International Journal of Business Strategy and Financial Markets
Vol. 1 No. 1 (2025): Volume 1, Issue 1
ISSN:
DOI:
Journal homepage: https://iaglobalpub.org/index.php/IJBSFM
Research article

Implementing integrated supply chain help to alleviate stakeholder conflicts and enhance delivered service experience in the Chinese tourism sector for booking platforms

Yichan Li*

[1] School of Tourism Management, Sun Yat-sen University, Guangzhou, China
**Corresponding author: Yichan Li, email: annali8787@outlook.com*

Abstract

The tourism industry has undergone major revolutionary changes in recent decades due to the rise of the internet, accelerating the shift from traditional offline travel agencies to online booking platforms that provides a centralised channel for making reservations of all tourism products and service online. The emergence of online booking platforms has attracted large volumes of tourism supply chain network members to collaborate and acts as the intermediary channel to connect tourists (customers) with local service providers. This study critically explores the complex relationships between an extensive group of Chinese tourism supply chain network members from the perspective of online booking platforms, identifying the stakeholder conflicts current existed in the Chinese tourism industry, its causes and the individual needs/ interests of different stakeholder groups. The current effectiveness of the Chinese tourism supply chain system is examined, recognising the need for designing and implementing an integrated supply chain system that helps to overcome current challenges in the lack of control over service delivery quality and to reduce stakeholder conflicts. This study identified the potential challenges in the implementation of an integrated supply chain system for online booking platforms in the Chinese tourism industry, incorporating these challenges into the development of practical solutions through designing the integrated supply chain system with focus on individual stakeholder needs, real time monitoring and control measures, synchronisation of customer information toward supply chain partners and to foster strategic decision making through the involvement of supply chain partners and shared information/ resources.

Keywords: online booking platforms; tourism supply chain; stakeholder conflicts; Chinese tourism industry; service quality; integrated supply chain system

Received: June 22, 2025. **Revised:** August 26, 2025. **Editorial decision**: September 3, 2025. **Accepted**: September 9, 2025

1.0 Introduction

Supply chain management has become a key research area of interest in recent decades, particularly in the modern globalized business environment where cross border supplier relationships are established (Stadtier 2008). The tourism industry in particular is made up of many different suppliers and stakeholder groups, including tourists, service partners (hospitality and transportation companies), booking platforms and marketing agencies where differences of stakeholder interests would create conflicts and communication gaps (March & Wilkinson, 2009). Therefore, the integration of supply chains in the tourism sector would provide a practical solution to overcome stakeholder conflicts and enhance delivered service experience as shown in Quattrociocchi et als' (2017) study. Similarly, this proposed study representing clear research importance to the academic field with enhanced understanding on how specific tourism stakeholder conflicts within the Chinese tourism industry (booking platforms) can be minimalized, analyzing the strategic needs of key stakeholder groups and how supply chain can be effectively integrated.

The concept of an integrated supply chain is defined by Fox et al (1993) as a centralized system that facilitates all relationships, distribution and logistics activities between actors across the supply chain, synchronizing the traditionally silo nature of supply chain activities that is operated with multiple/ decentralized systems. Moreover, increasing research attention has been dedicated on supply chain integration in the tourism sector, conceptualizing how an integrated supply chain can enhance firm performance in the tourism sector characterized with lots of complex interrelations and communication silos (Zhang et al, 2009). Additionally, despite the rapid growth of the Chinese industry which has achieved a CAGR growth rate of 7.8% between 2000 and 2020, reaching a $2.23 trillion market value in 2020 (Statista, 2021), there exists a lack of relevant academic studies that explores the integration of supply chains in the Chinese tourism, as this study will contribute to both the academic and practitioner fields.

1.1 Research rationale

In the globalised modern business environment that thrives on complex cross border supplier relationships, major industries such as the tourism sector becomes influenced by a wide range of different suppliers and stakeholder groups including tourists, service partners (transportation and hospitality), booking platforms and marketing agencies where differences of stakeholder interests would create conflicts and communication gaps (March & Wilkinson, 2009). Furthermore, clash of stakeholder conflicts is found to negatively impact the quality of delivered service experience from tourism sector services (Quattociocchi et al, 2017), particularly in the Chinese tourism industry that competes based on thin margins due to intense industry competition. However, different dynamics in stakeholder relationships, interactions and communications exist in the tourism sector of different countries due to apparent cultural differences and preferences, thus the need to conduct a country specific study is identified in contrast to the generic approaches

conducted in the majority of empirical academic studies (Motevalli-Taher & Paydar, 2021)
Therefore, this research attempts to address the current stakeholder conflicts in the Chinese tourism industry (booking platforms) via the implementation of an integrated supply chain system, defined by Fox et al (1993) as a centralised system that facilitates the relationships, distribution and logistics activities between actors of a supply chain, synchronising the traditionally silo nature of supply chain activities that is operated with individual/ decentralised systems. Furthermore, this research contributes to the identified research gap where a lack of empirical studies has been conducted to explore the application of an integrated supply chain in the Chinese tourism market, despite numerous attempts to explore it impacts in the Indonesian (Arifin et al, 2019), African (Sifolo, 2020) and Halal tourism markets (Jaelani et al, 2020). Nonetheless, the drastic CAGR growth rate (7.8%) of the Chinese tourism between 2000 and 2020 with a $2.23 trillion market value indicates substantial importance for future study on (Statista, 2021). Furthermore, the emergence of major Chinese tourism industry online booking platforms in recent years such as Ctrip, Qunar, eLong, Tuniu and Travelzoo reflects the increasing popularity for Chinese consumers to purchase tourism service packages from centralised booking platforms, as the volume of online travel bookings from Chinese users have surged from $259 million in 2015 to $397 million in 2021 (Statista, 2021).
Nonetheless, there are minimal studies conducted on the operations of Chinese tourism online booking platforms, lacking academic interests over its complex interactions with an extensive range of supply chain partners throughout the country, representing a clear research gap that this study aims to contribute to. The findings of this study can contribute to both the academic and practitioner fields with understanding of integrated supply chain benefits specially customer to the Chinese tourism sector, providing valuable foundation for future research studies and practitioners to enact upon integrating the supply chain in the Chinese tourism sector. On a personal level, this study will provide valuable practical learning experience for me to obtain further knowledge in the Chinese tourism industry, combining academic knowledge into practice to prepare myself for future career opportunities in the sector upon graduation.

1.2 Research aims and objectives

This project aims to critically investigate the importance of an integrated supply chain, emphasizing on its role to alleviate stakeholder conflicts and enhance delivered service experience in Chinese tourism booking platforms. In order to achieve the proposed research aim, the following research objectives will be fulfilled:

1. To analyse empirical studies in academic literature on the types of stakeholder conflicts experienced in the Chinese tourism market across booking platforms.
2. To evaluate the needs and interests of key stakeholder groups in the Chinese tourism supply chain network, developing a framework to identify the priorities of key stakeholder groups of booking platforms.

3. To collect primary data (interviews) to analyse the current challenges of supply chain integration, benefits and outcomes for the Chinese tourism supply chain.
4. To create practical solutions to overcome supply chain integration challenges in order to ensure an effective integrated supply chain that reduces stakeholder conflicts and enhance delivered service experience in the Chinese tourism sector for booking platforms.

1.3 Research question

To what extent can an integrated supply chain help to alleviate stakeholder conflicts and enhance delivered service experience in the Chinese tourism sector for booking platforms?

1.3.1 Research sub-questions

1) What stakeholder conflicts currently exist in the Chinese tourism industry?
2) What are the needs and interests of key stakeholder groups in the Chinese tourism industry and particularly for booking platforms?
3) What are the benefits of an integrated supply chain for the Chinese tourism booking platforms?
4) What are the likely implementation challenges during supply chain integration and how can they be overcome for Chinese tourism booking platforms?

1.4 Project alignment to MSc Programme & work experiences

This project offers the opportunity to uitlise academic knowledge and theories learnt in the supply chain modules of the MSc degree programme, allowing the application of key supply chain theories and knowledge into real world practices of the Chinese tourism sector. Supply chain integration to enhance corporate performance has long been a personal fascination, previous work experience as a market analyst & tour guide for Beijing Zhongkai International Study Travel Co.,Ltd as an intern in 2019, I was made aware of the importance of supply chain integration in the tourism industry, particularly when there exists varying stakeholder interests and communication gaps between the company, foreign tourists and local service partners. This would often result in stakeholder conflicts and I'm a firm believer that effective supply chain integration would help to alleviate such problems through enhancing the service experience provided to tourists and synchronisation of real time information to eliminate information/ communication silos. Therefore, the design of the project directly stems from a practical problem identified in previous work experiences, utilising the academic theories and concepts learnt during the supply chain modules in order to integrate knowledge into practice.

1.5 Structure of study

This study consists of six key chapters, serving distinctive purposes and unveils the study in a logically structured manner. The first introductory chapter provides the background information to supply chain management and the Chinese tourism industry, providing general information over current research focuses, discussing the research rationale to conduct this study in relation to academic, personal, MSc programme and previous work experience interests. The research aims and objectives are discussed with proposed research questions & sub-questions that will be answered at the end of the study. The second chapter performs a thorough critical review of literature conducted in the field of supply chain management, this chapter helps to identify academic knowledge and theories already established in empirical studies, obtaining greater insights on the major research trends and scope in supply chain management studies. Furthermore, empirical studies conducted on exploring the application of supply chain management in the tourism sector is critically reviewed, identifying current academic knowledge and help to design the scope of this research study to address identified research gaps in the Chinese tourism industry, contributing to the development of a theoretical framework that conceptualizes the overall research process. The third chapter discusses the overall methodological system that guides the entire research process, providing the justification for each chosen research approach/ method and tools across all research onion layers, discussing the rationale behind the selection of research methods according to their facilitated functions and how potential limitations are addressed. The fourth chapter presents the findings gathered in the format of qualitative themes from semi-structured interviews conducted toward chosen Chinese tourism industry firms (booking platforms), identifying and analyzing key data patterns through performing thematic analysis on gathered qualitative data. The fifth chapter critically discusses the meanings behind the identified key themes, applying academic knowledge in discussions to address research objectives and questions, contributing to the identified research gap with new insights obtained in collected primary data. The sixth chapter concludes the key findings of the study, discussing potential limitations and the implications for future studies according to the identified research needs/ gaps that requires further investigations.

2. Literature review

This chapter critically reviews empirical studies conducted in the field of supply chain management, emphasising on supply chain integration to uncover empirical literature knowledge and current academic understanding, identifying potential research gaps to shape the design of this study with practical contributions to the academic field. The first section critically reviews empirical academic definition on supply chain management during the 1990s, drawing upon traditional supply chain theories such as Forrester's (1961) bullwhip effect model and analysing the key developments/ changes of supply chain management in 21st century literature. The modern supply chain management processes are discussed in relation to Lamber's (2008) SCMBP model, contrasting the differences of contemporary supply chain management in information flow and

processes compared to the 1990s. The second section critically explores the concept of an integrated supply chain, analysing its desired benefits, challenges and barriers in integrated supply chain system design and implementation.
The third chapter critically reviews empirical supply chain management studies in the tourism industry, emphasising on the design of integrated supply chains and subsequent impact on firm performance, drawing upon Piboonrungroj & Disney's (2009) generic tourism industry supply chain framework, addressing the apparent collaboration and conflicts between tourism supply chain stakeholders with the application of Zhang et als' (2009) network configuration model to understand the interactions/ relations between supply chain network members (stakeholders). The final section summarises current literature knowledge in the field of integrated supply chain management particularly for the tourism sector, addressing the identified research gap where minimal studies have focused on exploring the application of integrated supply chain systems for the booming Chinese tourism sector, overcoming apparent stakeholder conflicts and enhancing service quality.

2.1 Academic definition of supply chain management during the 1990s

The concept of supply chain management has received extensive research attention amongst academicians since the 1990s, reflecting the importance to understand the relations and processes in and between companies during the accelerated process of globalisation (Tan, 2001). According to Tan (2001), the traditional focus of supply chain management primarily focused on the procurement of supplies and management functions with industrial buyers, constituting to the key domain of the management discipline which was referred to by Tranfield & Starkey (1998) as an applied, divergent field of management research. Nonetheless, the increasingly competitive global business environment and the need to establish strategic collaborations between service providers and manufacturers to obtain competitive advantages raised the need to enhance the competitiveness of supply chains (Towill, 1992). Since the early 1990s, companies began to pursue more efficient management of supply chain relations and activities, as opposed to achieving cost reductions at the expense of supply chain partners, adopting a collaborative approach with suppliers in a holistic and strategic manner across supply chain aspects of operations, materials and logistics management as suggested by Tan & Handfield (1998).
According to Croom et als' (2000) critical review of supply chain management literature, empirical studies on supply chain management dates back to the early 1980s but lacked sufficient understanding and clear definitional constructs, reflecting the lack of focus on managing supply chains amongst practitioners. Despite multiple attempted during the early 1990s to conceptualise the definition of supply chain management under an industrial organisation perspective (Ellram, 1991), as a purchasing and logistics strategy (Cooper & Ellram, 1993) and in association with the Japanese terminology of Keiretsu that emphasis on working closely together amongst all actors of a business network to ensure shared success (Lincoln et al, 1992). Saunders (1994) argues that the dynamic nature of supply chains and distinctive characteristics of different industries would influence subsequent management initiatives of supply chains, hence the pursuit of a unified

definition would result in unnecessary conflicts and frustrations amongst academicians and practitioners. Saunders (1994) further illustrated the need to incorporate industrial economics, supply chain system dynamics, inter-organisational relationships and existing organisational values when designing supply chain management strategies, recognising the fragmented nature of supply chain management that affects a wide range of interconnected activities and relations.
Empirical studies conducted by Metters (1997), Lee et al (1997) and Beamon (1998) have attempted to define supply chain management with application of Forrester's (1961) bullwhip effect model as shown in figure 1 below. According to Forrester (1961), the bullwhip effect model, also commonly referred to as the Forrester effect model indicates the supply chain impacts upon fluctuations of customer demand levels, translating into progressively larger fluctuations upon the retail, distributor, manufacturer and the supplier levels across when considering the overall industry dynamics. The efforts of these empirical studies have opened up new insights on how the actions of material flows impact the entire supply chain, indicating necessary academic attention to understand supply chain dynamics under a cause-and-effect approach (Metters, 1997; Beamon, 1998). Additionally, Lee et al (1997) argues that increasing levels of distorted information from one end of the supply chain will likely transmit corresponding inefficiencies up the supply chain such as inaccurate forecasting, uncertain production planning and inefficient inventory management. Nonetheless, Croom et al (2000) argues that substantial increase in research attention on supply chain management during the 1990s points to the adoption and extension of established theoretical concepts in the supply chain discipline, highlighting the emergence of new management initiatives across the supply chain due to changing market dynamics rather than representing a novel phenomenon.

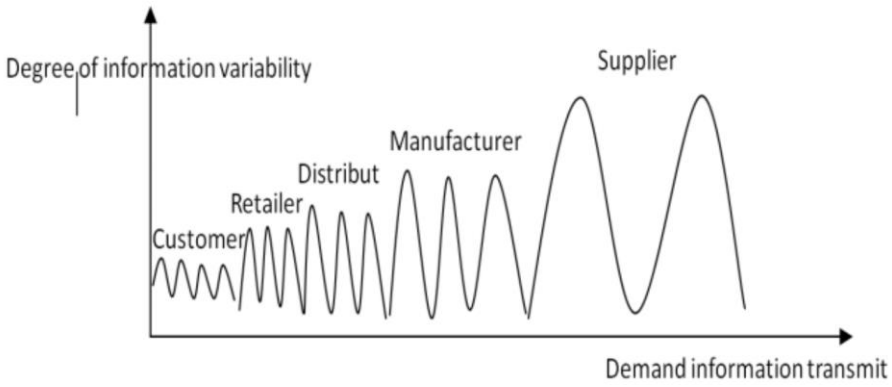

Figure 1: Bullwhip model (Adopted from Forrester, 1961)

The general research consensus on the conceptualisation and definition of supply chain management of major empirical studies is summarised in table 1 below (Croom et al, 2000). Tan et al (1998) defined supply chain management as a management philosophy that brings together supply chain partners with the shared objective of optimising supply chain activities beyond traditional intra-enterprise activities, emphasising on how processes, technology and materials can

be collectively utilised to increase competitive advantages. The development of trust, active communication to share and utilise accessed information from different levels of the supply chain is associated as vital elements of supply chain management by Berry et al (1994), focusing on leveraging the unique advantages of each supply chain actor and the development of long lasting, mutually beneficial relationships. Christopher (1992) further elaborated on the importance of collective efforts between supply chain network actors, arguing that effective supply chain management requires both upstream and downstream linkages to generate added values to the final users (customers). It is apparent that empirical literature recognises supply chain management as a collective process between a network of supply chain entities beginning from the supplier and ending with the customer, encompassing all activities that produces value from processing raw materials, manufacturing, assembling, distributing, retailing and final deliveries (Croom et al, 2000).

Table 1: Academic definitions of supply chain managements (Croom et al, 2000, p69)

Authors	Definition
Tan et al. (1998)	Supply chain management encompasses materials/supply management from the supply of basic raw materials to final product (and possible recycling and re-use). Supply chain management focuses on how firms utilise their suppliers' processes, technology and capability to enhance competitive advantage. It is a management philosophy that extends traditional intra-enterprise activities by bringing trading partners together with the common goal of optimisation and efficiency.
Berry et al. (1994)	Supply chain management aims at building trust, exchanging information on market needs, developing new products, and reducing the supplier base to a particular OEM (original equipment manufacturer) so as to release management resources for developing meaningful, long term relationship.
Jones and Riley (1985)	An integrative approach to dealing with the planning and control of the materials flow from suppliers to end-users.
Saunders (1995)	External Chain is the total chain of exchange from original source of raw material, through the various firms involved in extracting and processing raw materials, manufacturing, assembling, distributing and retailing to ultimate end customers.
Ellram (1991)	A network of firms interacting to deliver product or service to the end customer, linking flows from raw material supply to final delivery.
Christopher (1992)	Network of organisations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate consumer.
Lee and Billington (1992)	Networks of manufacturing and distribution sites that procure raw materials, transform them into intermediate and finished products, and distribute the finished products to customers.
Kopczak (1997)	The set of entities, including suppliers, logistics services providers, manufacturers, distributors and resellers, through which materials, products and information flow.
Lee and Ng (1997)	A network of entities that starts with the suppliers' supplier and ends with the customers' custom the production and delivery of goods and services.

2.1.1 Key developments of supply chain literature in the 21st century

It is widely documented in literature that supply chain literature had undergone substantial developments in the 21st century, evolving to address contemporary supply chain challenges (Ketchn et al, 2008) and to embed product and process innovation across supply chain operations to satisfy the increasing demands of contemporary customers (Boyer & Verma, 2009). A key driver of the 21st century supply chain management evolution is often associated to the emergence of

information communication technologies (ICT), enhancing the efficiency in which high quality information can be shared between supply chain partners in a timely manner, integrating and streamlining supply chain management activities (Kumar, 2001). According to Zhang et als' (2011) qualitative survey-based research study, a strong positive correlation is identified between the use of ICT and supply chain management performance, enabling both small & medium sized enterprises (SMEs) and multinational enterprises to handle information resources in a timely manner, avoiding delays, achieve cost reductions and increased client compliance.

