Youtuber 共同推广，以拍摄介绍影片的方式帮助使用者深入了解本平台。本研究利用以下三点策略来进行推广：

- (一) 透过活动赞助参与、利用网路媒体广告建立形象并让广大使用者对宠物更有兴趣。
- (二) 置入性行销与收容所、动保合作拍摄影片，方便使用者浏览，促进以领养代替购买。
- (三) 举办说明会并于社群平台宣传，邀请使用者说明心得，让更多使用者增加领养意愿。

五、人员训练策略

在人员训练上，本研究认为平台工作人员要有热情关怀动物的心，必须贴近使用者，定期向使用者调查产品在使用上有何缺点，并针对使用者的心理需求数据做严密的判断及思考。因此本研究针对以下三种人员进行训练：

- (一) 行销人员：对客户做产品介绍，达到有效推广。
- (二) 维修、操作人员：于平台进行系统操作训练以及系统维修和更新。
- (三) 客服人员：熟悉各种产品问题为客户解答。

六、有形展示策略

本研究将推动各种有形展示的整合、实施重点在于专业解说整合规划，参考使用者提出的建议并改善，以促进使用者对平台的黏著度。主要的策略有下列三项：

- (一) 专业服务流程以及平台介绍影片（YouTube）。
- (二) 与知名实况主及动保团体共同推行活动。
- (三) 举办推广活动，以领养代替购买的行为帮助宠物找到好主人。

七、服务流程策略

在产品推出阶段，持续推动良好的使用体验、并依需求改善服务内容，建立可行之服务营运模式，并结合客服系统，提供评论与评分，让使用者可提出建议，促进友善的互动服务。在网络完备与产业成长阶段时，统整顾客意见，检讨并加以改善。至于在互动部份，主要是利用大众常用的脸书粉专让使用者可以在线上谘询，建立方便迅速的服务。现详述如下：

- (一) 利用手机 App Store 或 Play 商店下载本系统平台。
- (二) 提供讨论区，让使用者可以交流、得到领养相关疑问的解答。
- (三) 定期给予使用者评论问卷，以方便对平台进行优化。

8. 营收预估与财务规划

一、营收预估

根据 Pollster 线上市调 (2014) 的调查，台湾有饲养宠物的民众大多落于 20-50 岁。国家发展委员会人口推估查询系统 (2019) 调查，目前台湾 20-50 岁的人口约有 1,043 万人，经由本研究的问卷调查，有高达 83% 受访者有意愿去使用本平台来领养流浪动物。利用创新扩散理论进行推估，目标客群的 2.5% 会率先使用，因此本研究估计实际潜在客户约为 216,423 人，超过了平台运营所能容纳之客户人数。因此「浪浪宠物中继站」在创业初期的目标是做好对顾客的服务，以便产生口碑行销的效果，而不追求平台流量的快速成长。平台的前五年营运目标请参照表十左上方之营运目标。

本研究估计第一年的爱心募资和贩售流浪狗爱心商品，收入预估约美元 2 万元。至于广告收入的方面，由于本平台刚成立没有知名度，因此不易产生大量的销售营收及承揽广告，所以本平台初期主要以贩售流浪猫/狗爱心商品及爱心募资做为主要营收来源。

二、资本形成

「浪浪宠物中继站」初期的市场经营是锁定 20-50 岁希望领养宠物的消费者。为了刺激消费者的目光，在营运初期，主要为降低营运成本并透过争取学校的免费资源及以网路进行行销。因为本创业案初期採网路平台的方式经营，绝大部分的营业费用与资本支出都是利用捐款资源。「浪浪宠物中继站」平台的架设与 App 的写作编码则是利用学生专题研发完成。整体经营模式则採「轻资产」方式营运，所以创业资本支出并不大。也因为採取微型创业方式，所以本研究将初创的股本设定为美元 2 万元，主要由认同「浪浪宠物中继站」经营理念的师长及创业团队投资。

三、预估未来三年损益表

根据以上模拟推论，本研究提供财务规划与分析如表十四所示。由表十四可以看出，「浪浪宠物中继站」获利与营收从第五年起会有较大幅度的成长。

表十四 未来三年预估损益表

单位: USD

未来三年预估损益表			
科目	第1年	第3年	第5年
营业收入	130,000	260,000	500,000
材料成本	30,000	50,000	80,000
营业毛利	100,000	210,000	420,000
营业费用	40,000	80,000	100,000
薪资费用	50,000	100,000	150,000
杂费	5,000	10,000	20,000
税前利润	5,000	20,000	150,000

9. 结论

一、营运计画之结论

「浪浪宠物中继站」的营运打破以往商业经营模式，结合领养动物各种需求，让使用者透过平台能随时随地浏览流浪动物且立即提出领养申请，不再受限于时间及地点，就能领养自己心爱的宠物及了解更多关于领养的相关资讯。从内外部环境分析得知，流浪动物领养平台具有一定的潜在的客群及商机。而多数民众有个资安全及动物资讯两大疑虑，这部分此平台备有个人资料验证机制及健康状况查询系统辅助落实，以降低消费者不必要的疑虑。综合上述，此研究在商业意涵或是欲领养流浪动物人群方面，正是进入产品开发的最佳时机。