Nonetheless, despite increasing research attention over the importance of ICT for contemporary supply chain management, Singh et al (2020) argues that there exist no unified formular to guarantee supply chain management success through the utilisation of ICT technologies, as many firms have failed through poor ICT system designs, high levels of change resistance and insufficient technological competences/ knowledge across supply chain actors. Furthermore, the 21st century has been impacted with unprecedented changes in the global market environment, the emergence of geopolitics conflicts, trade wars, restrictive freight regulations and material scarcity have inflicted major disruptions on global supply chains (Koh et al, 2006). Additionally, traditional competitive advantages achieved through economies of scale in operations of large multi-national enterprises are no longer inimitable, as born global start-ups on the internet platform is able to utilise the global market reach of e-commerce platforms, accessing suppliers across the globe with higher levels of agility and flexibility in comparison to multi-national firms (Freeman et al, 2010). The change in business environment dynamics in the 21st century has resulted in the development of modified supply chain management approaches, Lambert's (19989) supply chain management business processes (SCMBP) model as shown in figure 2 addresses the eight key supply chain management processes in the 21st century.

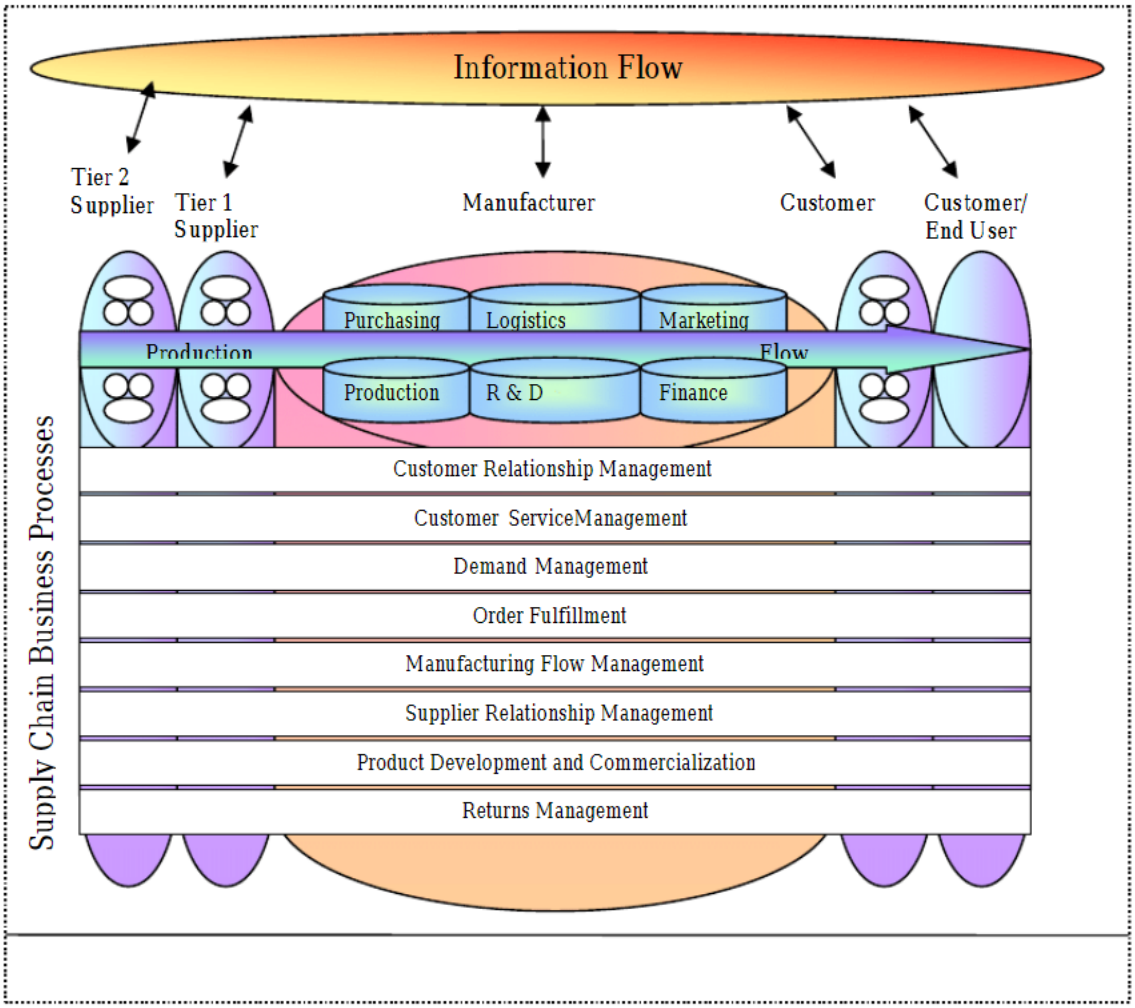

Figure 2: Eight key supply chain management processes of the SCMBP model (Lambert, 2008)

According to Lambert (2008), contemporary supply chain management systems must be strategically designed to streamline key processes with information flow accessed by all supply chain partners, for example the management of customer relationships would help to identify customers based on their value over time, reducing potential demand variability and non-value-added activities provided for low profitability customers across retail channels. Customer service management processes would play a central administer role to sort all information regarding a customer order, supplying the data across upside supply chain actors to ensure product availability and delivery dates are aligned (Naoui, 2014). Other key processes such as demand management, order fulfilment, manufacturing flow management and return management highlight the important role of ICT and information flow to improve supply chain communications and synergies, minimising human errors and optimising logistics, inventory and warehousing efficiencies as illustrated in Mukaddes et als' (2010) recognition of developing information models to manage supply chain information flows. Supply relationship management and product development & commercialisation processes reinforce Berry et als' (1994) recognition of developing mutually

beneficial relationships with supply chain actors, utilising distinctive competences and customer-oriented knowledge to develop products that match their changing needs.

Supply chain management studies conducted in the 21st century have expanded upon the traditional purchasing, supply, logistics and transportation perspectives, scholars have explored supply chain management in relation to organisational behaviours under the agency theory (Fayezi et al, 2012), industrial organisation (Khan & Burnes, 2007), institutional sociology & inter-organisational relationships (Scapens & Varoutsa, 2010), system engineering/ architecting (Blanchard, 2004), digital and economic development literatures (Miethlich et al, 2020). The impacts of supply chain management are recognised to cover an extensive range of organisational behaviours and the development of strategies for value generation across supply chain processes, as Seuring & Gold (2012) summarised the major principal component bodies of supply chain literature between 2000 and 2012 as shown in figure 3 below. This summary indicates the dynamics of supply chain management in areas of strategic management, logistics, marketing, relationships, best practices and organisational behaviour, encompassing a variety of applications with distinctive focuses to generate added value and competitive edges in the intensely competed contemporary global supply chain environment (Seuring & Gold, 2012).

Strategic management	*Relationships/partnerships*
Strategic Networks	Relationships Development
Control in the supply chain	Supplier Development
Time-Based Strategy	Strategic Supplier Selection
Strategic Sourcing	Vertical Disintegration
Vertical Disintegration	Partnership Sourcing
Make or Buy decisions	Supplier Involvement
Core Competencies focus	Supply/Distribution Base Integration
Supply Network Design	Supplier Assessment (ISO)
Strategic Alliances	Guest Engineering Concept
Strategic Supplier Segmentation	Design for Manufacture
World Class Manufacturing	Mergers Acquisitions, Joint Ventures
Strategic Supplier Selection	Strategic Alliances
Global Strategy	Contract View, Trust, Commitment
Capability Development	Partnership Performances
Strategic Purchasing	Relationship Marketing
Logistics	*Best practices*
Integration of materials and information flows	JIT, MRP, MRP II
JIT, MRP, Waste Removal, VMI	Continuous Improvement
Physical Distribution	Tiered Supplier Partnerships
Cross Docking	Supplier Associations (kyoryoku kai)
Logistics Postponement	Leverage Learning Network
Capacity Planning	Quick Response, Time Compression
Forecast Information Management	Process Mapping, Waste Removal
Distribution Channel Management	Physically efficient Vs. Market Oriented Supply
Planning and Control of Materials Flow	Chains
Marketing	*Organisational behaviour*
Relationship Marketing	Communication
Internet Supply Chains	Human Resources Management
Customer Service Management	Employees' Relationships
Efficient Consumer Response	Organisational Structure
Efficient Replenishment	Power in relationships
After Sales Service	Organisational Culture
	Organisational Learning
	Technology Transfer
	Knowledge Transfer

Figure 3: Key principal component bodies of supply chain literature in 21st century (Securing & Gold, 2012)

2.2 The concept of an integrated supply chain

The major developments in 21st century supply chain literature point to the rising importance of inter-organisational relationships, reflecting high levels of integration across the supply chain as globalisation and technological advances push firms to rethink the need for cooperative and mutually beneficial supply chain relationships (Alfalla-Luque & Medina-Lopez, 2013). Subsequently, the integration of supply chain, also commonly referred to as integrated supply chains have drawn increasing research attention but only few studies have attempted to provide specific definition of integrated supply chains (Alfalla-Luque & Medina-Lopez, 2013). According to Danese et al (2013), supply chain integration represents a mechanism to maximise values across supply network business processes, overcoming intra and inter-organisational boundaries that have traditionally limited management activities to within the boundaries of each firm. Similarly, Caggiano et al (2006) attempted to conceptualise the dynamics of integrated supply chains with streamlined coordination mechanism across supply network business processes, taking into consideration of influential actors across both internal and external firm environments that affects the coordination of supply chain actors.

Fabbe-Costes & Jahre's (2008) study reviewed empirical evidence between supply chain integration and performance, finding a clear relationship between higher levels of supply chain integration and more efficient operational decision making, reinforcing the conceptualisation of supply chain integration in relation to strategic collaborations between supply network members. The academic definitions of integrated supply chains generally recognise the need for both operational and strategic coordination between supply network members, involving management considerations to collaborate on both inter and intra-organisational activities to generate value for the final consumer with optimised efficiency (Alfalla-Luque & Medina-Lopez, 2013). According to Alfalla-Luque & Medina-Lopez's (2013) systematic review of integrated supply chain literature, there are three major school of thoughts when measuring integrated supply chain management. The first school of thought relates to Boon-itt's (2009) supply chain integration framework on product quality and innovation, emphasising on the optimisation of supply chain integration levels across both internal and external environments to predict product quality and product innovation capabilities as shown in figure 4 below.

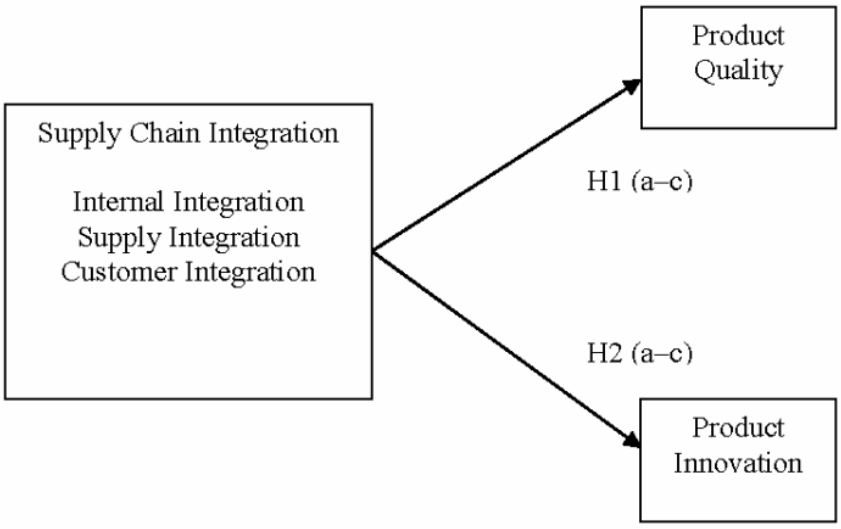

Figure 4: Supply chain integration framework on product quality and innovation (Boon-itt, 2009, p6)

Boon-itt's (2009) framework conceptualises the level of supply chain integration under the internal environment and the external environment (supply and customer dimensions). Under the internal environment perspective, the level of integration between all types of inter-departmental interactions and collaborations within an organisation is measured, characterised by high system visibility from purchasing to distribution activities (Boon-itt, 2009). This is also further elaborated in Wong et als' (2013) study where inter-departmental collaboration performance can be optimised by the use of integrated information systems, linking all department together with total visibility of each departments' functions, facilitating real time access to accurate and the most up-to-date information, directly improving communication efficiency and reducing errors. A study conducted by Riley et al (2016) measured internal integration under the unifying functions and processes of organisational departments including warehousing, transportation, inventory management, manufacturing, procurement and demand planning, emphasising on the level of coordination and integration sustained across the functional inputs of these departments, finding that organisational structures will highly integrated cross functional structures would empower management, streamline operations and eliminates potential redundant work.

Alternatively, supply chain integration within the external environment is often explored in relation to suppliers and customers, as Boon-itt (2009) argues that the fundamentals of an integrated supply chain should focus on developing synergised collaborations between supply network actors, especially at the two ends of the supply chain (upper & lower). According to Sharma et als' (2014) study that explored the integration of supply chain management in the agricultural industry, it is founded that supplier integration, also referred to as backward integration represent the most influential type of integration across the agricultural supply chain. This is driven by the importance of sourcing key raw materials at the right quality, quantity and time, creating competitive edges through implementing forward contracts between suppliers and buyers to integrate famers to

market. Naslund & Hulthen's (2012) study also explored the concept of backward integration through establishing a unified control of functions and processes across upside supply network members, sharing production plans and costs with suppliers to achieve a high level of supplier integration where all parties can benefit from accessing real time and accurate information. Companies that have actively engaged in supplier integration have seen strong improvements in product development efficiency, capacity decision and innovation, as the availability of high-quality raw materials, the design of product specification and technology exchange would require close collaboration with suppliers (Wang et al, 2007).

Integration with customers is recognised as the second key element in external environment supply chain integration, also referred to as forward integration as companies emphasis on establishing close collaborations with its targeted customers to optimise supply chain value creation (Boon-itt, 2009). According to Martinelli & Tunisini (2018), customer integration would enable firms to gather up-to-date and in-depth understanding over the rapidly changing needs and demands of targeted customers, directly benefiting demand planning as more accurate forecasts can be conducted. Furthermore, customer integration can help to anticipate future market changes, increasing the visibility of customer markets through effective communication methods such as focus group interviews, surveys and feedback forms (Flynn et al, 2010). Marty (2022) argues that many modern firms have transitioned from a traditional product-oriented focus into a customer-oriented approach, highlighting the importance of customer integration as values can be co-created with customers who will likely engage in repeated purchases, enhancing both supply chain efficiency and financial performances. Companies with higher levels of customer integration across the supply chain is found to be lesser vulnerable to sudden market changes and the loss of customers to competitors, as customer integration is found to contribute to more effective defining, consolidating and managing customer information across supply network members and organisational departments, as the gathered customer data offers highly accurate strategic values (Boon-itt & Wong, 2011).

2.2.1 Benefits of integrated supply chain

The strategic and competitive advantages of an integrated supply chain across both internal and external environments is widely explored, especially over the last ten years where supply chain management has transcended into a vital element of business survival in the globalised business environment (Caiado et al, 2022). According to Ahmed et als' (2021) study on the utilisation of advanced technologies such as the IoT (Internet of Things) to support supply chain integration, it is founded that an integrated supply chain help to uncover and overcome previous organisational challenges that were not addressed. A common supply chain problem is associated to the misaligned missions and visions between organisational departments and/ or between supply network members, resulting in the lack of commitment, mutual understanding and poor synergies established in interactions and communications (Ahmed et al, 2021). However, through the implementation of IoT technologies, an integrated supply chain system that tracks real-life progress of business functions can be designed to accommodate the needs of each supply network

member/ organisational department, streamlining the common vision and mission of the integrated supply chain system as all relevant parties are required to contribute, communicate and collectively design the system with identification of both independent and common goals (Ahmed et al, 2021). The identification of common objectives would reduce change resistance and the lack of clarity/ interests of implementing an integrated supply chain system, this is found to aid cross-functional unification with more effective communication, allowing all functional parties to update on achieved progress and obtain an accurate picture of the overall project/ order status (Jabbour et al, 2020). According to Shiralkar et als' (2021) study, the retail sector has experienced a dramatic rise in the implementation of ICT systems to integrate the supply chain to overcome supply chain disruptions from the COVID 19 pandemic achieving downstream supply chain performance increases rates of between 9 to 41%. The temporary/ permanent closure of manufacturing plants, retail outlets and inability to access key supplies due to restrictive logistics challenges have encouraged the integration of supply chain as a ICT enabled, modern enterprise-resource planning approach for the retail sector, whereby the utilisation of information sharing technologies such as industry-standard encryption methods and granular level access control have substantially improved the agility, traceability, information quality and information protection across the retail supply chain (Shiralkar et al, 2012).

Birasnav et als' (2022) study also reinforced the importance of integrated supply chains to overcome COVID pandemic disruptions as supply network members become more vulnerable to sudden market demand shocks, companies have become more cashflow restricted and sensitive to inefficient inventory management, calling for the need to streamline logistics operations and manage efficiency across supply network members. Subsequently, improved efficiency on receiving and dispatching goods through streamlined supply chain processes was found to be a major benefit from integrated supply chains, accuracy of order fulfilment can be effectively ensured as supply network members integrated their inventory information in real-time manner, particularly benefiting larger firms with high volumes of stock handling activities (Estampe et al, 2013). Maestrini et al (2017) also founded inventory management improvements upon the implementation of integrated inventory systems, automated monitoring of inventory levels, stock counts and cycle counting activities had enhanced the efficiency and ease of inventory monitoring. Maestrini et als' (2017) review of integrated supply chain performance measurement systems found common results in the early identification of defected/ damaged products, as the expiry date/ shelf time of products are automatically monitored at all times, sending signals upon products reaching the end of their life cycle to avoid poor customer experiences.

In terms of benefits and competitive advantages generated from external supply chain integration, Jermsittiparsert et al (2019) argues that the standardisation of operational procedures amongst supply network members of the system would eliminate traditional communication siloes, providing visibility of information in a commonly understood language to avoid confusions/ misinterpretations which represent the common drivers behind to supply chain failures. Closely integrated communication systems with suppliers and customers enable more effective joint-planning in aeras of material requirements planning and vendor managed inventory, as Soosay et

al (2007) proposes that customer information can be translated into accurate sales forecasts, design of new products that addresses new customer preferences and facilitate more efficient planning of production schedules. Ko et als' (2018) study on the external supply chain integration of UK based SMEs manufacturers found that companies can benefit from sharing knowledge with both customers and suppliers, ultimately resulting in stronger supplier relationships as the strategic customer information can be shared and utilised by suppliers to optimise production levels according to anticipated changes in market demands. The collection and sharing of strategic customer information would also help to encourage innovation in product design, directly matching and satisfying customer needs for the benefits of all supply chain actors (Ko et al, 2018).