另外，本平台最主要的是提供使用者简单的平台服务，让使用者能在短暂的时间内了解到领养宠物许多相关的议题，以及能在此查到有用的资讯。平台提供的资讯以流浪宠物为主，其中包含查询全台湾各地的收容所，宠物资讯内容裡还有宠物的介绍，也可以查询到宠物品种的不同，了解宠物的性格，需要给牠什麽样的环境等。另一方面，也提供宠物的相关资讯让使用者参考，平台中除了可以查询宠物、收容所、动保议题的资讯之外，还提供距离使用者位置最近的收容所或动物之家的资讯，并利用地图定位以及街景图，让使用者快速得知。本平台也为那些喜爱宠物却没有领养条件的使用者，以线上领养的方式，发挥出爱心捐献，及购买爱心商品的方式，给予流浪猫狗温暖。因此本研究总结以下三项重点结论：

- (一) 平台打破商业经营模式，让使用者不受限于时间及地点来浏览流浪动物资讯。
- (二) 平台备有个人资料验证机制及健康状况查询系统，降低消费者不必要疑虑。
- (三) 平台採用线上领养方式，让喜爱宠物却没有领养条件的使用者，捐赠物资与金钱。

二、效益说明

本研究之平台希望透过网路网路，提供正计画领养宠物的家庭一项全新的选择。而在O2O商业模式下，对使用者而言可以快速且不受地点限制浏览流浪动物，同时亦可以透过讨论区吸引领养者；平台则透过定期举办说明会与网路整合行销，让更多有需要认养宠物的人关注，提高对宠物意识的价值；而本平台则可以利用流量的增加提高广告收益，进而达到三赢的局面。因此本研究总结以下三项平台效益：

- (一) 透过O2O商业模式，让使用者更快速浏览流浪动物。

(二) 平台藉由讨论区及说明会, 增加对宠物意识的价值。

(三) 利用流量的增加提高广告收益, 进而增加曝光率。

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Research on Marketing Planning of Trading Platform for Trendy Sports Commodities

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Abstract

At present, many people like to collect valuable fashion brand sports goods, but they always make a choice between new or second-hand products, and are annoyed by the authenticity of some limited edition products. There is no one specifically designed for fashion brand sports goods. Online trading platform. Focusing on this, this research designed an online information sharing platform to allow consumers who love fashion brand sports goods to purchase goods easily and safely. This platform uses cloud imaging technology to identify the needs of consumers. In this way, it can allow fashion brand sports goods merchants to quickly expand their sales territory, and consumers can purchase products easily and securely, achieving information sharing and creating a win-win situation.

Keywords: sports industry, trendy sports commodity, used commodity, cloud application technology, information sharing platform

潮流运动商品交易平台的行销企划研究

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摘要

目前有很多人士喜爱收藏有价值的潮流运动商品，但总是在新品或二手商品间做取捨，以及对一些限量版商品的真伪感到困扰，目前还没有一个专门为潮流运动商品所设计的网路交易平台。著眼于此，本研究设计一个网路资讯共享平台，让喜爱潮流运动商品的消费者能够轻鬆且安全的购买到商品。此平台使用云端影像技术来判别消费者的需求，透过此种方式，能够让潮流运动商品商家，快速拓展销售版图，消费者也能轻鬆且安心地购买商品，达到资讯共享并共创双赢。

关键词：运动产业、潮流运动商品、二手商品、云端运算、资讯共享平台

1. 绪论

运动球鞋现在可说是潮流必备的服饰，是一个大的商机，许多人靠著炒卖（Resell）球鞋赚钱，但市面上充斥著许多假鞋，有些甚至很难分辨出来。无论是 Air Jordan 球鞋或者是平时用来打球运动的运动鞋，都有存在假鞋的风险，对于常常在网上购买球鞋的民众，并不知道卖家的货源，也不懂得如何分辨正版与盗版，因此常常面临受骗的风险，基于此理由，本研究设计了一个专门为二手运动潮流商品交易平台，「梦想市集」。此平台藉由收购商品时，先鑑定商品的真实性与价值，然后才上架于平台上贩卖，使消费者能安心购买到正版的商品。

近年来民众热爱运动的比例提高，但有很多潮流运动品牌厂商都在国外，一般消费者不太

可能专诚飞去国外购买。再加上运动媒体的流行，很多世界各地的运动比赛都可以在电视上观看，也都会发售很多周边产品，许多潮流运动商品的爱好者们都会想要拥有这些商品，但却又怕买到假货而受骗。因此本研究开发之「梦想市集」平台，就是为了免除潮流运动商品爱好者的烦恼，透过线上到线下 (OTO, Online to Offline) 的电子商务模式去节省购物流程。本研究希望能达到以下两项研究目的：

- 一、利用本平台的鑑定功能，将二手限量商品透过鑑定，来判定商品的品质及外观的真实性，解决消费者的不安，使潮流运动商品的消费者能够安心的购买商品。
- 二、本平台会透过大数据的蒐集，让价格透明化，解决潮流运动商品爱好者不知道市场正常价格的烦恼。

2. 文献探讨

一、运动产业

曾慧青 (2015) 认为随著民众运动需求与支出的明显提升，带动民间更愿意参予及推广体育运动产业之活动。此外，在政府经费有限下，体育运动事务的推展必须结合民间的力量，与民间合作推动运动产业活动已成为政府主要施政目标。谢茂杰 (2016) 指出近年来运动风气愈发盛行，运动产业也更加蓬勃发展。欧美各大运动品牌产业竞争也越来越激烈，其中全球运动用品龙头耐吉 (NIKE) 如何在短短 40 年内从一家地方性的运动商店，演变成全球运动用品龙头，靠的就是灵敏的市场嗅觉以及灵活的销售及广告行销手法。黄蕙娟与白乃远 (2015) 认为运动与休閒不再只是工作馀暇打发时间的活动，更成为维繫身心灵健康、释放心理压力的良方。因此人们开始积极投注大量心力和构想于运动休閒活动的追求，不仅促进了运动休閒等相关产业的新兴和扩张，更带动了运动健身产业的发展契机。

林房儕与谢承昀 (2013) 认为运动休閒产业已成为全球瞩目之新兴产业。运动休閒产业在二十世纪可谓是经济发展中重要的产业之一。邱翼松与金明央 (2016) 认为在全球经济不景气影响下，政府部门无不积极思考如何提昇经济实力，进行产业转型。各国专家学者皆认为，运动产业已成为发展经济的金鸡母。柯语茹 (2016) 认为运动产业是一个新兴市场，係以提供各种运动行为为前提而生产或提供某种产品或服务给消费者，以满足其需求的厂商集合，这些厂商所生产或提供之产品、彼此的服务可以相互替代。

本研究从以上文献得知，运动产业已随著社会变迁以及生活型态的改变而受到世人重视，加上日新月异的影视发展让人们能随时随地接触到各种运动赛事，而人们也逐渐意识到运动的重要性，运动产业将会是一个新的蓝海商机，消费者透过大众意识，对运动产品喜爱也逐渐提高。

二、二手商品

马凤敏 (2011) 认为近年来，全球环保意意识逐渐提升，人们对「回收再利用」的概念大都能接受，将不再需要的物品拿到通路上贩售。周美婷 (2014) 发现在网路科技尚未盛行之前，二手交易基本上从自製传单张贴、直接询问亲朋好友是否要购买、登报宣传及委託仲介机构代办等四种广告方式寻找买、卖主，但现在多以网路进行为主。Levinthal and Purohit (1989) 认为二手商品不只是以价格与品质来衡量其价值，对于消费者该慎重考虑的则是自身是否需要；能不能使用才是消费者所重视的价值。至于消费者视为是否会将用品以二手商品卖出的主要因素则有时间、金钱与赠与等。陈明郁、樊祖烨、曾芷薇与黄俊铭 (2020) 认为要解决旧物所带来的困扰。网路拍卖是最快的方式，与其拿去送人，不如利用 C2C 的模式进行交易，创造一些收入。只要顾客确定成交，即可以宅配的方式将货品运送至买家处，这样不但简单，还可以解决二手商品的问题。

潘星宇 (2011) 发现全球环保意识提昇，许多先进国家已走向资源再利用的「循环型社会」，「换手文化」早已略具雏形，国内政府为宣导环保概念，相关的再生计画亦逐步推动，而民间

团体也经常举办活动式的假日二手市集，除此之外，大环境的不景气，二手商品的消费逐渐受到国人重视。黄安妮 (2011) 发现在日本，二手电脑、二手家电、二手傢俱的需求目前均呈现直线上升的趋势，显示日本人的消费模式已经转变。逆势成长的二手产业也已经受到日本政府重视。Horne and Maddrell (2016) 发现二手货有其不同于新商品的特性？常是消费者的非必要选项，消费者对于二手商品的接受意愿到底受到哪些行为态度影响，还是仅由基本人口统计变项即可辨别目标消费者群呢？也成为学者研究的重点。

本研究从以上文献得知，世人对二手商品的接受度也有逐渐升高的趋势，主因是消费族群年龄的降低，许多年轻消费群族群加入，又没太多的预算考量，却想得到商品而获得满足感。加上环保意识抬头使得二手商品更有利环境的永续发展，因此二手商品的需求量逐年增加。