2.2.2 Challenges and barriers of integrated supply chain systems

The necessity for modern businesses to adopt and implement an integrated supply chain system is widely recognised amongst academicians and practitioners, being referred to as the "backbone for every modern business organisation" by Elsaber et al (2019). Nonetheless, Garcia & You (2015) argues that most integrated supply chain systems have failed due to five common factors including lack of appropriate information technologies, poor information sharing, inadequate trust, system incompatibility and a lack of relevant knowledge, highlighting the importance for all supply network members to understand and fulfil requirements for an effective integrated supply chain prior the implementation stage. According to Garcia & You (2015), many organisations lack sufficient in-house technology capabilities and knowledge to utilise information technologies used for supply chain integration, the lack of suitable hardware, practice and training provided for system operators were found to cause communication inefficiencies both internally and externally. Additionally, insufficient or poor selection of information technologies would result in poor information sharing, affecting resource utilisation, slow responsiveness to supply chain interactions, communication siloes and heightens communication related opportunity costs (Shapior, 2004).

Tran et al (2016) further elaborated on the consequences of poor information sharing across the supply chain, suggesting that varying perceptions of risks in data exchange process throughout the supply network would stimulate unnecessary conflicts, create misunderstanding and sabotage supply chain partner relationships. Consequently, stimulated conflicts with supply chain partners would likely reduce collaboration efficiency, lowering trusts and confidence as the buyer-supplier relationship deteriorates, falling under the psychology of toxic supplier relationships (Marcos & Prior, 2017). Garcia & You (2015) also discussed the combined challenges of system incompatibility and lack of relevant knowledge, suggesting that inadequate skill sets and experience of integrated supply chain management could lead to different understanding of management needs, resulting in poorly designed systems operating with no common language and protocols. System incompatibility also reflects the lack of understanding of integrated supply chain needs amongst supply chain partners, misaligning wants and needs in the design of system functions that does not facilitate highly synergised activities throughout supply chain processes (Banerjee et al, 2014).

According to Awasthi & Grzybowska (2014), common challenges that affects supply chain integration can be mitigated through identifying and reducing the apparent barriers obstructing operational and relationship efficiencies. It is argued that the most impactful barrier to supply chain integration relates to the insufficient knowledge of the needs of other supply chain actors, thus failing to communicate, acknowledge and fulfil the independent needs of all supply chain actors on top of mutually beneficial goals. Insufficient knowledge of the needs, operational processes and strategic goals of suppliers could potentially create conflicting goals, misaligned directions in system design and ineffective working relationships (Awathi & Grzybowska, 2014). Richey et als' (2009) study also acknowledge the barrier of insufficient supplier side knowledge, put forth the notion that it would sabotage the execution of supply chain activities due to potential internal politics, weak management, short term orientation and the lack of emphasis to establish long term sustainable relationships. Similarly, Frohlich's (2002) study on e-integration of the supply chain concluded that strategic misalignment of information strategies, limited awareness of potential advantages from ICT adoption and inexperienced leaders represented major barriers to effective supply chain integration.

2.3 Supply chain integration and firm performance in the tourism industry

A large body of empirical research studies have focused on supply chain integration and firm performance in product markets such as textile & fashion (Wang & Chan, 2010), automobile (Kamble et al, 2021) and chemicals (Pinto & Diemer, 2020). However, lesser research attention has been given to supply chain integration of service markets, as Bandyopadhyay (2016) argues that the five distinctive characteristics of services including intangibility, inseparability, variability, perishability and lack of ownership make it difficult to design integrated supply chain systems due to its complex dynamics. Nonetheless, the rise of the internet in the globalised modern environment has revolutionised traditional service industries, particularly the tourism industry where large numbers of new service providers have entered the market, serving and communication with customers worldwide with the emergence of travel agency platforms such as Expedia, Ctrip, Airbnb, Booking.com and Tripadvisor.com (Marine-Roig, 2022). According to Piboonrungroj & Disney (2009) the distinctive nature of the tourism industry is translated into its supply chain that differs to other product or service-based industries, encompassing a range of activities associated to the supply of tourism services/ products, the marketing and distribution of tourism services/ products, hospitality & accommodation services, transportation services, food and beverage, culture and recreational services, tour operators and travel agencies as summarised in the generic tourism industry supply chain framework in figure 5 below.

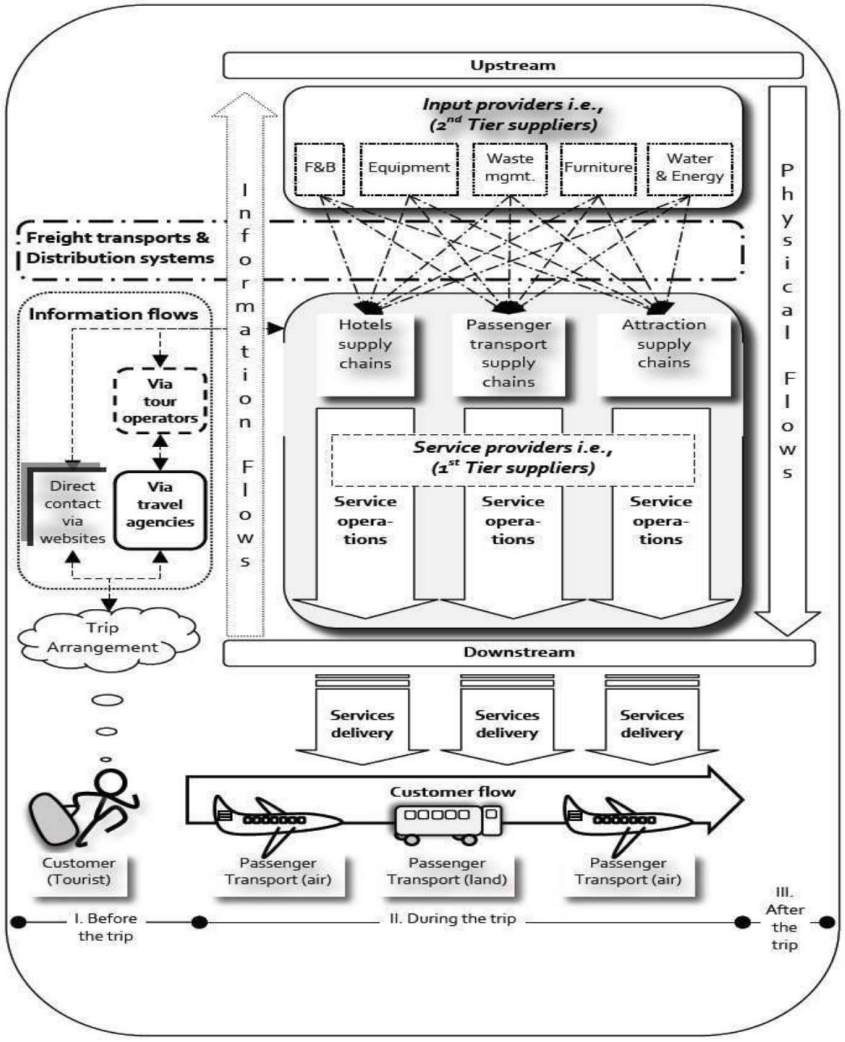

Figure 5: Generic tourism industry supply chain framework (Piboonrungroj & Disney, 2009, p132)

Subsequently, the supply chain of the tourism sector becomes heavily reliant on the coordination, collaboration and integration of a wide range of supply network actors worldwide, delivering customer centric products and services in an intensely competed global market where big variations of demand occur across different seasons (Dragen et al, 2015). Furthermore, this raises the need to continuously improve the functions of each supply chain member, actively developing more effective and sustainable collaboration through the integration of then tourism supply chain (Dragen et al, 2015). Similarly, the performance of supply chain integration in the tourism sector is also measured in both internal and external environment dimensions, as Song (2012) argues that optimised flows of information, decisions, products/ services and money within intra and inter-organisational processes highlights the effectiveness of internal supply chain integration. Alternatively, the achievement of imitable competitive advantage to create obstacles for competitors, ensuring of high-quality customer experience, reduced transaction costs, guaranteeing priority access to the most sought-after destinations are identified as the key

performance gains in the external environment of an integrated tourism supply chain (Song, 2012). However, Szpilgo's (2017) systematic review of tourism supply chain literature founded a clear research gap on the analysis of integrated supply chain relationships and the performance of tourism supply chain members, arguing that empirical studies are restricted to only one specific service provider of the tourism industry such as the hotel (Liu et al, 2017), transportation (Kumar & Anbanandam, 2019) and tour operator sectors (Ibarnia et al, 2020). Furthermore, recent studies have emphasised on the importance of supply chain integration for the tourism sector due to COVID pandemic disruptions, the closure of first and second tier suppliers, cancelling of customer orders and government imposed restrictions on public movement have substantially impacted the operations of the tourism sector, raising the need for more efficient, cheaper and customer centric tourism services to mitigate evidential supply chain disruptions (Mittal & Sinha, 2021; Jain et al, 2021; Hosseini et al, 2021).

2.3.1 Collaboration and conflicts between tourism supply chain stakeholders

The tourism industry is argued to have one of the largest supply chains due to its broad coverage of tourism services and products across the globe, presenting major challenges in supply chain integration that undermines collaboration effectiveness between supply chain members (Sutono, 2019). Additionally, given the mixture of offering both products and services, the tourism supply chain consists of many intensely and loosely connected relationships across the supply chain, as vulnerability to high volatility and season demand sensitivity is found to cause major disruptions on the upstream supply chain, reinforcing Forrester's (1961) bullwhip effect theory. The high variation in stakeholder needs and wants across the tourism supply chain makes it difficult to effectively design an integrated system that considers the needs of each tourism supply chain actors, as Sudapet et als' (2019) study founded four dimensions of tourism supply chain stakeholder conflicts including tourism industry-host conflicts, tourist-host conflicts, tourism-tourist conflicts and host-host conflicts. These types of stakeholder conflicts are found to hinder the quality of service experience delivered, lowering customer satisfaction and damaging supplier relationships as tourism supply chain integration would require the understanding of stakeholder needs, solving of potential conflicting stakeholder interests and high levels of stakeholder engagement across system design, implementation and monitoring processes (Motevalli-Taher & Paydar, 2021).

Zhang et al (2009) attempted to conceptualise the tourism supply chain network under the network configuration model of the tourism supply chain as shown in figure 6 below, incorporating a range of generic downstream and upstream stakeholders and the relationships amongst them. This model explores the passage of service and information flow from tier 2 suppliers to tier 1 suppliers, distributors, retail platforms and ending at the customers, indicating the direct and indirect forms of interactions and relationships through the exchange of information and service provision (Zhang et al, 2009). Zhang et als' (2009) network configuration model has been applied in the studies of Wang et al (2015), Buhalis & Leung (2018) and Dolnicar & Ring (2014) to explore the key relationships of tourism supply chains stakeholders, designing smart and integrative systems to enhance synergy and information flow across the supply chain network. However, it remains a

clear research gap in literature as there are no unified paradigms applicable for all types of tourism sectors, as Motevalli-Taher & Paydar (2021) argues that tourism sectors in different countries pose substantial variations in the number of supply chain network layers, the types of interactions and communications would differ, for example high context Asian cultures that favour explicit communications would see stakeholders across all supply chain network layers to directly communication with each other, bypassing intermediary layers to ensure trust and confidence with first tier suppliers.

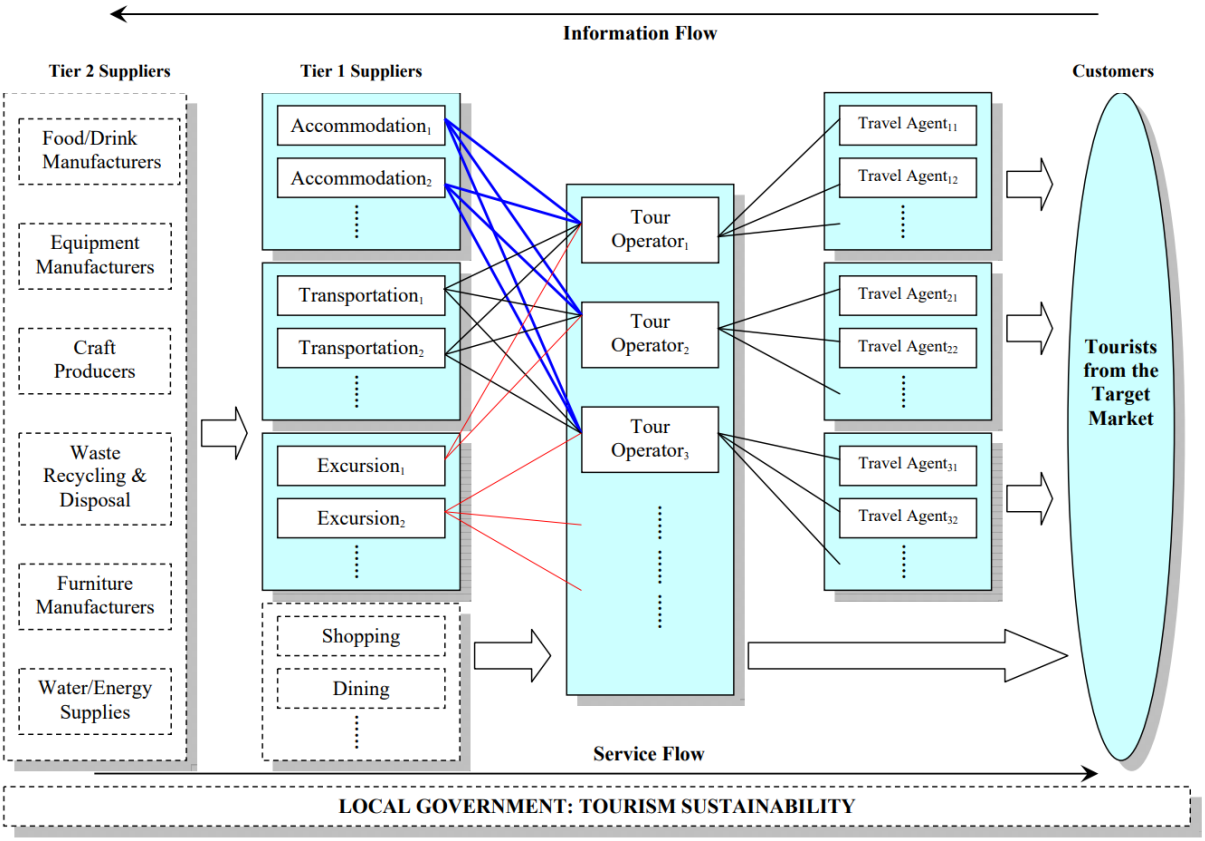

Figure 6: Network configuration of tourism supply chain network (Zhang et al, 2009)

Therefore, a research need is identified to examine the integrated supply chain design and implementation of the tourism industry with a country specific focus, addressing the current literature gap where generic frameworks cannot accurately apply with consideration of cultural values and unique supply chain network dynamics. Nonetheless, Piboonrungroj & Disney's (2009) study provided a dynamic conceptualisation of tourism supply chain stakeholders/ components, providing useful foundation for future studies when examining the nature of stakeholder needs, interests, conflicts and relationships across different types of supply chains as shown in the tourism supply chain correlation matrix of stakeholders in figure 7 below. The correlation matrix identifies a range of input providers that takes upon the role of supplying materials for tourism services, first tier service providers that provides the core functions and directly interacts with the customers, the

intermediary channels/ platforms that helps to assembler tourism service and products (tour packages), freight & transportation service providers that act as the connector for physical flows or customer flows/ passenger transports (Piboonrungroj & Disney, 2009).

Tourism supply chain components	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. Transports to & from destinations	■															
2. Ground transport	★	■														
3. Ground operations	★	★	■													
4. Excursions & attractions	Δ	★	O	■												
5. Cultural, social and sport events	Δ	★	★		■											
6. Furniture and crafts				★		■										
7. Infrastructures, service & resources of destinations	O	O	Δ	O	O		■									
8. Energy and water supplies	O	★	★	O	O	★	O	■								
9. Waste recycling & disposal	Δ	Δ	★	O	O	★	★	★	■							
10. Foods production	O		★	★	Δ		Δ	★	★	■						
11. Laundry								★	★		■					
12. Caterings, foods and beverages	O			★	★		Δ	★	★	★		■				
13. Accommodations	O	★	★	O	O	★	★	★	★	★	★	★	■			
14. Tour operating	★	★	★	★	★	Δ	★	★	★	Δ	Δ	O	★	■		
15. Marketing & sales	O	O	★	★	★	O	O			Δ	O	O	O	★	■	
16. Customers	★	★	O	★	★	★	★	★	★	★	★	★	★	★	★	■

Note: ★ Supply chain link (Tapper and Font 2004, p. 4)
O Critical correlation between TSC components (the authors)
Δ Moderate correlation between TSC components (the authors)

Figure 7: Correlation matrix of stakeholders in the tourism supply chain (Piboonrungruj & Disney, 2009, p136)

2.4 Summary of literature

Over recent decades, empirical studies conducted in the field of supply chain management have undergone major developments in reflection of the changing dynamics of the global business environment, the advancement of technologies, accessibility to global suppliers/ customers via the internet and the subsequent challenges emerged. Traditional supply chain management theories have provided important theoretical foundations for modern supply chain management as indicated by Lambert's (2008) eight key supply chain management processes model. The key principal component bodies of supply chain management literature in the 21st century summarised by Securing & Gold (2012) addresses the new applications of supply chain management across a wide range of operational and management disciplines. The concept of supply chain integration has dominated supply chain management literature in recent decades as it is widely recognised to stimulate added values in areas of product innovation and product quality (Boon-itt, 2009), encompassing two dimensions of integrations across the internal and external environments of the supply chain (Alfalla-Luque & Medina-Lopez, 2013). The benefits of integrated supply chain

systems is widely explored in empirical studies, focusing on the relationship between supply chain integration and performance gains in areas of collaboration, coordination and integration between supply chain network members, benefiting from information and service flow sharing (Awasthi & Grzybowska (2014).

Despite increasing research attention dedicated to the design and implementation of integrated supply chain systems in product markets, there has been lesser research studies conducted on service markets due to the complex and dynamic service characteristics (Bandyopadhyay, 2016). Nonetheless, the tourism sector has emerged as a growing research field as numerous studies have attempted to examine the design of integrated supply chain systems to optimise supply chain network interactions and communications between an extensive range of actors across the globe. Piboonrungrok & Disney (2009) provided a generic tourism industry supply chain framework to conceptualise the relationships between supply chain network actors (stakeholders), as Zhang et als' (2009) network configuration model provides a further break down of stakeholder interactions and relationships with focus on information and service flow/ exchanges. It is apparent that empirical literature has recognised the importance of an integrated supply chain for the tourism industry, as multiple studies have attempted to explore the needs, conflicts and relationships of tourism supply chain network stakeholders but lacked country specific focus where unique cultural values have shaped different supply chain dynamics and stakeholder relationships in the tourism sector. Furthermore, the unique stakeholder relationships, needs and conflicts of the Chinese tourism industry and especially in the context of Chinese tourism online booking platforms have not received adequate research attention despite its surging market growth, representing a clear research gap for this study to contribute to. In consideration of empirical academic knowledge over supply chain management and integrated supply chain for the tourism sector, a theoretical framework of this study is designed as shown in figure 8.