三、云端运算

李香蓉 (2018) 认为目前云端运算已成为资通讯产业重要的新兴发展趋势。云端运算是经由网路，将庞大的运算能力提供给使用者运用的服务。廖羿乔 (2017) 发现近年来许多先进国家以云端科技运用于国防作战的概念愈为盛行，各国纷纷发展云端科技支援作战。其中关键在于推行革新的「云端运用」作法，不仅使训练更加有效，还可以分析敌国情报，以利于更佳精密的反应用于策，使训练效益提升。郑钧任 (2019) 认为云端运算 (Cloud Computing) 是一种基于网际网路的运算与储存方式，透过共用的软硬体资源和资讯，提供给电脑各种终端和其他装置使用，具有集约、共用及高效能的特点。

刘孟竺 (2019) 认为云端运算是一种将数据和程序存储在物联网中而不是计算机的硬体中，可以透过远端操控而截取所需的重要资料，和过往资料存取在实体硬碟中，有著完全不同的差异以及实用性。张硕毅 (2017) 认为随著新的云端运算服务和技术逐步进入市场，组织须不断重新设计需求和重複评估，因此未来的评估工作应按照特定的准则加以规范。李启荣 (2019) 认为如何快速从庞大而複杂的资料中，挖掘出有效的讯息并预测未来趋势，作出即时的反应与决策，是商业模式中极为艰难以及重要的一个挑战。

本研究从以上文献得知，云端已成为现代产业转型需具备的专业能力，透过云端可以不受地域、时间的限制，随时提供资讯给消费者。本研究的目标是要提供一个云端整合式平台，希望能够让使用者透过云端来轻鬆取得所需的资讯，形成一个新的商业模式。

四、资讯共享平台

张展评 (2016) 认为掌握资讯就掌握了商机。资讯的掌握源自于各个行业间彼此的讯息交流，但大部份公司在获利的考量下，多数不愿将手中掌握的讯息公开，最多就是透过私人情谊的请託，这样就较难有更多的讯息共享。李怡慧 (2018) 认为要提昇贸易效率，必须强化厂商竞争优势，这是近来台湾对外经贸政策发展的重心，而资讯共享能使各行业间的讯息公开，利于经济发展。朱耀明、吴明待与林伯翰 (2006) 认为所谓资讯分享是将获取之资讯传递出去的过程，是资讯行为的一环，也是社会中相当自然行为。资讯分享可概略分为资讯的获取与传递，综观两者其实是结合在一起且相互影响的行为。

陆安妮 (2016) 提出透过资讯共享，从大数据分析以及顾客关係等方式中去掌握需求，得以从下游精准地行销到上游并正确预测销量，进而在备货上减少仓储或者缺货成本。陈苗霈 (2017) 认为透过资讯平台可以掌握整个市场的动向，更加准确的知道消费者的相关资讯，利用资讯共享的方式，让供应链中各个成员互相合作，目的是为了大幅缩减整个供应链中的成本以及获得最佳的成本分担。黄子峻 (2016) 认为 www 在 Internet 扮演著资讯共享平台的重要角色。而 XML 是继 HTML 之后为新一代 Web 相关系统中极重要的技术。

综合上述参考文献之资料，本研究可以推论出下列结论：由于运动产业让大众对运动的商品及媒体认知提高，加上对二手商品的接受度提升，使运动品牌平台得到共享经济，加上云端运用技术，使云端可以不受地域、时间的限制，随时提供资讯给消费者，形成一个新的商业模式，创造更大的资讯共享平台。

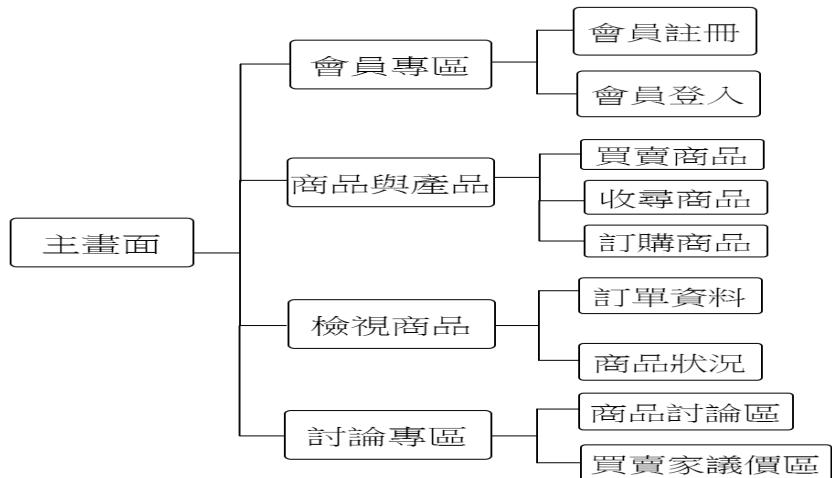
3. 产品与服务内容

一、系统架构

本 App 系统命名为「梦想市集」，它整合了多样功能，依照使用者需求，以 AR 技术和鑑定商品技术建置系统功能。本系统架构主要是使运动潮流人士更加便利，让使用者能透过「梦想市集」买到安全，且品质高的商品。系统前端主要提供给一般使用者（会员及商家）所使用；后端则是提供管理者进行系统维护，以及商品鑑定技术人员使用，提供使用者更好的服务品质。

二、流程说明

图一是「梦想市集」的系统整体流程图。由架构图可知本系统使用者端主要分为四大功能，会员专区、商品与产品、检视商品、讨论专区。



图一 系统流程图

三、画面说明

平台功能为【所有产品】。销售年轻族群喜爱的运动商品。详如表一。

表一 系统登入及首页界面操作说明表

1. 第一次进入系统	2. 注册画面	3. 登入画面
4. 进入首页	5. 登入界面流程图	
	<pre> graph TD A([夢想市集]) --> B{是否註冊} B -- 否 --> C[註冊帳號] B -- 是 --> D[登入] D --> E[首頁] </pre>	

平台功能为【所有产品】。贩卖年轻族群喜爱的运动商品。详如表二。

表二 所有产品操作说明表

1. 所有产品	2. 购物车页面	3. 登入画面
		<pre> graph TD A([夢想市集]) --> B[所有產品] B --> C[購物車] </pre>

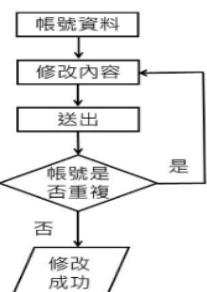
平台功能为【商品谘询】，功能为提供使用者各种问题回答。详如表三。

表三 连络我们介面操作说明表

1.商品谘询	2.讨论专区	3.商品谘询流程图
使用者询问各种商品问题。 	使用者可以留下商品留言。 	 <pre> graph TD A[商品諮詢] --> B[輸入內容] B --> C[成功送出] </pre>

平台功能为【个人资料】。功能为供使用者更改会员资料。详如表四。

表四 个人资料介面操作说明表

1.个人资料	2.个人资料结构图
会员专区。 	 <pre> graph TD A[帳號資料] --> B[修改內容] B --> C[送出] C --> D{帳號是否重複} D -- 是 --> E[修改成功] D -- 否 --> F[修改成功] </pre>

4. 市场与竞争分析

本研究透过 PEST 分析、五力分析、SWOT 分析等分析工具来进行次级资料的蒐集与整理，并交叉分析与探讨其中之关联性以拟定出具体的 STP 分析，并找出「梦想市集」的市场区隔，以便能够做为研究方向与拟定行销策略之参考。本研究针对「梦想市集」所进行的各项研究分析如下所示。