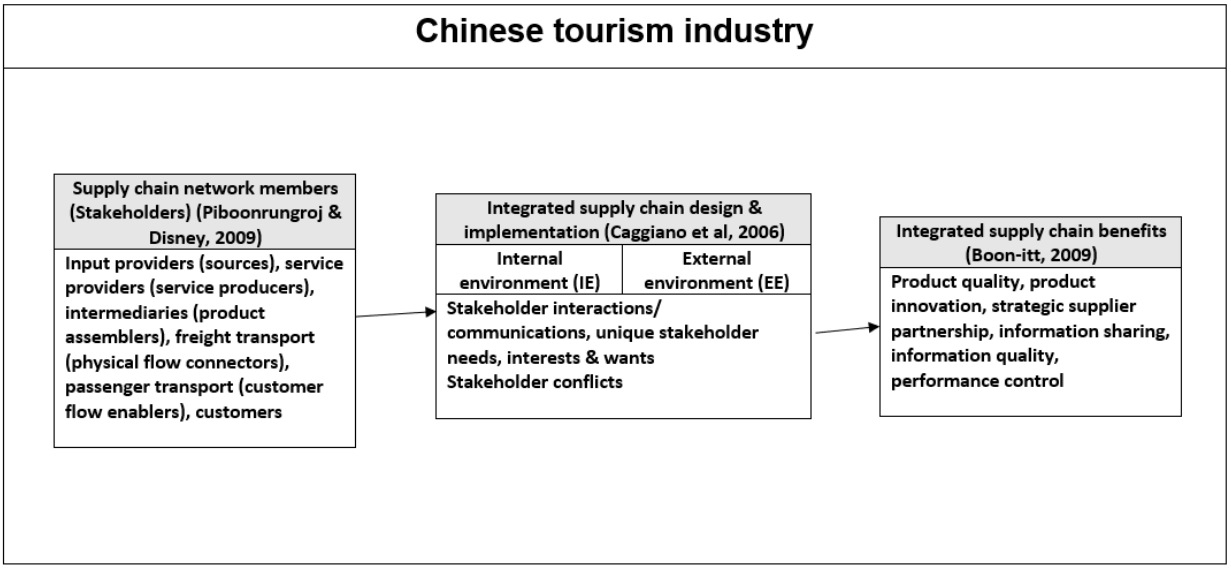

Figure 8: Theoretical framework

This theoretical framework incorporates empirical academic knowledge and theories across supply chain management studies conducted in the tourism industry, as shown in Piboonrungroj & Disney's (2009) categorisation of generic supply chain network members in the tourism industry. The stakeholder groups including input providers (sources), service providers, intermediaries (product assemblers), freight transport (physical flow connectors), passenger transport (customer flow enablers) and customers are used to illustrate the related actors across China's tourism industry especially for online booking platforms. These supply chain actors are linked to the design and implementation of an integrated supply chain system, considering both internal and external dimensions as illustrated by Caggiano et al (2006) approach to conceptualise the dynamics of integrated supply chain systems with streamlined coordination mechanisms across supply network members and related business processes, incorporating the influence of internal and external environments that would affect the coordination effectiveness of supply chain actor integration. An effectively designed and implemented integrated supply chain system is expected to generate tourism industry specific benefits including increase in product/ service delivery & innovation, strategic supplier relationship development, information quality/ sharing and strong performance control as suggested by Poon-itt (2009).

3. Methodology

This chapter discusses the methodological design of this study, emphasising on the chosen research methods/ approaches and tools used throughout the research process. According to Novikov & Novikov (2013), the research methodology dictates the actions undertaken across the research study to achieve desired objectives, requiring the researcher to select the most suitable research methods/ approaches to best fulfil research objectives. Furthermore, Novikov & Novikov (2013) argues that there exists an extensive repertoire of available research methods and tools available for research studies, as the researcher must understand the unique functions offered by each method and consider the potential limitations to effectively select research methods in alignment to the nature and needs of the research study. Therefore, this chapter will discuss the justification behind each chosen research method/ approach and tool, illustrating the rationale for selection with emphasis on its offered strengths to fulfil research objectives, also discussing apparent limitations and how their impacts are mitigated. This chapter is structured in accordance to Saunders et als' (2015) research onion framework as shown in figure 9 below, discussing the methodological design in a chronological order from the research philosophy layer to approach, strategy, choice, time horizon, data collection, data analysis layers and concluded with discussion of research ethics.

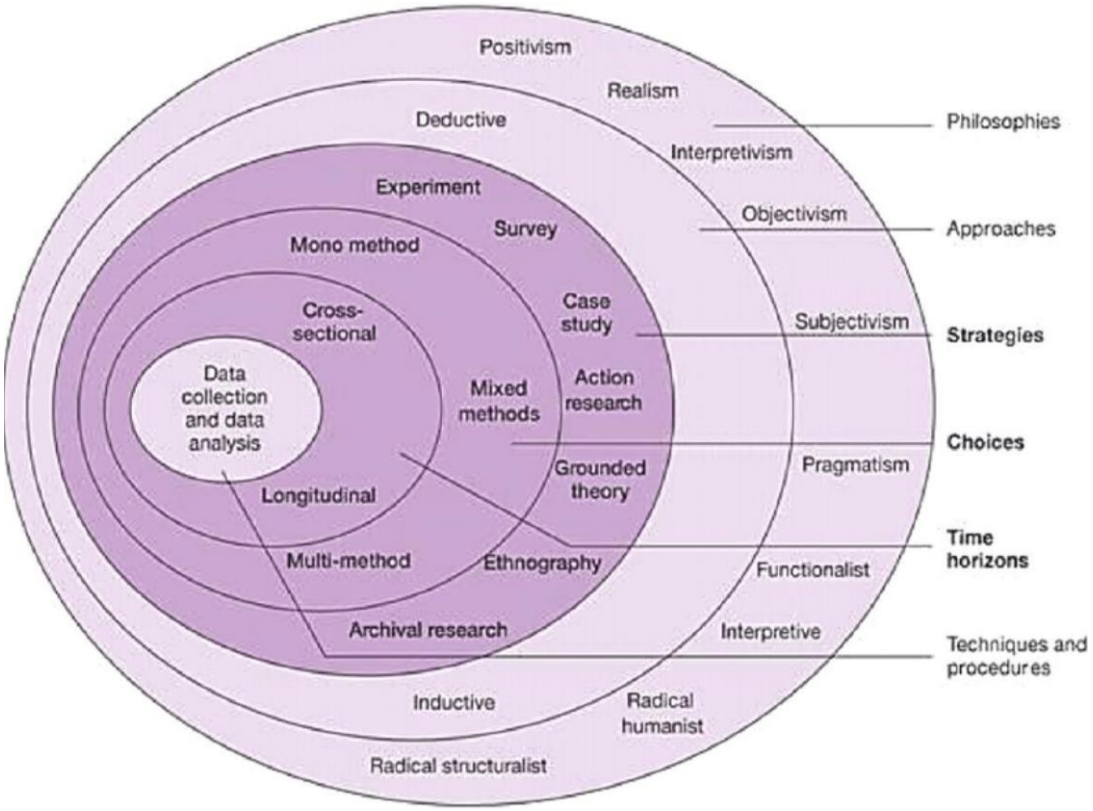

Figure 9: Research onion framework (Saunders et al, 2015)

3.1 Research philosophy

The research philosophy represents the outer research layer that shapes the overall research plan and how the research processes are performed according to Saunders et als' (2015) research onion framework. Easterby-Smith et al (1994) defined the philosophy of a research study as the views about how the world works, primarily focusing on the development of knowledge, the perception of reality and the nature of existence. The research philosophy of a study thus governs how the accepted perception of reality affects the development of knowledge in the chosen research topic, directly affecting how research data about a phenomenon is collected, analysed and utilised to develop research knowledge (Easterby-Smith et al, 1994). According to Saunders et al (2015), there are three major research philosophy paradigms that adopts ontological, epistemological and axiological philosophical values. An ontological philosophy concerns with the investigation of what is real, exploring whether a single objective truth/ knowable reality can be affected by a consistent set of laws, adopting the view that the reality is relative to the approach in answering research questions, as there is no singular objective truth but merely a number of subjective truths (Creswell & Creswell, 2003).

An epistemology philosophy concerns with how knowledge is developed based on the perception of reality and its effects on our perceived knowledge of the world, focusing on the design of an

objective discovery research process that aids the development of "objectively approved" knowledge of the research matter (Kitchener, 2011). An epistemology philosophy accepts that there exist multiple objective truths in how knowledge is gained about realities of the world, therefore the process of obtaining knowledge becomes the key focus as the researcher is required to objectively obtain unbiased knowledge in order to conceptualise realities. An axiology philosophy concerns with studying the nature of goodness or values of a research phenomenon, emphasising on the investigation over whether a research study is worthwhile and valuable (De Monticelli, 2022). Additionally, an axiology research philosophy incorporates the importance of research ethics in the design of the study, emphasising on the decision making of the right decisions and value judgements (De Monticelli, 2022). This research study attempts to develop knowledge through exploring the importance of an integrated supply chain to alleviate stakeholder conflicts and enhance delivered service experience in Chinese tourism booking platforms.

Therefore, an epistemology research philosophy is adopted as it enables the researcher to design an objective approach to develop knowledge over integrated supply chain applications in the Chinese tourism industry, accepting that multiple realities could exist as there is no universal realities to how integrated supply chain management can be best applied for all Chinese tourism online booking platforms. Furthermore, the epistemology philosophical branch of pragmatism is adopted as it allows the researcher to focus on individual decision maker within an actual real-world situation, accepting the truthful nature of received reality if it is considered useful and objectively verified with chosen research methods (Biesta & Burbules, 2003). A pragmatism research philosophy provides the researcher with high levels of flexibility to select the "best practices" in research methods and tools to fulfil research needs, overcoming apparent limitations due to the inaccessibility of desired data (Chinese tourism company internal data) with the use of only accessible and relevant data (interview data from workers in Chinese tourism companies), providing a holistic approach to develop solutions to research problems in a flexible manner.

3.2 Research approach

According to Saunders et al (2015), there are two types of research approach under inductive and deductive reasoning, directing the sequence of research activities that affects how knowledge is developed and data findings are produced. Under inductive reasoning, a bottom-up approach is adopted as the research beings with performing observations on a set/ multiple sets of identified empirical data conducted in the research field of interest, actively seeking data patterns in observations to generate knowledge based on the nature of identified data patterns (Jebb et al, 2017). According to Wolceshyn & Daellenbach (2018), an inductive research approach is adopted for research areas where minimal numbers of empirical studies have been conducted on, as researchers attempt to formulate new theories/ knowledge to contribute to the apparent research gap and offer new insights for future research implications. However, Giola et al (2013) criticised that inductive research studies are vulnerable to poor rigorous levels in the research design, whereby failure to collect data from accurate/ reliable sources and biasness in observation of data

would result in inaccurate findings produced, affecting the validity of the overall study and thus pose major challenges to effectively execute.

Under deductive reasoning, a top-down approach is adopted for research areas where substantial levels of empirical studies have already been conducted and academic knowledge exist. A deductive research approach begins with the identification of empirical studies, investigating over key research themes, scopes and trends in literature over the research field of interest. The researcher can thus effectively align the research design according to identified research gaps, extracting empirical academic knowledge and theories as the basis of theoretical foundations that shapes the research scope and hypothesises. This would enable the researcher to formulate data collection methods and parameters in-line with already established academic knowledge, increasing the validity and reliability of produced findings in comparison to an inductive research approach where the researcher formulates self-developed data collection methods/ parameters without recognised validity. Nonetheless, given the lack of like-for-like studies conducted on exploring the application of integrated supply chain systems in the Chinese tourism industry, especially for Chinese online tourism booking platforms and the lack of specific measurement parameters on stakeholder conflicts.

An inductive research approach is adopted similar to Jalil et als (2021) study that explores the service supply chain of the hotel industry, developing the theoretical structure for service supply chain application from service supply chain theories, shaping into relevant qualitative research parameters. Similarly, empirical research themes in supply chain management literature are observed and incorporated in the design of relevant data collection parameters to study the application of integrated supply chain in the Chinese tourism sector and especially online booking platforms, generating new insights that contribute to the identified research gap.

3.3 Research strategy

This research adopts an interview research strategy to collect primary data from workers of online tourism booking platforms in China, enabling the collection of rich data from a small number of participants from the targeted research population. According to Rowley (2012), the research strategy to conduct interviews allows the capturing of dynamic and complex information including the attributes, behaviours, preferences, feelings, attitudes, opinions and knowledge that is intangible in nature. Subsequently, interviews can generate in-depth and research specific data that helps to explain, understand and explore the attitudinal context of interviewees, uncovering the causes of particularly attitudes, identifying the factors that would shape certain preferences and the experience of interviewees to fully capture the causes, context and effects on their opinions toward supply chain management in the Chinese tourism industry.

Furthermore, an interview research strategy is adopted as it is used in the empirical study conducted by Ma et al (2003), when exploring the application of new ICT technologies in the Chinese tourism industry. Ma et als' (2003) study conducted 45 interviews to obtain a comprehensive understanding over the emergence of e-Tourism applications across five key

tourism stakeholder groups of the Chinese tourism sector including airlines, hotels, tour operations, visitor attractions and the Chinese tourism authority. Subsequently, an average of 9 interviews were performed to each identified tourism stakeholder groups, taking this into consideration a sample size of 10 interviewees were recruited given the research scope focus on gathering data from only one stakeholder group (Chinese online tourism booking platforms).

3.4 Research choice

According to Hopt (2004), a qualitative research choice complements an interview research strategy as the collection of qualitative, in-depth data can be achieved through lengthy discussions with interviewees. The collection of qualitative data creates openness as interviewees can be encouraged to expand on their responses, potentially opening up previously unknown findings and contribute with new practical insights through their unique experiences/ tacit knowledge in the field of interest (Potter & Hepburn, 2005). However, Potter & Hepburn (2005) also argues that the openness of qualitative data collection shed light on the important role of the researcher, as objectivity, integrity and accurate observations are required to ensure that participants are led to provide in-depth research specific data, assisting interviewees to make sure they can stay on track in their responses to interview questions. Nonetheless, the researcher attempts to overcome this potential concern through exercising reflective listening, identifying key words/ phrases discussed by the interviewee and pay close attention to the content/ feelings expressed, restating identified key points through paraphrasing and re-affirming with the interviewee (Passmore, 2022).

3.5 Research time horizon

All research participants (10 interviewees) are recruited on a one-off basis, reflecting a cross sectional time horizon approach as their responses to interview questions are gathered only at a single moment in time (Armstrong, 2001). Each research participants participate only once throughout the research process, as this study does not require the repeated collection of data to measure potential changes in attitudes overtime likewise to a longitudinal time horizon approach (Neale, 2020). The adoption of a cross sectional time horizon approach coheres to Ma et als' (2003) study on interviewing Chinese tourism stakeholder groups on the application of new ICT technologies, as all interview data were collection at only a single moment in time.

3.6 Data collection

The research collects primary data through semi-structured interviews toward the employees/ management of Chinese tourism online booking platforms, recruited through the personal networks of the researcher under a convenience sampling approach. The first two interviewees were identified and recruited as the researcher posted on WeChat to search for employees working

at online booking platforms in the Chinese industry, the two interviewees engaged the researcher and voiced their consent to take part and introduced other colleagues and friends working in the sector to participate, totalling ten interviewees. A convenience sampling approach eliminates potential accessibility issues on data relevant to the Chinese tourism sector, transforming online booking platform specific observations in an exploratory research manner to generate new ideas and insights to the formulation of practical knowledge (Crowe et al, 2011). A total of 10 interviewees from Chinese tourism online booking platform companies is chosen in representative of the generalised attitudes toward supply chain management of online booking platforms in the Chinese tourism industry, the chosen sample size coheres to and exceeds the sample size used in Ma et als' (2003) study, where a sample of 9 interviewees for each researched stakeholder groups in the Chinese tourism industry. The recruited interviewees include a variety of job positions in the company including, management, marketing, operations, customer services and supply chain (relationship) departments. This aims to generate a multiple perspective to different stages of supply chain activities and their interactions with various stakeholder groups in the chosen tourism company under a purposive sampling approach within the company.

The collection of primary data (qualitative) through a semi-structured interview approach helps to encourage two-way communication between the interviewer and interviewee, contributing to the identification of previously unknown knowledge and allow respondents to open up on key discussed topics with greater depth from their experiences (Schmidt, 2004). As opposed to structured interviews, the collection of data through a semi-structured interview method allows higher levels of flexibility, providing the researcher opportunities to immediately formulate new questions based on the information obtained, obtaining further information that expands on meaningful discussions with greater insights (Schmidt, 2004). A total of ten semi-structured interviews are collected, all interviews are conducted via Zoom with an average duration between 10 to 15 minutes. All interview data will be recorded and transcribed into transcripts for further analysis. Each interviewee will be given an identity e.g., interviewee A (management), interviewee B (customer services) to ensure their anonymity and confidentiality ethical principles.

All primary data will be gathered from open ended questions to obtain in-depth qualitative data, all interview questions are tested via pilot testing to ensure that targeted participants can accurately understand the intended meanings of each question, a testing round will be undertaken to ensure that the design of interview questions are understandable, clear and appropriate. A sample of ten pilot testing samples will be chosen via convenience sampling from the friends of the researcher, ensuring the wording, clarity and purpose of interviewee questions are adequately fulfilled. University approved tools and protocols will be used to ensure appropriate collection of data processes, interview questions are designed with parameters outlined in empirical literature.

3.7 Data analysis

This research project collects only qualitative primary data, as a thematic analysis approach is adopted to identify key themes identified in gathered textual data under Clarke et als' (2015) five

steps of thematic analysis. Upon the transcribing of interview audio recordings into textual data and identification of relevant secondary data sources, the researcher will begin to read and familiarise with all qualitative data to understand the context and key meanings of the data, highlighting key text for latter analysis. Secondly, the researcher will generate initial preliminary codes that describes the features of the data, indicating the context of the highlighted text that offers meaningful values and contributes to the study. Thirdly, the researcher will initiate an interpretive analysis of all collated codes, searching for similarities between codes and arranging codes through combining or splitting to produce an overarching theme, alluding the relationship between codes, subthemes and themes. Fourthly, the researcher will review all generated themes, evaluating all relevant text to ensure that the data within themes cohere together meaningfully, checking the relationship between coded extracts via the formulation of a thematic map. Finally, the researcher will refine the themes and relation subthemes with designated titles that can capture the essence of each theme in a concise manner, writing up the analysis with triangulation of academic knowledge to support or challenge empirical findings in literature. Given the qualitative nature of all collected data, a thematic analysis is chosen over cognitive mapping or analytic comparison as there are no direct comparisons available (Guest et al, 2011).