一、外部大环境情报分析

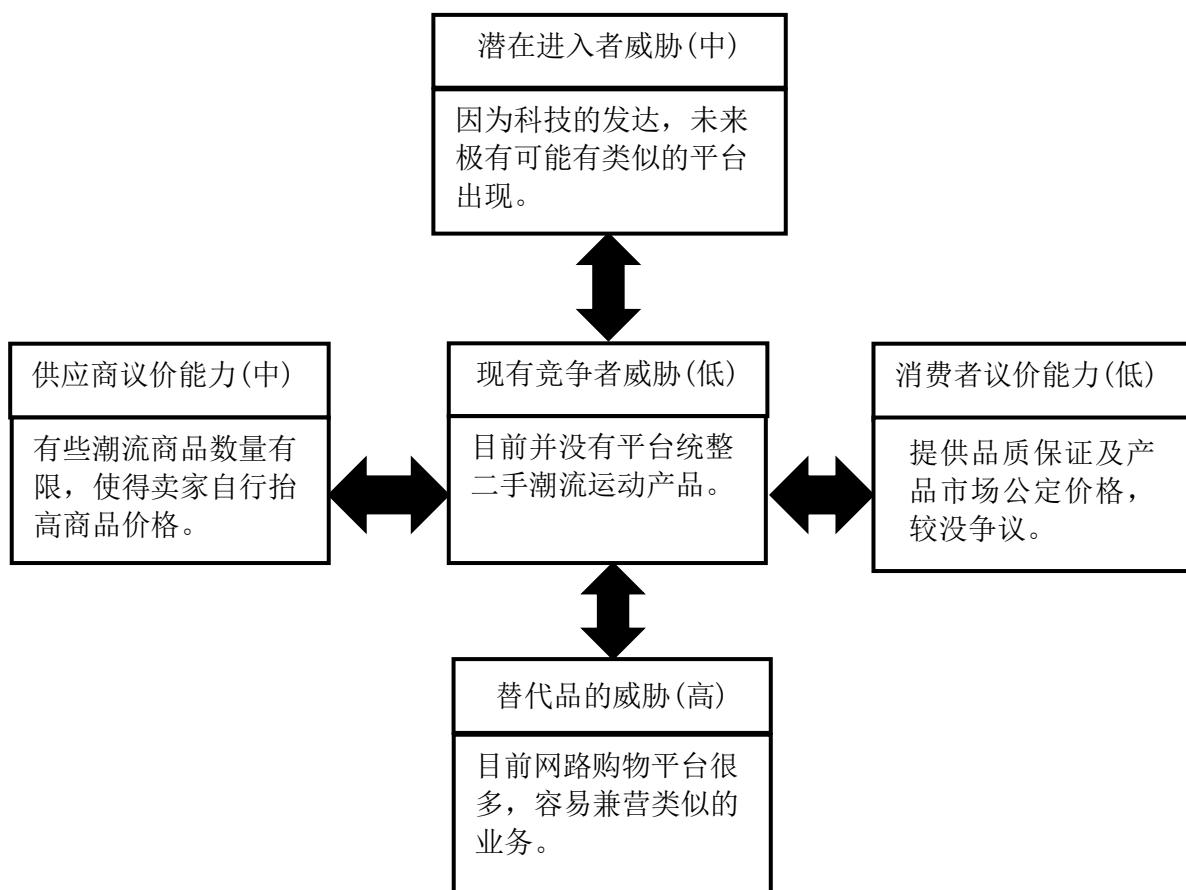
PEST 分析模式最早可追溯至 Aguilar (1967) 之研究，其探讨的是 (Political)、经济 (Economic)、社会 (Social) 与科技 (Technological) 等四种因素。这也是在作市场研究时，外部分析的一种主要分析方式，其分析能给予公司一个针对总体环境中不同因素的概述。藉以协助企业或产业于宏观环境发展评估所需。PEST 分析模型应用于各不同产业或所涉及之要点亦不相同，在政治/法律方面，可以藉由宣传台湾球星的商品，让更多人能知道台湾的球星，在经济/消费方面，现在人都透过电商支付的方式购买商品，以及对潮流意识也逐渐提高，可促进国家电商产业的发展，在社会/人口方面，大家对运动的意识越来越高，可以透过运动活动来促销商品，在科技/技术方面，结合各种电子商业模式，使想买卖商品的消费者能多一个管道使用。PEST 分析结果详如表五所示。

表五 PEST 分析表

<u>政策/法律趋势情报:</u> <ol style="list-style-type: none"> 电商经营须依照政府规章制度经营，确保消费者的权益。 为促进与保障国民体育参与，健全国内体育环境，政府推动国家体育政策及运动发展，增加国民对运动兴趣。 消保法第 19 条规定，二手物品或新品，只要是个人之间买卖行为，不适用七天鑑赏期。 	<u>经济/消费趋势情报:</u> <ol style="list-style-type: none"> 网路科技发达，促使许多电商平台崛起，消费者消费能力增加，且大多透过网路购物。 2019 年之运动消费支出总额为美元 420 亿，相较于 2016 年约成长 2.9%，可知运动意识逐渐提高。 全球运动产业未来三年产值成长率将超过 6%，显示全球运动产业不仅商机庞大，且成长动能相当强劲。
<u>社会/人口趋势情报:</u> <ol style="list-style-type: none"> 2019 年调查显示，参与运动人口比例 83.1%，规律运动人口比例高达 33.5%，表示运动意识越来越高。 共享经济兴起，消费者愿意尝试二手商品，使那些对运动商品爱好者，能多一个购物管道。 网路经济的兴起，大部分的消费者都会在网路上购物。 	<u>科技/技术趋势情报:</u> <ol style="list-style-type: none"> 透过行动支付，提供消费者多元的付款选择，使消费者方便使用平台。 透过专家经验的鉴定，及庞大的资料库辅助，找出商品的品质问题，让买家清楚品质保证。 平台能根据消费者所搜寻的商品，透过虚拟实境的方式试穿商品，让买家能买到符合自己的商品。

二、五力分析

运动产业目前为成长期。本研究以 Porter (1980) 提出五种相对竞争作用力分析，就产业内各相关影响因素进行分析。由分析内容可知，本研究因善用平台经济兴起的优势与掌握买卖方需求的问题，所以在供应商议价能力与潜在进入者威胁为中等。至于消费者议价能力与现有竞争者威胁较低，因为公司目前知名度不高，所以在初期愿意与本平台异业结盟的商家不多。因为近年来资讯科技发达，所以替代品的威胁高。如果平台的技术没有一直改良，技术被超前不是不可能，所以要持续进行技术研发及提出会员忠诚方案。详细分析结果如图二所示。



图二 五力分析

三、竞争者情报分析

虽然目前市场上已有开发类似的二手交易平台，但没有一个平台同时具有交流区与多元选择。本研究将本系统与市面上现有的相关 App 做竞争对手的分析，分析结果如表六所示。

表六 竞争情报分析

购物方式	虾皮购物	旋转拍卖	夢想市集
产品新旧	全部新品	8成新	9成新
价格	价格固定	平均约7折	平均约6折
产品种类	选择多元	选择较少	选择多元
商品真伪	易买到仿製品	易买到仿製品	由专家鉴定品质保证
资讯交流	有设置留言区	有设置交流区	有设置交流区
购物方式	网路平台	网路平台	寄卖式 C2C

四、SWOT 分析

SWOT 分析最早是由 Wehrich (1982) 所提出，透过此分析模式，可评价企业内部的优势、

劣势与外部竞争市场上的机会和威胁。「梦想市集」将善用机会与优势、化解威胁及避免劣势，针对其所面临的内、外在环境加以检视，并提出改善办法进而增加竞争力。详细分析详如表七所示。

表七 SWOT 分析

第一年：月成交超过 20 件， 月营业额超过美元 1 万，FB 按讚数破 1 千		O 机会	T 威胁
第三年：月成交超过 50 件， 月营业额超过美元 3 万，FB 按讚数破 3 千。		1. 近年来二手商品逐渐大 众所接受。 2. 潮流运动商品主要消费 群落在年轻族群及收藏 家。 3. 共享经济兴起，使大众 对网路平台更加信任。	1. 大多数的消费者还是有品 牌迷失。 2. 平台知名度较低，较难与大 品牌竞争。 3. 运动商品通路多，消费者可 能通过各种管道购买运动 商品。
S 优 势	1. 有设置留言区增加流 量。 2. 透过专家鑑定，商品 品质保证。 3. 商品都由市场公定价 交易。	(SxO：发展策略) 1. 透过平台共享技术，达 到双方最大的满足。 2. 透过线上讨论区了解消 费族群需求，设计有效 的行销方式。	(SxT：去除策略) 1. 便利的操作介面，吸引使用 者下载，解决无实体店面的 问题。 2. 利用目标客群的需求管道， 来做推广行销。
W 劣 势	1. 收购过程中，需负担 大量成本。 2. 市场价格过多，沟通 上不顺利。 3. 技术功能不够成熟， 知名度低。	(WxO：补足策略) 1. 往目标族群作发展，以 解决知名度不高的问 题。 2. 设计针对本平台的问卷 与评分表，以做出改 善。	(WxT：放弃策略) 1. 初期知名度不高，透过网路 媒体行销，使得消费者产生 兴趣。 2. 假设卖不出去的商品，可以 捐给贫穷的孩童使用。

五、STP 分析

Kotler and Keller (2015) 提出 STP 分析，是指企业在一定的市场细分基础上，确定自己的目标市场，最后把产品或服务定位在目标市场中的确定位置上。

(一) 市場區隔

本研究将消费者市场依据各项区隔变数，区分为几个同性质较高的市场，再针对主要客群进行需求分析，根据客群的不同提供相对应的服务。如表八所示。

表八「梦想市集」之目标市场

消费者市场区隔变数	项目	具体说明
人口统计变数	年龄	15-50 岁
	性别	女跟男
	年收入	美元 20,000 至美元 50,000
地理变数	区域分布	台湾东部、北部、中部、南部
心理变数	生活型态	家境普通、小康、富裕
产品相关之行为变数	价格	中、高价位

(二) 目标客群

经过上述市场区隔变数的分析后，本研究决定将目标市场设定为以 15-50 岁，年收入美元 20,000 至美元 50,000 的年轻族群为主要对象。让他们透过「梦想市集」在线上完成交易。

(三) 商品定位

针对上述研究内容，本研究提供一个具有安全保障的二手运动潮流商品交易平台，目的是要在未来能让平台正常的经营且找到获利的模式。所以对潮流运动商品的品质及真假，能藉由专业鑑定提高商品品质，使买方可以获得更好的商品，以及提高商品的辨识度，增加消费者的信赖，进而获得好的品牌形象。本研究希望能将潮流运动商品的效益达到最大，使买方买得安心，卖家卖得放心。

5. 行销策略与战术

本研究对消费者行为、内/外在的环境及竞争对手做调查分析后，进一步拟出 7P 行销策略，并依郑启川、赵满玲、洪敏莉(2013)的研究，针对使用者拟定短期行销策略。本研究将分为 7P 拟定其行销策略如下：

一、产品策略

本研究主要的目的就是要建置一个具有保障的二手运动潮流商品交易平台，具体的产品策略可分为下列四点：

- (一) 可以买卖商品，让卖家割爱出现限量版商品，转卖给有缘的买家。
- (二) 给予卖家市场公定价格收购商品，让他们不用担心商品无法卖出。
- (三) 产品均有投保产品责任险，让买方不用怕买到赝品。
- (四) 让消费者买到想要的潮流运动商品，同时可交流商品的资讯。

二、价格策略

本研究因商业模式较为创新并拥有过去其他商务平台没有的特色，因此在价格上採公开定价，以利日后产品发展能够弹性调配价格以维持市场竞争力，具体价格策略可依照消费者与店家两大层面来作探讨如下：