3.8 Ethical risks and limitations

During the primary data collection process where human participants are involved, it is essential to avoid potential ethical issues in areas of consent, data protection and confidentiality. In order to ensure the consent of participants from the chosen case study firm to participate, a consent form will be emailed and signed off by all ten interviewees prior participating in interviews. The consent form will be designed with a participant information sheet that details the purpose of the project, the desired contributions of the participant and their rights to participate or withdraw from the study at any given moment in time. The contact information of the researcher, project supervisor and University of Warwick is disclosed on the consent form to enable direct contact from research participants if they wish, clarifying on potential queries or confusions prior taking part in interviews. Additionally, all participants will be recruited on the basis of their position at the chosen case study company, ensuring that all participants are over the age of 18 and have substantial experience in the field, avoiding the ethical issues of targeting vulnerable participants, this is stated on the consent form and is highlighted in the early email communication exchanges with the chosen company.

To ensure data protection in accordance to the GDRP act, the learnings from WMG ethical training is utilised as all recorded interview audio files and transcripts will be stored in the personal computer of the researcher and the WMG secure drive, limiting the access to only the researcher and the supervisor as all data will be destroyed upon the completion of the study, or when the participant decides to withdraw from the study at any given point. To ensure confidentiality of participants, personal and identifiable information will not be collected, ensuring anonymity of each participant as they will be referred to as interviewee A, B, C, D, E etc... In terms of secondary data used in literature review, all data will be appropriately referenced and acknowledged to its

original authors, collecting data from sources where consent is publicly disclosed and the outcome of the analysis must not allow the re-identifying of participants from empirical studies (Tripathy, 2013). Furthermore, the researcher has completed the relevant ethical training and will apply the obtained knowledge throughout the research project, ensuring that academic misconduct and ethical issues are avoided with ethical and appropriate research efforts.

To overcome potential ethical concerns in relation to collecting primary data from human participants (Hesse et al, 2019), each participant will be kept anonymous without the disclosure of personal information, the questions will be designed to avoid potential psychological harm inflicted through pilot testing and subsequent modifications, ensuring that the interview questions are not designed in a sensitive and inappropriate manner for their wellbeing (Thomas, 2004). To avoid physical contacts during the pandemic, interviewees will be interviewed online to ensure their personal safety.

4. Results and findings

This chapter presents the key findings from the conducted interviews toward ten research participants working in online booking platforms in the Chinese tourism industry, a summary of the job positions (departments), the companies the interviewees are currently working for and their representative pseudonymised code is shown in table 2 below. This chapter is structured in accordance to the sequence of each interview questions, the major themes and sub codes are extracted from the context of gathered qualitative data with examples of key meaning units (phrases) recorded during the interviews.

Table 2: Summary of interviewee information

Pseudonymised code	Job position/ department	Online booking platform
Interviewee A	Marketing (management)	Ctrip
Interviewee B	Customer services	Ctrip
Interviewee C	Supply chain	Ctrip
Interviewee D	Operations	Qunar
Interviewee E	Customer services	Qunar
Interviewee F	Supply chain (management)	Qunar
Interviewee G	Marketing	Meituan
Interviewee H	Supply chain	Meituan
Interviewee I	Operations	Fliggy (Alibaba)
Interviewee J	Supply chain	Fliggy (Alibaba)

4.1 Key stakeholder groups of online booking platforms in the tourism industry

The first interview question attempted to address the range of stakeholder groups involved in the

business operations of online booking platforms in the Chinese tourism industry. The identified key themes as shown in table 3 below reinforces Piboonrungroj & Disney's (2009) supply chain network members framework, as the key stakeholder groups can be categorised under the major themes of input providers, service providers, product assemblers, physical flow connectors, customer flow enablers and customers. Under the category of input providers, it is founded that food & beverage providers, marketing intermediaries and manufacturers of local produce, as reflected by interviewee C where their company collaborates with over 80,000 food and beverage companies across China. It is also acknowledged that long-term working relationships have been established with these key input providers, as local marketing intermediaries would also help to design and offer tourism products for customers that made bookings on online platforms. The importance of manufacturers for famous local produce is highlighted as these partners can enrich the tourism experience through offering site visits and discount deals on local produce.

Under the category of service providers, it is founded that hotels/ hostels, local tour operators and local venues represent the key partners to design, deliver and maintain the quality of tourism services that are beyond the direct control of online booking platforms. According to interviewee C, collaborated local tour operators are heavily relied on as they deliver the actual services, whilst both long term and temporary collaborations are required for meeting peak season demands. It is also identified that many hotels/ hostels have died in recent years during the COVID pandemic, but accommodation services remain a key part of the supplier network. Similarly, the need for renting our local venues from corporate clients have also reduced during COVID, as major events and expos have been cancelled but they also remain a key service provider for hosting certain tourism events. Under the category of product assemblers, local tourism bodies play a key role in influencing what online booking platforms can offer in tourism packages, controlling the concertation and diversification of tourism products according to interviewee I.

Under the categories of physical flow and customer flow connectors, freight transportation, local transportation departments, car/bus hire and passenger transportation service providers (flights/ ferries/ trains) indicate the important role of logistics supply network members in the tourism industry, contributing to both the logistics of tourism products and customers. It is founded that online booking platforms have established long-term working relationships with major airlines and transportation service providers, ensuring discounted deals and reservation of seats during peak seasons. Under category of customers, corporate and individual customers (leisure) are identified.

Table 3: Key stakeholder groups

Key themes	Sub codes	Interviewee	Key meaning phrases
Input providers	Food & beverage providers	A,C,D,F	We collaborate with many of the local restaurants, cafes and bars to design special deals (A), our company collaborates with over 80,000 food and beverage companies across China (C), an extensive supplier network of local restaurants all around the country (D), local businesses such as restaurants and bars we have long-term working relationships with (F).
	Marketing intermediaries	A,G,I	We work with multiple marketing intermediaries in different regions (A), marketing agencies help us to design strategies and products that fit with local values (G), a lot of our packages and offerings are designed by marketing intermediaries (I).
	Manufacturers (local produce)	C,G,J	There are many manufacturers of local produce that we work with (C), almost every major city we offer tourism services in we have at least two or three collaborated major local manufacturers (G), local manufacturers enrich our tourism packages with site visits and discount deals on local produce (J).
Service providers	Hotels & hostels	B,E,F,G	We work with over 50 domestic hotel chains all across China (B), there is a total of around 25,000 hotels and hostels registered on our platform (E), even though many hotels have died in recent years due to COVID they still represent our biggest group of collaborated service providers (F), hotels and hostels form a large part of our supplier network (G).
	Local tour operators	A,C,J	As an online booking platform we rely on local tour operators to deliver the actual services (A), we have many long term and temporary collaborations with local tour operators according to seasonal demands (C), most of the services customer receive are actually from our collaborate tour operators even though we run some by ourselves most are not owned by us (J).
	Local venues	C,D,I	We have a large network of venues for hosting corporate and exhibition events (C), sometimes we need to have large spaces for certain tourism activities like entertainment shows (D), our corporate clients need a lot of venue options available for hosting events (I).

Product assemblers	Local tourism bodies (government)	D,F,I	Local tourism bodies have strong control over what we can offer in tourism packages (D), there are certain local tourism hotspots that require permission for group travels with governing bodies (F), the concentration and diversification of tourism products in major tourism cities are led by local governing bodies they decide on what to promote and we have to follow suit (I).
	Local tour operators	A,C,F	Some of our tour operators use their experience and networks in local regions to assemble packages for us (A), a lot of our tour packages are recommended and designed by local tour operators (C), you would find that most tour operators in major tourism cities come to you and discuss collaborations with already designed packages at decent prices (F).
Physical flow connectors	Freight transportation	C,D,I	We work with all major domestic airlines to get discounted deals (C), our company has long term contracts with the biggest airlines to ensure we have enough flight spaces in peak seasons (D), sometimes we need to transport over certain materials for corporate clients and we have train, ferry and flight logistics partners for that (I).
	Local transportation departments	B,C	In some special occasions when we have very important corporate clients we need to apply for special transportation services with governing bodies (B), we remain in constant dialogue with local transportation departments to keep track of any sudden changes or disruptions in the local transportation system (C).
Customer flow enablers	Car/ bus hire	B,F,H,I	We collaborate with the major private vehicle hiring companies across the country (B), we offer the full private vehicle renting service including drivers from local partners (F), in our database there are current over 2,000 car hire partners across the country (H), in some bigger cities we have our own buses but for smaller cities we collaborate with local partners (I).
	Passenger transportation (Flights/ ferries/ taxi)	B,F,H	We work with all major domestic airlines to get group discounted deals (B), we have passenger transportation quotas reserved for us during peak seasons (F), our customers choose us because our competitive advantage lies in our diverse transportation services offered in comparison to other platforms (H).

Customers	Corporate customers	A,G,I	We have a lot of corporate clients travelling for expos and work duties that requires transportation and accommodation services (A), during major international expos our corporate customer market demand surges (G), we have bespoke package plans that is customised to the needs of each corporate client/ event (I).
	Individual/ group customers (leisure)	B,E,I,J	Customers are always the most important stakeholder for us (B), our platform has over 200 million customers registered with us (E), the largest stakeholder group for us is definitely leisure tourism-based customers (I), we have seen a surge of individual customer booking in recent years particularly our millennial consumers (J).

4.2 Key stakeholder conflicts

The second interview question attempted to discover the types of conflicts commonly occurred in the Chinese tourism industry from the perspective and experiences of online booking platforms. The identified key themes as summerised in table 4 below reinforces Yang et als' (2016) categorisation of tourism conflicts under the dimension of tourist-host, tourism-tourist and host-host conflicts, furthermore, a tourist-tourist conflict type is also identified as it contributes to Yang et als' (2016) theoretical framework of stakeholder conflicts in the tourism sector. Under the category of tourist-host conflicts, four common types of conflicts (sub-codes) are identified under unsatisfied service experience, poor customer focus/ orientation, false advertisement and cultural conflicts. According to interviewee C, the most common conflict encountered is reflected in customer complaints over the poor quality of tourism products/ services from partners, accounting to over 70% of daily complaints received as stated by interviewee G. It is identified that many local tourism service providers prioritise commercial gains over fulfilling the actual needs of tourists, offering limited value propositions as service quality is often quite poor given the lack of direct control from online booking platforms.

Furthermore, the extensive range of supply chain network partners for online booking platforms pose major challenges for due diligence via on site visits, resulting in many false or overly exaggerated advertising content that differs from the actual service/ product offered, damaging the trust of the platform-user relationship and resulting in the customer expectation gap that lowers satisfaction levels reinforcing Douglas & Connor's (2003) arguments. The apparent concerns over cultural conflicts and inability for local tourism service partners to address the cultural preferences of certain tourist profiles remains prevalent, negatively affecting the service experience and demonstrates a lack of desire to under/ respect tourist diversity. Under the category of tourism-tourist conflicts, the identified key conflicts opened up new insights that contributed to the research field due to minimal academic studies over the recent strict implementation of the zero COVID protocols by the Chinese government and its subsequent impacts on the tourism industry. According to interviewee B, COVID has resulted in immediate closure of airports which has caused tourists being left stranded in quarantine hotels with major disruptions to all inbound and outbound transportation. The most recent lockdowns imposed in Hainan and Shanghai was mentioned as all planned travels were cancelled and affected, as tourists in the regions were forced to pay mandatory quarantine hotel fees.

The occurrence of regulatory changes is found to disrupt the operation of tourism service delivery, as tourism hotspots and hotels can be closed off for government use according to interviewee D and E. The violation of local rules is also recognised as a key stakeholder conflict as criminal and malicious conducts from tourists have resulted in the intervention of local authorities. Under the category of host-host conflicts, it is founded that the intensely competed nature of the Chinese tourism industry has resulted in toxic competition between local tourism service providers, performing coordinated attack through critical and negative reviews on competitors on online booking platforms which discourages potential tourists. Furthermore, discrimination against start-

ups in the low profit margin Chinese tourism industry is identified, opening up previously unknown knowledge as online platforms discourage collaborations with new or small scale service providers due to poorly perceived levels of reliability, Additionally, high levels of conflicts amongst service providers in the intensely competitive tourism landscape has resulted in high levels of stress for tourism industry workers, resulting in high employee turnover.

It is also acknowledged that the Chinese tourism industry operates with many grey areas and is hard for employees to remain motivated, being prone to forced resignations due to customer complaints as the importance of reputation is vital for survival in the sector. Under the category of host to tourist-tourist conflicts, it is identified that disagreements between tourists in a group tour is very common (50%+), causing the disassembling of tours and negative experiences for other tourists in the tour group. According to interviewee E, tourist-tourist conflicts would often result in itinerary disruptions, causing major delays and failing to meet certain scheduled events at designated times, negatively impacting the overall experiences of the tour group. Furthermore, the perception of unfair treatments particularly amongst elder Chinese tourists is found to impose added stress and burdens for service providers, customer complaints are commonly related to the unequal experience received in comparison to other customers.

Table 4: Key stakeholder conflicts

Key themes	Sub codes	Interviewee	Key meaning phrases
Tourist-host conflicts	Unsatisfied service experience	A,C,G,H	The most common conflict is probable us receiving customer complaints about the poor quality of tourism products/ services from our partners (A), I would say conflicts between our service providers and the customers represent over 70% of all our daily challenges (C), unsatisfaction over the service provided by tour operations and hotel conditions are very common (G), we would receive daily complaints over the hygiene issues of some of the hotels we are partnered with (H).
	Poor customer focus/ orientation	B,E,G,I	In my time at the company I have noticed that a lot of the problems are actually because our service partners prioritise commercial gains over the actual needs of the customers (B), I feel that a lot of the services provided by our partnered service providers do not provide decent value propositions in the perspective of customers (E), more often than not the local tour guides don't care about how the customers feel (G), the service quality is genuinely quite poor on the ground level because we have no direct control over it (I).
	False advertisement	A,B,D,F	We would receive so many complaints because the pictures we receive from service partners are actually photoshopped or fake (A), there is a lot of exaggerated or even completely false advertisements from our suppliers but there are too many of suppliers for us to regularly monitor (B), our partnered hostels can register on our platform with ease and they could upload information that doesn't require due diligence to check on site (D), people don't realise lots of the photos only show certain sides of service experience and the bad sides are always hidden away (F).
	Cultural conflicts	B,D,E,H	We have had many international tourists complaining about them feeling disrespected from local tour guides due to apparent cultural differences (B), last year I remember that we had a group of wealthy tourists from Hong Kong that complained about the noise (D), lack of manners and politeness of our overly welcoming local tour partners (E), cultural conflicts are very common as there are unique cultural preferences between different Chinese provinces

			and cities affecting their preferences in food taste and types of tourism experience they desire (active/ passive) (H).
Tourism-tourist conflicts	Zero COVID protocols	B,D,F,I	A key conflict of interest in recent years is inevitably related to the strict zero COVID protocols (B), upon identifying new COVID cases we would have airports shut by the government and all tourists stranded (D), most recently in Hainan we have 80,000 stranded tourists requiring to pay off mandatory quarantine hotel fees due to a sudden lockdown imposed on the city (F), the Shanghai outbreak in April and May saw every single one of our flights and tours cancelled (I).
	Regulatory changes	B,D,E,I	It is common to see sudden regulatory changes to close off tourism hotspots for visits due to travelling political leaders and political meetings (B), we have had all our reserved quotas at a hotel completely cancelled recently due to the compulsive order by the local government to use it for quarantine purposes (D), many hotels in recent years have been turned into quarantine centres which has affected the planning of our trips (E), governing bodies never tell us in advance when they impose new changes that would drastically impact the demand for tourism in the region (I).
	Violation of local rules	B,E,I	We have had multiple customers violating the law upon their visits in recent times (B), most tourists travel for a good time and sometimes too much alcohol can lead to criminal offences which are actually quite common in our field (E), there were times when tourists stole from and damaged the properties of our service partners and they just left without noticing us (I).
Host-host conflicts	Toxic competition	A,D,F,I	The intense competition of the industry has created many forms of toxic competition (A), in the modern digital era where customers are driven by online reviews we see a lot of coordinated attacks between our service partners with critical or even false reviews (D), our potential customers have been turned away by the amount of bad reviews written by the competitors of local regions (F), I have been in such a toxic industry before the amount of hate and malicious behaviours between competitions happens all the time (I).
	Discriminating	A,F	There is a saying that start-ups cannot survive in the Chinese tourism industry because the

	collaborations		intense competition driven by economies of scale (low profit margins) prices out start-ups (A), to be honest for us large online booking platforms we discourage collaborations with smaller operational scale due to their poorly perceived levels of reliability (F).
	Employee turnover	A,D,I	The Chinese tourism industry is arguably the one of the industries with the highest turnover rates because of how stressful it can be (A), a lot of the Chinese tourism industry operates with grey areas and is hard for employees to remain motivated (D), it is very easy for tourism companies to fire their companies based on one singular customer compliant due to the importance of reputation in the sector (I).
Tourist-tourist conflicts	Disagreements/ negative emotions	B,D,E,I	Disagreements between tourists in a group tour is very common I would say it occurs on more than 50% of tours (B), we have had major fights and disputes between tour members because of conflicting interests and it really does affect the overall experience for the others (D), I have seen from my own eyes how a tour group was disassembled on the first day because of conflicts between particular tourists (E), having huge conflicts between tourists drastically reduces the overall experience for everyone involved (I).
	Itinerary disruptions	D,E,I	We have had to make immediate changes in our itinerary plans on the spot because certain tourists were upset (D), delays caused by conflicts between tourists is very common and it results in the inability for the whole tour to meet certain events scheduled at designated times (E), tourists complaining about the conditions of hotel have seen us completely rebook the hotel for the whole tour group (I).
	Perception of unfair treatments	B,E,F,I	Chinese tourists love to compare and complain about everything when they get the opportunity to (B), it can get really pity sometimes over the small details in service experiences received by some tourists (E), the elder demographic of Chinese tourists have a tendency to complain over better treatments given to other tourists (F), there was a time when we had to let our partnered restaurant work overtime and completely re-cook the entire menu according to the preferences of our tour group because they were complaining about better food other people were having (I).