- (一) 行情订价：用市场的平均价，做为平台交易的参考价。
- (二) 时间差订价：透过商品时间上的差别来订出商品价值。
- (三) 成本加成订价：提供店家刊登广告，并依照市价 70% 左右为标准订价。

三、通路策略

了让消费者有效的认识商品，并藉由官方贩售使消费者了解物品与服务流程，故主要採取零阶通路，具体的通路策略为：

- (一) 官网连结：在各大运动品牌网站设立连结点。
- (二) 官方网站：透过官方网站知道本平台有哪些服务和技术项目。
- (三) 实体店面：在实体店面贴出「梦想市集」的官方网站及广告。

四、推广策略

本研究的网路整合行销策略，主要是利用 IMC 行销及关键字 SEO 行销，也会利用 FB (Facebook)、IG (Instagram) 等网路社群与录製影片媒体广告的投放而逐渐加深消费者对「梦想市集」印象。此外，平台上也有设置讨论分享专区，让热爱运动商品人士于线上针对运动用品

分享，目的就是要增加使用者的黏著度。总结以上所述，本研究的促销方式主要是分为下列三项：

- (一) 利用平台讨论区，让消费者了解商品趋势，并透过讨论专区炒热议题。
- (二) 第一次加入本平台的会员，可以享有一次免运费的优惠。
- (三) 透过 FB 粉丝专页与 IG 粉专的线上推广活动，吸引目标客群关注。

五、人员训练策略

运动用品爱好者最在乎的不外乎就是品质与外观。因此本研究为了要满足市场之需求，设立了商品鑑定部门。此外，服务的不一致性会导致提供者与消费者的标准有所不同进而导致消费纠纷甚至是影响企业形象，也因此在人员的训练策略上，本研究著重于：

- (一) 鉴定部门：审核卖家商品没问题后，再请卖家先将商品寄给本平台。平台鑑识商品品质与外观无误后，才会放在平台上贩售。
- (二) 资讯部门：网站维护、定时上架新品及更新最新资讯。
- (三) 市场行销部门：了解市场需求及搜寻新产品，拟定致胜行销策略。
- (四) 公关部：担任小编并协助行销设计部各项活动。

六、有形展示策略

本研究利用许多资讯的传播方式使消费者能快速地得知本平台讯息。如果消费者有需求透过网路搜寻便可以找到平台的联络方法，进而协助消费者解决他们的需求。因为「梦想市集」没有实体店面，所以本平台主要是透过网站来推广，具体的推广方式如下：

- (一) 透过 FB、IG 网路 PO 文，以提高知名度。
- (二) 各大运动品牌合作宣传及媒体行销。
- (三) 透过 YouTuber 线上宣传，提高曝光率。

七、服务流程策略

有了良好的服务体验，才会有回头客的产生。本研究在服务流程策略上，归纳出以下五大服务流程：

- (一) 二手卖家先将自己的商品照片上传至官网或平台，审核后会收购商品。
- (二) 售出商品会由鑑定专人处理，检验、整理过后才会放到平台上贩售。
- (三) 购买产品后，统一由物流中心送出，目的就是确保品质。
- (四) 所有售出的商品均有产品责任险，及产品品质保证，让买家能买得安心。
- (五) 重视售后服务处理，有问题的商品会收回商品做处理或更换商品。

6. 结论

本研究打破以前网路平台的商业经营模式，透过潮流运动商品的交易平台建置与传统的运动用品业做出服务上的区别，将市场的潜在竞争者数量降至最低。本研究从各项内外部环境分析中发现，潮流运动商品在市场上具有一定的商机。多数潮流运动用品爱好者多数的顾虑在于品质与真假两大项目，本平台具有完善的专业鑑定中心与物流配送功能可以落实，以降低消费者不必要的疑虑。因此，本研究认为无论是商业意涵还是站在潮流运动商品爱好者的立场，目前正是投入产品开发的最佳时机。

本研究希望藉由「梦想市集」可以让消费者获得方便的服务，也让消费者不再有找不到潮流运动商品资讯的烦恼。消费者使用本平台后可以获得美好的购物回忆，形成本平台、买家与

卖家三赢的局面。本平台亦会依据使用者提出的建议去做改进，达到更完善的系统平台，使更多有需求的人发现及使用。

本平台最主要之目的是提供一个使用者间交流的平台服务，让使用者能在短时间内找到各自喜欢的商品，用合理的价格交易到正版商品，除此之外，平台还设有讨论区让消费者各自讨论自己喜爱的潮流商品。「梦想市集」希望能达到下列三项成：

- 一、 本平台打破商业经营模式，透过运动商品，将市场潜在竞争者降低。
- 二、 希望藉由此平台让消费者找寻到需要的商品，以满足购物的需求。
- 三、 让喜爱潮流商品的同好互相讨论交流，发展潮流文化。

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