4.3 Causes of stakeholder conflicts

The third interview question attempted to examine the causes of stakeholder conflicts encountered in the supply chain of Chinese online booking platforms. The identified key themes summerised in table 5 below includes four major themes including poor selection/ quality of suppliers, government/ political restrictions, intense competition and cultural influence, contributing to academic research knowledge as minimal studies have examined the causes of stakeholder conflicts in the Chinese tourism industry. Under the category of poor selection/ quality of suppliers, it is founded that there exists a lack of transparency and trust between service providers and online platforms, as interviewee F stated that tourism service providers are always updating their service information and exact details are not known. Furthermore, communication siloes between supply chain partners due to a lack of communication recording mechanism during service delivery highlight gaps that would hinder the control over service quality, as services are delivered and complaints are received before booking platforms are informed (interviewee D & J). Under the category of government/ political restrictions, dominant government control, political uncertainty and lack of stakeholder involvement in planning as shown from recent zero COVID protocols highlight the lack of power for platforms (interviewee A, F, H).

Under the category of intense competition, it is founded that survival challenges have driven toxic behaviours amongst competitors across the supply chain (interviewee A), as suppliers are performing unethical conducts to survive in the difficult COVID restricted tourism environment (interviewee G). Additionally, high levels of stress, frustration and staff burnout have resulted in poor service delivery (interviewee F) and substantially increasing staff turnover rates (interviewee G). Under the category of cultural influence, a lack of cultural intelligence to anticipate and accommodate different cultural preference of tourists domestically have resulted in cultural conflicts (interviewee C), highlighting the problems of current standardised service delivery (interviewee E). Cultural influence is also found to stimulate miscommunication between tourists and hosts (interviewee B), hosts and platform (interviewee F) and causing unnecessary challenges that can be avoided (interviewee I). Poor customer knowledge without active engagement to understand customers amongst service providers also fail to identify new customer needs (interviewee G) and demonstrate poor customer integration (interviewee A).

Table 5: Causes of stakeholder conflicts/ challenges

Key themes	Sub codes	Interviewee	Key meaning phrases
Poor selection/ quality of suppliers	Lack of transparency	B,F,I	This is a clear lack of transparency in the delivery of services from our partner suppliers (B), we don't actually know the exact details of services provided from all our service suppliers because they are always updating the range of services offered (F), we connect our service suppliers with customers but their interactions and communications are not always recorded on our platform (I).
	Lack of trust	B,D,G	We collaborate with our suppliers base on a review system but there is a high volumes of fake reviews written by the suppliers themselves to boost their ratings (B), even for suppliers that we have developed a long term working relationship with sometimes we get customer complaints about false advertisements you just can't be sure with these things (D), I don't believe that trust exists in the current Chinese tourism industry especially in recent years when everyone is struggling due to COVID controls and are trying everything to survive (G).
	Communication silos	A,C,F	It is inevitable that not all communication with and between our supply chain partners and customers are recorded and utilised (A), our tour guides would often make immediate changes to scheduled plans due to the encounter of sudden challenges but we would not know this until decisions are made (C), it is common for the platform to be misinformed due to a lack of current communication recording mechanisms especially during service delivery (F).
	Lack of control over service quality	D,J	We receive customer complaints after a negative experience has been encountered and poorly handled by our service partners hence we have no control over service quality delivery (D), over 90% of tourism services are delivered by our partners and we have limited control over the quality of services actually delivered (J).
Government/ political	Dominant	A,F,H	The Chinese tourism industry is heavily influenced by government regulations and sudden changes in policies (A), we can only play a passive role when it comes to making

restrictions	government control		market related decisions especially over the long term because policies are always changing (F), the zero COVID protocols that are decided on the spot really puts us in a vulnerable position with almost no control (H).
	Political uncertainty	B,D,H	The nature of policy making in the tourism industry is unlike other industries as our services are offline-based and vulnerable to any sudden changes (B), I believe that political uncertainty is the most influential cause of our struggles in recent years (D), it is difficult to make effective strategic decisions when political environment is highly uncertain (H).
	Lack of stakeholder involvement in planning	D,F,I	The tourism sector would make decisions in manners they see best fit for the industry but it does not reflect the actual best practice most times (D), governments rarely consult industry companies and take-in advices that shapes political decisions (F), we have absolutely no involvement in the design of government policies even though we make up for most of the sector alongside several other platforms (I).
Intense competition	Survival challenges	A,D,G	The intensity in the competitive landscape is definitely a key driver for all the toxic behaviours between competitors in across the supply chain (A), it has been so difficult in the last few years even our company has been recording losses for the first time since operation (D), many service suppliers would try everything they can to survive nowadays be it unethical or violating our platform's code of conduct (G).
	Stress/ frustration & staff burnout	A,F,G	There is a high level of stress across the whole tourism sectors and it discourages employees to stay (A), we have had so many employees leaving over the past several years due to poor performances and high levels of customer complaints from COVID control effects on our service delivery (F), staff burnout and frustration are really affecting both service quality and staff retention across the supply chain (G).
Cultural influence	Lack of cultural intelligence	B,C,E	You would find that most tourism service providers at local levels are not very well educated and do not possess capabilities to dealing with customers from different cultural backgrounds (B), a lot of the cultural conflicts are caused by the inability to anticipate

			cultural differences (C), China is a big country with lots of unique cultures from various provinces but right now service delivery is designed and performed at a standardised manner (E).
	Miscommunications	B,F,I	Lots of the conflicts between tourists and hosts can actually be avoided if our service partners had accurately understood what the customer wants (B), I would say that most conflicts on our platform with partnered suppliers are due to miscommunications (F), miscommunication is very common and could raise unnecessary challenges that could be easily avoided (I).
	Poor customer knowledge	A,B,G	The rapidly changing needs and preferences of Chinese tourists are not always identified and integrated into the design of tourism products/ service features (A), Chinese consumers are always changing at a very rate and this is often neglected by our service providers (B), I would say that most service providers are great at doing what they have been doing for years but they don't understand and appreciate the changes in consumer needs (G).

4.4 Stakeholder needs and interests

The fourth interview question attempted to explore the needs and interests of stakeholders that are difficult to fulfil with the current supply chain management system. The identified key themes as summerised in table 6 below again reinforces Piboonrungroj & Disney's (2009) categorisation of supply chain network member groups. For input providers, it is founded that major upper stream supplier partners demand stable and guaranteed volumes of orders upon collaborations (interviewee C), as many local suppliers are dependent on booking platforms for survival (interviewee D). Input providers also demand highest exposure and priority over competitors (interviewee D & E), as the request for exclusive contracts to are common but rarely granted (interviewee G & I). For service providers, exclusive contracts to secure all local service demands are also requested but not offered (interviewee A). Furthermore, the need for long term collaborations remains another concern as there are many service providers entering the market (interviewee F), some bigger service partners would demand involvement in strategic decision making (interviewee F) and to influence local tourism strategies that accommodates supplier needs (interviewee I.) Product assemblers such as local tourism bodies demand obliged support and commitment to zero COVID policies (interviewee A).

As for local tour operator partners, the demand for long term collaborations is difficult due to high turnover rates caused by poor reviews and feedbacks (interviewee C&D). For physical flow connectors like local transportation departments, the demand to accommodate government needs in short notice is identified which is a challenge during the COVID pandemic (interviewee A). As for transportation partners, guaranteed/ minimum demand during weak seasons is needed but booking platforms have limited control (interviewee C). For customer flow enablers, the need to make timely reservations and to fulfil customer needs are found but it is difficult when current supplier inventory volumes are not visible (interviewee D), tourist transportation preference shift from tour to independent travel has reduced car/ bus hire demands (interviewee G). The need for prioritised collaborations over competitors with increase exposure is also found (interviewee D). For customers, the need for guaranteed service quality that fulfils their high expectations, anticipation of customer changing needs and innovation is demanded.

Table 6: Stakeholder needs and interests

Key themes	Sub codes	Interviewee	Key meaning phrases
Input providers	Guaranteed tourist volumes	C,D,I	A lot of the upper stream suppliers that we work with want us to provide stable volumes of tourists (C), whilst it might seem very normal that our suppliers are dependent on our platform it reflects how difficult it is for local suppliers to survive due to reduced tourist volumes (D), we always tell our partners that we will try our best but we cannot guarantee that customers on the platform would choose them (I).
	Priority over competitors	D,F,H	Given how intense the industry is it is natural that our suppliers want us to give them the highest exposure on our platform (D), a lot of the bigger service partners want us to reach out to them first upon customer requests (F), when we have large corporate customer orders it is difficult to decide which supplier we go to first given that many suppliers can fulfil client requirements (H).
	Exclusive contracts	A,G,I	We do sign exclusive contracts to ensure the priorities of several key suppliers but its not common (A), there are organisational policies and politics involved in which suppliers we can give exclusive contracts to (G), the whole Chinese tourism industry is too big for us to use exclusive contracts (I).
Service providers	Long term collaborations	A,D,F	It is important to have long term collaborations established with service providers but the industry is changing so fast and some partners fail to adapt (A), most service providers want guarantees over long term collaborations (D), it is a challenge to maintain long term collaborations in this industry given the amount of service providers coming in and out of the industry (F).
	Exclusive contracts	A,G	A lot of service providers ask for exclusive contracts that we can't offer (A), it is near impossible for us to establish exclusive collaborations for most tourism service segments (G).
	Involvement in	D,F,I	Some bigger partners would want to design marketing strategies with us but in reality we

	strategic decision making		have limited control (D), we cannot afford to let our service partners make key decisions sometimes (F), many service provider partners want to influence our local tourism strategies to accommodate their needs (I).
Product assemblers	Support and commitment to policies	A,F,H	Local tourism bodies want us to strictly oblige to their zero COVID policy which is very costly for us (A), we have made many conflicts with local governments due to their sudden changes to tourism control (F), local governing bodies want us to be 100% committed to supporting their policies even though it is not commercially friendly for us (H).
	Long term collaborations	C,D	The turnover rates with tour operator partners are surprisingly high (C), it is a challenge to maintain long term collaborations given poor reviews and feedbacks (D).
Physical flow connectors	Accommodating government needs	A,E,H	It is always a challenge to do everything the government wants you to do especially in short notice (A), governments prioritise their needs over ours (E), the zero COVID protocols in place even now has been very difficult for us to accept and commit to (H).
	Guaranteed demand during weak seasons	C,H	Our transportation partners always seek a minimum number of tourist volume guarantee which is beyond our control (C), collaboration and relationship with transportation partners during weak seasons are always hard (H).
Customer flow enablers	Timely reservations & fulfilment	D,G,J	Sometimes we have to cancel customer reservation orders when we find that our suppliers have limited supply/ vacancy rates (D), many modern tourists prefer travelling alone and car/ bus hire demands drop significantly (G), our passenger transportation partners need us to confirm with them all the order details asap as they operate in cost efficient agile models (J).
	Priority over competitors	A,D	Partners wanting prioritised collaborations over other competitors (A), it is difficult for us to constantly provide exposure for selected partners over others (D).
Customers	Guaranteed service quality	B,E,G	Customer have very high expectations over the services they receive (B), you have to satisfy the expectations of customers and beyond at all times (E), customers want absolute guarantee on the quality of services in accordance to the details of advertisement materials (G).

	Anticipation of changing needs	B,E	Customers complain that our tourism packages are very generic (B), it is often hard to anticipate the changing needs of customers when our industry is heavily reliant on historical data (E).
	Innovative service experience	I,J	Innovative service experiences are always demanded but they are costly and difficult to design and deliver (I), we can only provide certain services according to the capabilities of our service partners which can be very limited and generic (J).

4.5 Effectiveness of current supply chain system on stakeholder management and service delivery

The fifth interview question attempted to explore the effectiveness of the current supply chain on stakeholder management and service delivery across online booking tourism platforms. It is identified that positive performance has been achieved in the areas of identifying new suppliers, the large range of services offered and the capability to perform just-in-time (JIT) across logistic processes, fulfilling three of the five key elements of supply chain management including "source", "deliver" and "plan" according to Berry et al (1994). It is founded that over 500 suppliers from different tourism market segments are sourced and added into the supply chain network (interviewee B), as suppliers find online booking platforms more effective than traditional offline tourism booking agencies for customer attraction (interviewee G). Subsequently, an extensive range of service providers are partnered as customers also favour the all-in-one solution of centralised online booking platforms (interviewee F). The current effectiveness to create and provide tourism products/ services coincide with consumer demands upon orders are made is found to facilitate JIT logistics management (interviewee C).

However, areas of ineffective are found as there are clear communication siloes/ gaps between supply chain network actors that could cause delays of up to several days (interviewee B). A lack of transparency in service delivery due to a lack of monitoring mechanisms have hindered the quality of delivered services (interviewee G), whereby inefficient supply chain management have resulted in duplication of orders/ late responses (interviewee C), human errors (interviewee I) and long lead times (interviewee J). More importantly, there are areas of key gaps in the current supply chain system as there is clear inventory invisibility, creating challenges to stay on top of demand due to the need to double confirm with supply chain partners upon receiving customer booking (interviewee C), reflecting the gap in which vacancy levels of collaborated suppliers are not known in real time (interviewee I). The lack of value-added collaborations is identified as online booking platforms currently only connects tourists and service providers (interviewee A), lacking involvement in strategic decision making across the supply chain and with governing bodies (interviewee D). High levels of waste are generated due to costs from siloes and opportunity costs from customer turnover rates (interviewee B, C).

Table 7: Current supply chain effectiveness

Key themes	Sub codes	Interviewee	Key meaning phrases
Areas of positive performance	Identification of new suppliers (source)	B,C,F,G	The supplier pool on our platform is increasing every-day (B), we can add over 500 suppliers of from different segments in our platform every-day (C), suppliers come us directly via submitting applications on our platform (F), it is very effective to source new suppliers according to client needs compared to traditional offline tourism booking agencies (G).
	Range of services offered (deliver)	A,D,E,F	We have secured an extensive range of service providers from entertainment to hotels and food (A), our supply chain is heavily driven by the amount of options that our customers can choose from (D), there are multiple major or small partners for all types of tourism services in major Chinese cities (E), modern tourism consumers use online platforms because we centralise everything for them with convenience (F).
	JIT logistics (plan)	C,H,J	The creation and provision of tourism products and services are timed coincide with consumer demands from when reservations/ orders are made (C), the logistics systems is effective because we only confirm with supply chain partners when payments are made (H), we can operate in a just in time model due to the time-effectiveness of the current system from customers making order to matching order details with service delivery (J).
Areas of inefficiencies	Communication siloes	B,E,I	There are clear communication gaps between actors across the supply chain network that can range from minutes to days (B), a lot of the communication and interaction between customers and supply chain actors are not recorded or monitored (E), it is common for us to receive complaints after a poor service experience is delivered thus we have limited control (I).
	Lack of transparency	C,G,I	We cannot see the order progress in time due to the need for supply chain partners to update progress (C), there is a clear lack of transparency in service delivery which is not monitored on our platform (G), there is inadequate control in the current system over the

			level of transparency achieved across all supply chain actors (I).
	Supply chain management	C,F,I,J	There are many areas of costs that can be avoided due to poor supply chain management such as duplicated orders or late responses (C), an extensive range of supply chain partners makes management a complex process (F), huge growth in online tourism demands in peak seasons magnifies the current problems we have that are human made (I), long lead times due to late partner response can hinder supply chain management effectiveness (J).
Areas of key gaps	Inventory invisibility (suppliers)	C,D,I	It is difficult to stay on top of demand because a lot of the times our service provider partners tell us they cannot fulfil our demands after a booking is made so we have to cancel (C), we often don't know the vacancy levels of our suppliers as they collaborate with other platforms too (D), duplicate orders and reservations for limited booking services are very common as inventory status is not automatically updated in real time (I).
	Lack of value-added collaborations/ planning	A,D,F,I	We play the role of an intermediary platform that connects tourists and service providers without adding much value in service delivery (A), governing bodies do not consult us over future plannings that actually benefits the growth of the sector (D), there is a clear lack of integrated planning for strategic decision making amongst supply chain network (F), most suppliers are new and there is a lack of trust to formulate strategic collaborations with (I).
	High levels of waste	B,C,E	There are many areas of costs that can be avoided given greater understanding over each other's capabilities/ supply levels (B), some customers on our platform would go to other competitive platforms if we can't receive prompt replies from our service partners (C), there is a lot of opportunity costs given how much waste is created in our current supply chain system in areas of time and customer turnover rates (E).

4.6 Need and benefits from an integrated supply chain

The sixth interview question attempted to explore the needs and benefits for Chinese online booking platforms to implement an integrated supply chain system. It is identified that all interviewees recognised the needs and expected gains from supply chain integration as shown in the theme category of higher profit margins. It is founded that interviewee B, C, G and H recognises the benefits of improved disruption management, especially in the tourism sector which has been vulnerable to sudden disturbance and interruptions from the external environment, providing higher control over the management of current logistics disruptions due to communication siloes. The reduction of costs through reduced human errors (interviewee A), meeting customer demands more efficiently with reduced failure rates would lower opportunity costs (interviewee D) and to reduce costs from supplier loss with establishment of trust and confidence (interviewee I). Quick responsiveness to market changes would allow increase profit margins as market changes can be identified at both ends of the supply chain (interviewee A), enabling the utilisation of customer information with upside suppliers (interviewee G) and synchronise customer requirements with flow of suppliers in real time (interviewee J).

Under the category of service delivery improvement, Ahmed et als' (2021) acknowledgement of using integrated supply chains to improve service quality, customer services and customer satisfaction is reinforced. According to interviewee B & D, a well-designed integrated supply chain system that streamlines supply chain processes can effectively foster stronger collaboration, enhance operational control over service delivery quality to aid the transitioning of customers down the tourist service experience journey. Customer services can also be improved as response times are reduced to almost real time with precise understanding of conditions at partnered suppliers (interviewee B), customers can see order statuses across all supply chain levels (interviewee E) and the facilitated agility enable effective customer services even during peak season demands (interviewee F). Subsequently, enhanced service delivery and supply chain efficiency with an integrated supply chain would increase customer satisfaction, as higher visibility would enable better handling of customer queries (interviewee C) and eliminating of human errors (interviewee I).

Under the category of increased flexibility, improved response time is found to enable better adjustability to client requests and demands (interviewee C), enabling the observation of key changes across supply and demand sides to actively respond (interviewee J). The increased visibility/ transparency supports Dragen et als' (2015) findings as service delivery of internal operations and supply chain partners can be tracked in real time (interviewee C), monitoring the inventory/ vacancy levels of hotels and restaurants without the need for two-way confirmations where current communication siloes exist (interviewee D). Furthermore, higher adaptation to uncertainty is enabled as changes in the external environment is immediately identified (interviewee A), enabling more accurate simulations from real time data flows to improve forecasting and predictions of future market changes (interviewee H). Under the category of

improved control and decision making, an integrated supply chain is found to enhance supplier collaborations through integrating and fulfilling individual goals that motivate collaboration intentions (interviewee C), optimising service delivery processes with reduced opportunity costs and wastages from cutting down non-value-added processes/ workload (interviewee D & H). The centralisation of data would enhance decision making effectiveness, reducing communication siloes and provide greater control over strategic planning with individual needs of all supply chain partners addressed (interviewee I).

Table 8: Benefits from an integrated supply chain

Key themes	**Sub codes**	**Interviewee**	**Key meaning phrases**
Higher profit margins	Improved disruption management	B,C,G,H	We would be able to identify and prepare for potential disruptions across the supply chain (B), given the highly interactive nature of the tourism service experience a highly integrated supply chain could enhance management of sudden disturbance and interruptions (C), it would give us much needed control to mitigate the damages from potential disruptions (G), reduction of logistics disruption impacts from eliminating current communication siloes can help us better manage supply chain processes (H).
	Reduced costs	A,C,D,I	Increased reliability of an integrated system would help to reduce human errors and subsequent costs (A), costs can be shared as each supply chain partner would be responsible for the potential disruption due to their own failures (C), customer demands can be met at a much faster and cost-efficient manner with higher success rates (D), establishment of trust and confidence amongst supply chain partners from an integrated system would significantly reduce puerility and switching costs (I).
	Quick responsiveness to market changes	A,G,J	Market changes at both ends of the supply chain can be immediately identified and managed in accordance (A), we will be able to utilise customer information to respond to their changing needs via collaboration with upside suppliers (G), integrated supply chain would allow us to synchronize customer requirements with the flow/ supply of service partners as inventory levels are shared in real time (J).
Service delivery improvement	Improved service quality	B,D,E,I	A well-designed integrated supply chain system would foster stronger collaboration with better operational control over service delivery quality (B), we can achieve greater consistency and streamlined processes when transitioning customer down the tourist service experience journey with a range of service providers (D), the timeliness of service delivery can be improved to reduce wait time/ lead time (E), real time monitoring of service delivery to enhance overall quality (I).

	Improved customer services	B,E,F	Customer response time can be greatly reduced to almost real time manner with accurate understanding of current conditions at partnered suppliers (B), customers can see the status of their order across the entire supply chain (E), even large variations of customer demand during peak seasons can be satisfied with the facilitated agility from integrated supply chains (F).
	Improved customer satisfaction	C,D,I	Enhanced visibility across supply chain partners can better deal with customer queries and enhance satisfaction levels (C), the increased accuracy and speed of customer interactions will likely increase their satisfaction and loyalty (D), the elimination of human errors throughout the customer service experience due to enhanced visibility of partners can result in improved customer satisfaction (I).
Increased flexibility	Improved response time	C,F,J	We can automate responses to client queries due to current supply chain conditions to greatly reduce response time (C), there is higher levels of flexibility to adjust to client requests and demands (F), we can observe key changes across both supply and demand sides of the supply chain and actively response to competitor actions (J).
	Increased visibility/ transparency	C,D,I,J	It would allow us to track service delivery from both our internal operations and partners in a real time manner (C), the inventory/ vacancy levels from partnered hotels and restaurants can be seen live without the need for two-way confirmations (D), real-time transparency can be achieved across entire supply chain network (I), improved visibility can provide information that is precise and trustworthy to overcome siloes (J).
	Reduces/ better adapt to uncertainty	A,G,H	Changes in the external environment across the supply chain stream is immediately identified (A), sudden changes from partnered suppliers/ governments can be identified and handled with higher efficiency (G), more accurate simulations from real time data flows for better predictions and understanding of market changes (H).
Improved control/ decision	Enhanced supplier collaborations	C,I,J	Individual goals of all supply chain network actors can be integrated and fulfilled to enhance collaboration motivation (C), greater understanding of partnering suppliers can result in value co-creation and achievement of common goals (I), a highly integrated

making			supply chain network can foster trust and long-term collaborations for mutual gains (J).
	Reducing wastage	A,D,F,H	Optimised service delivery processes can reduce opportunity costs and waste (A), we can identify current non-value-added processes/ actors and cut them out (D), a highly synchronised supply chain would result in the reduction of lead time which is important in the tourism industry where services are provided one after another (F), we can directly trace the status of each order which reduces unnecessary workload and labour resources (H).
	Data centralisation	D,F,I	Accurate decision making can be achieved when all information/data are centralised (D), we can produce accurate forecasts of future trends based on the data collected across the entire supply chain in a singular system with no communication siloes (F), enhanced control over strategic planning that draws on the needs of all supply chain partners from centralised data (I).

4.7 Practical challenges on integrated supply chain implementation

The seventh interviewee question attempted to explore the potential challenges that would hinder the implementation of an integrated supply chain system. It is identified that the high costs of integration would potentially discourage supply chain partners and management to engage supply chain integration, reinforcing Elsaber et als' (2019) arguments that firms are often discouraged due to cost concerns. The relevant costs in areas of developing a new information technology system via outsourced software developers (interviewee J) supports Shapior's (2004) recognition that insufficient in-house technological capabilities would hinder effective utilisation of information technologies for supply chain integration thus requiring expensive outsourced developments to third parties. The costs for suppliers may discourage motivation to integrate due to the necessary spending on hardware, equipment and labour to monitor and maintain integrated supply chain operations especially at the current financially restricted COVID control environment (interviewee C, G). The costs to train all internal workers and suppliers to operate a new integrated supply chain system would be very expensive and time-consuming, especially when there is an extensive group of supply chain partners in the Chinese tourism industry (interviewee D, F, I).

Under the category of incompatibility, it is apparent that potential system incompatibility with current systems might result in complex challenges to transfer all operational processes and data from all supply chain network members onto a singular system (interviewee C & F), highlighting the challenges to developed a standardised supply chain system given the unique operations and operational languages of all supply chain actors as suggested by Garcia & You (2015). High levels of change resistance are anticipated amongst the internal employees and supply chain partners due to high uncertainty avoidance nature of the Chinese culture (interviewee D). Reluctance and inability to share key resource and information due to fear of tacit knowledge loss is identified (interviewee J). Under the category of collaboration efficiency, potential clashes of stakeholder interests due to the nature of profiting from information asymmetry (interviewee F) would likely discourage the sharing of key information (trade secret, tacit knowledge), reflecting the apparent mistrust between supply chain partners (interviewee C, H, J).

Table 9: Challenges to supply chain integration

Key themes	Sub codes	Interviewee	Key meaning phrases
Cost of integration	Information technology system costs	D,I,J	I can see management level rejecting the idea to invest heavily on the information system behind an integrated platform (D), the development costs of new IT systems are very high and it is a large expenditure for us especially when our company is cutting down on costs in recent times (I), there is not a lot that we can spend on new developments especially systems like this that probably require outsourcing (J).
	Cost for suppliers	C,F,G	I can see our suppliers discouraged by the need to spend money on new hardware or equipment to use the system (C), it is a very challenging climate at the moment and the last thing our suppliers want is more spending (F), there would be costs involved for other partners operating the system to monitor and maintain effective operations (G).
	Training costs	D,F,I	It is often expensive and time consuming to train our workers to operate new systems and technologies (D), we would need to spend a lot on training every employee to use the new system (F), our service partners will need to be trained to use the system and there is a large group of them (I).
Incompatibility	System incompatibility	C,D,F,I	The new system might not be compatible to the ones are currently using now (C), it would be very complex and difficult to transfer all operational processes and data onto a new system (D), our current service partners operate with their own systems and to have everyone on the same system it would be technically very challenging (F), system incompatibility is always a concern for major tech migrations or updates (I).
	Change resistance	B,D,E,H	I think that a lot of our current employees would not favour new changes to what they have been doing all this time (B), change resistance is a very difficult challenge amongst the Chinese culture (D), our suppliers may not want to be fully transparent with us in areas of service status and availability due to collaborations with other platforms and us knowing where problems are (E), I think there will be some sort of resistance within our

			company and amongst our suppliers due to the reluctance to engage change (H).
	Resource/ information sharing challenges	A,G,J	It is never easy to ask our service suppliers to share their company information that could hinder their capability to achieve competitive edges (A), the Chinese tourism industry very homogenous with differences set on having valuable networks and resources which cannot be shared (G), I can see potential non-willingness to share key information due to the loss of tacit knowledge (J).
Collaboration inefficiency	Clash of stakeholder interests	B,E,F	It would be interesting to see whether our service providers would see the overall benefits of it (B), I'm not sure if other supply chain network partners will see the benefits of an integrated system where we will clearly take the most benefits from (E), our logistics partners may not want to share information about their supply levels as they often seek to maximise profit margins due to information asymmetry (F).
	Insufficient knowledge sharing	A,H,J	The whole service delivery process is very complex and involves many actors for full transparency in information sharing to ensure effective collaboration (A), different interests in supply chain integration may lead to inaccurate or untimely sharing of key data, our service providers collaborate with many of our competitors and this could hinder their willingness to share key information and knowledge (H), fear of trade secret and tacit knowledge loss may discourage the sharing of key information (J).
	Mistrust between supply chain partners	C,H,J	Suppliers might not want to share information with other actors across the supply chain network (C), our service providers are essentially competitors so having them all integrated into one system it would require careful design to overcome mistrust challenges (H), fear of tacit knowledge loss to competitive rival firms and subsequent loss of competitive edges (J).

International Journal of Business Strategy and Financial Markets
Vol. 1 No. 1 (2025): Volume 1, Issue 1
ISSN:
DOI:
Journal homepage: https://iaglobalpub.org/index.php/IJBSFM
Research article

5. Discussion

The gathered interview data from employees and management of major Chinese online tourism booking platforms produced findings that reinforced empirical academic knowledge and opened up new insights, contributing to the identified research gap where insufficient studies have explored the application of integrated supply chain in the highly complex Chinese tourism industry. A range of stakeholder conflicts in the current tourism supply chain system platform can be categorised under Yang et als' (2016) categorisation of tourism conflicts, as unsatisfied service experience, poor customer focus/ orientation, false advertisement and cultural conflicts are found under the tourist-host dimension. Under the tourism-tourist conflicts dimension, recent strict zero COVID protocols illustrate the lack of power possessed by online booking platforms as sudden regulatory changes and potential violation of local rules would impact the quality-of-service delivery. Under the host-host conflicts dimension, toxic competition, discriminating collaborations and high levels of employee turnover highlight the stakeholder challenges caused by intense competition in the Chinese tourism sector. Additionally, new insights are generated in the identification of tourist-tourist conflicts which have been neglected in literature, as disagreements between tourists and perception of unfair treatments would result in negative emotions, itinerary disruptions and negatively impacting service experiences.

The causes of these stakeholder conflicts reinforce academic knowledge as poor selection of quality suppliers due to lack of transparency, trust, communication siloes and lack of control over service quality have also been discussed in the studies of March & Wilkinson (2009); Zhang et al (2009) and Berry et al (1994). However, the findings also provided new insights to Chinese tourism literature as influential factors such as government/ political restrictions with dominant control, high uncertainty and lack of stakeholder involvement in key planning have resulted in major supply chain disruptions as shown in the case of recent zero COVID protocols where tourism restrictions were imposed. Subsequently, intense competition due to survival challenges and high stress/ frustration from high expectations of Chinese tourists have resulted in staff burnout and high turnover rates, contributing to poor service delivery. The lack of cultural intelligence amongst tourism service providers, miscommunications between tourists and hosts and poor knowledge of customers have all hindered the quality of tourism service delivery, opening up new insights as unique cultural preferences of different Chinese provinces is found to affect customer expectations and service requirements which have been neglected in literature, whilst the majority of culture related tourism studies have been conducted on a national/ global level (Muhammedrisaevna et al, 2021; Liu & Zhang, 2022; Sabiote-Ortiz et al, 2016).

Received: June 22, 2025. **Revised:** August 26, 2025. **Editorial decision**: September 3, 2025. **Accepted**: September 10, 2025

The identification of key stakeholder groups and their needs/ interests reinforces Piboonrungroj & Disney's (2009) categorisation of supply chain network member groups, as input providers, service providers and product assemblers desire long term/ prioritised collaborations over competitors, provision of exclusive contracts and guaranteed tourist volumes which are hard to fulfil due to the nature of online booking platforms where competitive edges are achieved through connecting customers with a wide range of tourism service providers, being unable to control and influence weak season tourism demands. Strong support and commitment to policies established by local tourism bodies (product assemblers) and transportation departments (physical flow connectors) are required, as private tourism firms have limited options and influence in decision making but to oblige to sudden, restrictive regulatory changes. The capability to facilitate and fulfil timely reservations of customer flow enablers is identified as guaranteed service quality, anticipation of changing customer needs and to offer innovative tourism service experience are found to be important for Chinese tourists (customers).

In general, the current Chinese tourism supply chain system is found to show areas of positive performance across the "source", "deliver" and "plan" elements of supply chain management according to Berry et al (1994). The ease of identifying new suppliers, offer an extensive range of services and the facilitation of just-in-time logistics processes demonstrate value generation between supply chain entities (Croom et al, 2000). However, apparent communication siloes between supply chain network members, lack of transparency in service delivery with limited monitoring systems and poor supply chain management with late responses, duplicated orders and high levels of human-made errors highlights the need for higher supply chain integration. Additionally, the invisibility of inventory statuses in an accurate, real-time manner, lack of value added collaborations and involvement of key partners in strategic planning have produced high levels of waste across supply chain activities, particularly in form of time, opportunity costs and high customer turnover rates.

It is apparent that existing online booking platforms recognises the needs and benefits for an integrated supply chain system, the capability to increase profit margins due to improved disruption management, reduction of costs and quicker responsiveness to market changes reinforces the findings of Ahmed et al (2021), Jabbour et al (2020) and Shiralkar et al (2021). The improvement of service delivery quality, customer services and customer satisfaction also highlight the recognised benefits of integrated supply chain by Ahmed et al (2021). The increase of flexibility levels from quicker response time, higher visibility/ transparency and adaptability to uncertainty also reinforces the findings of Freeman et al (2010) and Dragen et al (2015). Improved control and decision making due to enhanced supplier collaboration and elimination of wastage from centralised data supports Ko et als' (2018) arguments to utilise the sharing of strategic customer information and to optimise supply chain efficiency. However, the highly complex nature of the Chinese tourism industry with an extensive range of suppliers and the current financially challenging situation of all Chinese tourism sector companies due to tourist restrictions from zero

COVID protocols highlight potential concerns in supply chain integration. The cost concerns recognised by Elsaber et al (2019) is supported especially in the costs of developing a new integrated supply chain system, cost for suppliers to operate and maintain new system operations and the training costs required for all booking platform staff and large numbers of collaborated supply chain partners.

System incompatibility issues are identified during the transfer of existing processes and data onto new systems from a wide range of supply chain partners that operates with individual systems (non-unified language) and operations, reinforcing the findings of Garcia & You (2015). High levels of change resistance in the Chinese culture are identified to discourage effective supply chain integration, potentially causing resource/ information sharing challenges as supply chain network members fear the loss of tacit knowledge. Collaboration inefficiency is identified as a potential challenge with the clash of stakeholder interests due to conflicting individual supply chain actor needs, as the homogenous nature of the tourism service industry would likely discourage knowledge and information sharing as profit margins are made through information asymmetry. The demand for fully transparency in sharing of key information could result in the lack of motivation to contribute and fully integrate in new supply chain systems, reinforcing the findings of Garcia & You (2015) as apparent mistrust exists between supply chain partners.
Based on primary research findings, the solutions to overcome current stakeholder/ supply chain problems, overcoming barriers to supply chain integration and to achieve potential integrated supply chain gains for online booking platforms in accordance to the current situation of the Chinese tourism industry is proposed as follows:

- To develop a new integrated supply chain system via outsourcing to software development expert companies with experience in the Chinese tourism industry such as Insigma Hentain Software Ltd, IT Consultis and JustPro (The Manifest, 2022). Training programmes given to internal employees and supply chain partners are provided by outsourced software developers to reduce cost, knowledge gaps and aid the transitioning to a new integrated system.

- To design an integrated supply chain system with a standardised and easy to understand language for all supply chain network members, engaging two-way communications with collaborated supply chain partners to identify their needs, prioritising key individual partner needs via needs assessment that are incorporated and fulfilled in system design according to Chin et als' (2006) suppliers needs evaluation and assessment system.

- To incorporate the individual needs of supply chain network members into the integrated supply chain system design, educating and inspiring the short/ long term individual and mutual gains from the new system with the appointment of a transformational leader to lead the change through offering idealized influence, inspirational motivation, intellectual stimulation and individual consideration that is found to effectively influence change in the tourism industry (Vargas-Sevalle et al, 2020).

- To customise the user interface of the integrated supply chain system with limited access to each supply chain partner in accordance to their related responsibilities and involvement in tourism service delivery, limiting access from irrelevant supply chain partners to overcome the fear of tacit knowledge and key information loss to competitors of suppliers with authorisation/ managed access (Qin et al, 2008).
- To incorporate integrated supply chain features that allows the monitoring and real time updating of activities across the entire supply chain including service delivery progress, inventory level status, logistics status, customer order status and customer feedbacks/ ratings, enabling streamlining of supply chain activities without communication siloes and two-way confirmations with immediate response time (Stefanovic et al, 2011).
- To collect frequent feedbacks from integrated supply chain network members with the creation of a designated team to communicate, handle and manage integrated supply chain interactions, actively identifying the experiences of supply chain partners and share key knowledge through collaborative strategic decision making (Simatupang & Sridharan, 2008).
- To design a strategic reward and punishment system to reward supply chain partners for achieving positive customer reviews in service delivery, punishing false advertisements or poor service delivery under the concept of cost and responsibility sharing in an integrated supply chain system (Yoo & Cheong, 2018).

6. Conclusion

This study critically explores the current supply chain management of online booking platforms in the Chinese tourism industry, identifying key areas of conflicts between stakeholder groups across the Chinese tourism supply chain, investigating the causes of these conflicts, the needs of supply chain network members and current effectiveness of supply chain management. Despite identifying positive supply chain performances in three key supply chain management elements in sourcing, delivering and planning, major inefficiencies and gaps are identified which have hindered the quality-of-service delivery and stimulated stakeholder conflicts. The identified key themes from gathered primary data indicated the need for a new integrated supply chain system, improve service delivery, increasing profit margins, operating with higher flexibility to handle unprecedented regulatory changes, to provide greater control and effective decision making through utilising the key knowledge shared amongst supply chain network members. The potential challenges for implementing a new integrated supply chain system are identified and incorporated into the practical solutions proposed.

The findings of this study contributed to the research gap in literature where insufficient studies have been conducted on the use of integrated supply chain systems in the highly complex Chinese

tourism industry, as the recommended solutions offer practical values for online booking platforms to improve their service delivery quality and alleviate stakeholder conflicts. However, the findings of this study were collected from employees/ management of four major online booking platforms, limiting the generalisability of produced findings toward smaller online booking performs operating with limited scale and bargaining power due to diseconomies of scale. Furthermore, the research findings were limited to the current Chinese tourism industry environment which is subject to change overtime and cannot be accurately applied onto the tourism industry of other countries. Therefore, future studies are required to better understand the use of integrated supply chain for the Chinese tourism online booking platforms with focus on SMEs or emerging platforms, obtaining a multi-faceted understanding through comparing the stakeholder conflicts and supply chain management inefficiencies between bigger and smaller platforms. Moreover, future studies can be conducted on online booking platforms of other countries to address research gaps where insufficient studies have been conducted.

References

Ahmed, S., Kalsoom, T., Ramzan, N., Pervez, Z., Azmat, M., Zeb, B., & Ur Rehman, M. (2021). Towards supply chain visibility using internet of things: A dyadic analysis review. *Sensors*, *21*(12), 4158.

Alfalla-Luque, R., Medina-Lopez, C., & Dey, P. K. (2013). Supply chain integration framework using literature review. *Production Planning & Control*, *24*(8-9), 800-817.

Arifin, M., Ibrahim, A., & Nur, M. (2019). Integration of supply chain management and tourism: An empirical study from the hotel industry of Indonesia. *Management Science Letters*, *9*(2), 261-270.

Armstrong, J. S. (2001). Extrapolation for time-series and cross-sectional data. In *Principles of forecasting* (pp. 217-243). Springer, Boston, MA.

Awasthi, A., & Grzybowska, K. (2014). Barriers of the supply chain integration process. In *Logistics operations, supply chain management and sustainability* (pp. 15-30). Springer, Cham.

Bandyopadhyay, N. (2016). Exploring service quality: a critical review of literature. *International Journal of Indian Culture and Business Management*, *13*(3), 358-377.

Banerjee, S., Chang, X., Fu, K., Li, T., & Wong, G. (2014). Corporate environmental risk and the customer-supplier relationship. *Available at SSRN 2533471*.

Beamon, B. M. (1998). Supply chain design and analysis:: Models and methods. *International journal of production economics*, *55*(3), 281-294.

Berry, T., Ahmed, A., Cullen, J., Dunlop, A., Seal, W., Johnston, S., & Holmes, M. (1994). The consequences of inter-firm supply chains for management accounting. *Management*

Accounting, *75*(10), 74-75.

Biesta, G., & Burbules, N. C. (2003). Pragmatism and educational research.

Birasnav, M., Chaudhary, R., Dunne, J. H., Bienstock, J., & Seaman, C. (2022). Green Supply Chain Management: A Theoretical Framework And Research Directions. *Computers & Industrial Engineering*, 108441.

Blanchard, B. S. (2004). *System engineering management*. John Wiley & Sons.

Boon-itt, S. (2009). The effect of internal and external supply chain integration on product quality and innovation: evidence from Thai automotive industry. *International Journal of Integrated Supply Management*, *5*(2), 97.

Boon-itt, S., & Wong, C. Y. (2011). The moderating effects of technological and demand uncertainties on the relationship between supply chain integration and customer delivery performance. *International Journal of Physical Distribution & Logistics Management*.

Boyer, K., & Verma, R. (2009). *Operations and supply chain management for the 21st century*. Cengage Learning.

Buhalis, D., & Leung, R. (2018). Smart hospitality—Interconnectivity and interoperability towards an ecosystem. *International Journal of Hospitality Management*, *71*, 41-50.

Caggiano, K. E., Muckstadt, J. A., & Rappold, J. A. (2006). Integrated real-time capacity and inventory allocation for reparable service parts in a two-echelon supply system. *Manufacturing & Service Operations Management*, *8*(3), 292-319.

Caiado, R. G. G., Scavarda, L. F., Azevedo, B. D., de Mattos Nascimento, D. L., & Quelhas, O. L. G. (2022). Challenges and benefits of sustainable industry 4.0 for operations and supply chain management—A framework headed toward the 2030 agenda. *Sustainability*, *14*(2), 830.

Chin, K. S., Yeung, I. K., & Pun, K. F. (2006). Development of an assessment system for supplier quality management. *International Journal of Quality & Reliability Management*.

Clarke, V., Braun, V., & Hayfield, N. (2015). Thematic analysis. *Qualitative psychology: A practical guide to research methods*, *222*, 248.

Cooper, M. C., & Ellram, L. M. (1993). Characteristics of supply chain management and the implications for purchasing and logistics strategy. *The international journal of logistics management*.

Cowton, C. J. (1998). The use of secondary data in business ethics research. *Journal of Business Ethics*, *17*(4), 423-434.

Creswell, J. W., & Creswell, J. (2003). *Research design* (pp. 155-179). Thousand Oaks, CA: Sage

publications.

Croom, S., Romano, P., & Giannakis, M. (2000). Supply chain management: an analytical framework for critical literature review. *European journal of purchasing & supply management*, *6*(1), 67-83.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC medical research methodology*, *11*(1), 1-9.

Danese, P., Romano, P., & Formentini, M. (2013). The impact of supply chain integration on responsiveness: The moderating effect of using an international supplier network. *Transportation Research Part E: Logistics and Transportation Review*, *49*(1), 125-140.

De Monticelli, R. (2022). *Towards a phenomenological axiology: Discovering what matters*. Springer Nature.

Dolnicar, S., & Ring, A. (2014). Tourism marketing research: Past, present and future. *Annals of tourism research*, *47*, 31-47.

Douglas, L., & Connor, R. (2003). Attitudes to service quality–the expectation gap. *Nutrition & Food Science*.

Dragan, D., Kramberger, T., & Topolšek, D. (2015, June). Supply chain integration and firm performance in the tourism sector. In *Pre-conference proceedings of the 12th International Conference on Logistics & Sustainable Transport*.

Easterby-Smith, M., Thorpe, R., & Lowe, A. (1994). The philosophy of research design. *Improving educational management through research and consultancy*, 76-93.

Ellram, L. M. (1991). Supply-chain management: the industrial organisation perspective. *International Journal of Physical Distribution & Logistics Management*, *21*(1), 13-22.

Elsäßer, C., Glas, A. H., & Eßig, M. (2019). Digital (ization)–A Single Construct Amidst Supply Management?. In *Logistics Management* (pp. 3-18). Springer, Cham.

Estampe, D., Lamouri, S., Paris, J. L., & Brahim-Djelloul, S. (2013). A framework for analysing supply chain performance evaluation models. *International Journal of Production Economics*, *142*(2), 247-258.

Fabbe-Costes, N., & Jahre, M. (2008). Supply chain integration and performance: a review of the evidence. *The International Journal of Logistics Management*.

Fayezi, S., O'Loughlin, A., & Zutshi, A. (2012). Agency theory and supply chain management: a structured literature review. *Supply chain management: an international journal*.

Flynn, B. B., Huo, B., & Zhao, X. (2010). The impact of supply chain integration on performance: A contingency and configuration approach. *Journal of operations management*, *28*(1), 58-71.

Forrester, J.W. (1961). Industrial Dynamics (MIT Press, Cambridge Mass)

Fox, M. S., Chionglo, J. F., & Barbuceanu, M. (1993). *The integrated supply chain management system*. Technical report, Department of Industrial Engineering, University of Toronto.

Freeman, S., Hutchings, K., Lazaris, M., & Zyngier, S. (2010). A model of rapid knowledge development: The smaller born-global firm. *International Business Review*, *19*(1), 70-84.

Frohlich, M. T. (2002). E-integration in the supply chain: barriers and performance. *Decision Sciences*, *33*(4), 537-556.

Garcia, D. J., & You, F. (2015). Supply chain design and optimization: Challenges and opportunities. *Computers & Chemical Engineering*, *81*, 153-170.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods*, *16*(1), 15-31.

Guest, G., MacQueen, K. M., & Namey, E. E. (2011). *Applied thematic analysis*. sage publications.

Hesse, A., Glenna, L., Hinrichs, C., Chiles, R., & Sachs, C. (2019). Qualitative research ethics in the big data era. *American Behavioral Scientist*, *63*(5), 560-583.

Hopf, C. (2004). Qualitative interviews: An overview. *A companion to qualitative research*, *203*(8).

Hosseini, S. M., Paydar, M. M., Alizadeh, M., & Triki, C. (2021). Ecotourism supply chain during the COVID-19 pandemic: A real case study. *Applied Soft Computing*, *113*, 107919.

Ibarnia, E., Garay, L., & Guevara, A. (2020). Corporate social responsibility (CSR) in the travel supply chain: A literature review. *Sustainability*, *12*(23), 10125.

Jabbour, C. J. C., Fiorini, P. D. C., Ndubisi, N. O., Queiroz, M. M., & Piato, É. L. (2020). Digitally-enabled sustainable supply chains in the 21st century: A review and a research agenda. *Science of the total environment*, *725*, 138177.

Jaelani, A. K., Ayu, I. G., Rachmi, K., & Karjoko, L. (2020). The impact of corona virus on supply chain of halal tourism management in west Nusa Tenggara. *International Journal of Supply Chain Management*, *9*(5), 823-831.

Jain, A., Shanker, S., & Barve, A. (2021). Resilience against the COVID-19 pandemic: is the hotel and tourism supply chain on the right path?. *Benchmarking: An International Journal*.

Jalil, R., Asgharizadeh, E., & Kazemi, A. (2021). A Service Supply Chain Synchronization Model. *Journal of Strategic Management Studies*, *12*(47), 63-78.

Jebb, A. T., Parrigon, S., & Woo, S. E. (2017). Exploratory data analysis as a foundation of inductive research. *Human Resource Management Review*, *27*(2), 265-276.

Jermsittiparsert, K., Sutduean, J., Sriyakul, T., & Khumboon, R. (2019). The role of customer responsiveness in improving the external performance of an agile supply chain. *Polish journal of management studies*, *19*.

Kamble, S. S., Gunasekaran, A., Subramanian, N., Ghadge, A., Belhadi, A., & Venkatesh, M. (2021). Blockchain technology's impact on supply chain integration and sustainable supply chain performance: Evidence from the automotive industry. *Annals of Operations Research*, 1-26.

Ketchen Jr, D. J., Rebarick, W., Hult, G. T. M., & Meyer, D. (2008). Best value supply chains: A key competitive weapon for the 21st century. *Business Horizons*, *51*(3), 235-243.

Khan, O., & Burnes, B. (2007). Risk and supply chain management: creating a research agenda. *The international journal of logistics management*.

Kitchener, R. F. (2011). Personal epistemology and philosophical epistemology: The view of a philosopher. In *Links between beliefs and cognitive flexibility* (pp. 79-103). Springer, Dordrecht.

Ko, W. W. J., Liu, G., Ngugi, I. K., & Chapleo, C. (2018). External supply chain flexibility and product innovation performance: A study of small-and medium-sized UK-based manufacturers. *European Journal of Marketing*, *52*(9/10), 1981-2004.

Koh, S. L., Saad, S., & Arunachalam, S. (2006). Competing in the 21st century supply chain through supply chain management and enterprise resource planning integration. *International Journal of Physical Distribution & Logistics Management*.

Kumar, A., & Anbanandam, R. (2019). Multimodal freight transportation strategic network design for sustainable supply chain: an or prospective literature review. *International Journal of System Dynamics Applications (IJSDA)*, *8*(2), 19-35.

Kumar, K. (2001). Technology for supporting supply chain management: introduction. *Communications of the ACM*, *44*(6), 58-61.

Lambert, D. M. (2008). *Supply chain management: processes, partnerships, performance*. Supply Chain Management Inst.

Lee, H. L., Padmanabhan, V., & Whang, S. (1997). Information distortion in a supply chain: The bullwhip effect. *Management science*, *43*(4), 546-558.

Lincoln, J. R., Gerlach, M. L., & Takahashi, P. (1992). Keiretsu networks in the Japanese economy: A dyad analysis of intercorporate ties. *American sociological review*, 561-585.

Liu, Q., Liu, Y., & Zhang, J. (2022). The Tourism Service Trade Network: Statistics from China

and ASEAN Countries. *Sustainability*, *14*(16), 9950.

Liu, W., Bai, E., Liu, L., & Wei, W. (2017). A framework of sustainable service supply chain management: A literature review and research agenda. *Sustainability*, *9*(3), 421.

Ma, J. X., Buhalis, D., & Song, H. (2003). ICTs and Internet adoption in China's tourism industry. *International Journal of Information Management*, *23*(6), 451-467.

Mabert, V. A., & Venkataramanan, M. A. (1998). Special research focus on supply chain linkages: challenges for design and management in the 21st century. *Decision sciences*, *29*(3), 537-552.

Maestrini, V., Luzzini, D., Maccarrone, P., & Caniato, F. (2017). Supply chain performance measurement systems: A systematic review and research agenda. *International Journal of Production Economics*, *183*, 299-315.

March, R., & Wilkinson, I. (2009). Conceptual tools for evaluating tourism partnerships. *Tourism management*, *30*(3), 455-462.

Marcos, J., & Prior, D. D. (2017). Buyer-supplier relationship decline: A norms-based perspective. *Journal of Business Research*, *76*, 14-23.

Marine-Roig, E. (2022). Analytics in Hospitality and Tourism: Online Travel Reviews. *University of South Florida M3 Center Publishing*, *18*(9781732127586), 7.

Martinelli, E. M., & Tunisini, A. (2018). Customer integration into supply chains: literature review and research propositions. *Journal of Business & Industrial Marketing*.

Marty, J. (2022, April). Consumer/user/customer integration in Supply Chain Management: a review and bibliometric analysis. In *Supply Chain Forum: An International Journal* (Vol. 23, No. 2, pp. 181-196). Taylor & Francis.

Metters, R. (1997). Quantifying the bullwhip effect in supply chains. *Journal of operations management*, *15*(2), 89-100.

Miethlich, B., Belotserkovich, D., Abasova, S., Zatsarinnaya, E., & Veselitsky, O. (2020). Digital supply chain management-new competitiveness imperative for economic development. *International Journal of Supply Chain Management*, *9*(5), 495.

Mittal, R., & Sinha, P. (2021). Framework for a resilient religious tourism supply chain for mitigating post-pandemic risk. *International Hospitality Review*.

Motevalli-Taher, F., & Paydar, M. M. (2021). Supply chain design to tackle coronavirus pandemic crisis by tourism management. *Applied Soft Computing*, *104*, 107217.

Muhammedrisaevna, T. M., Shukrullaevich, A. F., & Bakhriddinovna, A. N. (2021). The logistics approach in managing a tourism company. *ResearchJet Journal of Analysis and*

Inventions, *2*(04), 231-236.

Mukaddes, A. M. M., Rashed, C. A. A., Malek, A. B. M. A., Kaiser, M. J., & Alam, S. M. S. (2010). Developing an information model for supply chain information flow and its management. *International Journal of Innovation, Management & Technology*, *12*, 226-231.

Naoui, F. (2014). Customer service in supply chain management: a case study. *Journal of Enterprise Information Management*.

Näslund, D., & Hulthen, H. (2012). Supply chain management integration: a critical analysis. *Benchmarking: An International Journal*.

Neale, B. (2020). *Qualitative longitudinal research: research methods*. Bloomsbury Publishing.

Novikov, A. M., & Novikov, D. A. (2013). *Research methodology: From philosophy of science to research design* (Vol. 2). CRC Press.

Overall summary with a table

Passmore, J. (2022). Motivational interviewing techniques reflective listening. *Coaching Practiced*, 251-255.

Pinto, J. T., & Diemer, A. (2020). Supply chain integration strategies and circularity in the European steel industry. *Resources, Conservation and Recycling*, *153*, 104517.

Potter, J., & Hepburn, A. (2005). Qualitative interviews in psychology: Problems and possibilities. *Qualitative research in Psychology*, *2*(4), 281-307.

Qin, Z., Zheng, X., & Xing, J. (2008). *Introduction to software architecture* (pp. 1-33). Springer Berlin Heidelberg.

Quattrociocchi, B., Mercuri, F., Perano, M., & Calabrese, M. (2017). Tourism supply chain & strategic partnerships for managing the complexity in tourism industry. *Enlightening Tourism. A Pathmaking Journal*, *7*(1), 62-93.

Richey, R. G., Chen, H., Upreti, R., Fawcett, S. E., & Adams, F. G. (2009). The moderating role of barriers on the relationship between drivers to supply chain integration and firm performance. *International Journal of Physical Distribution & Logistics Management*.

Riley, J. M., Klein, R., Miller, J., & Sridharan, V. (2016). How internal integration, information sharing, and training affect supply chain risk management capabilities. *International Journal of Physical Distribution & Logistics Management*, *46*(10), 953-980.

Rowley, J. (2012). Conducting research interviews. *Management research review*.

Sabiote-Ortiz, C. M., Frías-Jamilena, D. M., & Castañeda-García, J. A. (2016). Overall perceived value of a tourism service delivered via different media: A cross-cultural

perspective. *Journal of Travel Research*, *55*(1), 34-51.

Saunders, M. (1994). *Strategic purchasing and supply chain management*. Pitman Pub.[in association with] the Chartered Institute of Purchasing & Supply.

Saunders, M. N., Lewis, P., Thornhill, A., & Bristow, A. (2015). Understanding research philosophy and approaches to theory development.

Scapens, R. W., & Varoutsa, E. (2010). Accounting in Inter-Organisational Relationships—The Institutional Theory Perspective. In *Accounting in networks* (pp. 328-355). Routledge.

Schmidt, C. (2004). The analysis of semi-structured interviews. *A companion to qualitative research*, *253*(41), 258.

Seuring, S., & Gold, S. (2012). Conducting content-analysis based literature reviews in supply chain management. *Supply Chain Management: An International Journal*.

Shapiro, J. F. (2004). Challenges of strategic supply chain planning and modeling. *Computers & Chemical Engineering*, *28*(6-7), 855-861.

Sharma, D., Khatri, A., & Mathur, Y. B. (2014). Backward integration of supply chain management: A case study. *International Journal of Emerging Technology and Advanced Engineering, May*, *4*(5), 867-869.

Shiralkar, K., Bongale, A., Kumar, S., Kotecha, K., & Prakash, C. (2021). Assessment of the benefits of information and communication technologies (ICT) adoption on downstream supply chain performance of the retail industry. *Logistics*, *5*(4), 80.

Sifolo, P. P. S. (2020). Tourism supply chain management: a catalyst to development in Africa. *The Gaze: Journal of Tourism and Hospitality*, *11*(1), 126-139.

Simatupang, T. M., & Sridharan, R. (2008). Design for supply chain collaboration. *Business Process Management Journal*.

Singh, J., Singh, S., & Kumari, M. (2020). Role of ICT in supply chain management. *Journal of Interdisciplinary Cycle Research*, *12*(10), 992.

Song, H. (2012). *Tourism supply chain management*. Routledge.

Soosay, C., Ferrer, M., Santa, R., & Hyland, P. (2007). *Internal and external integration: strategies for logistics competitiveness*. CQUniversity.

Statista (2021), Number of online travel booking userts in China from December 2015 to December 2021, available at: https://www.statista.com/statistics/1117733/china-number-of-internet-travel-booking-users/, last accessed 10/06/2022

Statista (2021), Tourism industry in China – Statistics & Facts, available at: https://www.statista.com/topics/1210/tourism-industry-in-china/#dossierKeyfigures, last

accessed 10/02/2022

Stefanovic, N., Stefanovic, D., & Radenkovic, B. (2011). Integrated supply chain intelligence through collaborative planning, analytics and monitoring. In *Electronic Supply Network Coordination in Intelligent and Dynamic Environments: Modeling and Implementation* (pp. 43-92). IGI Global.

Sudapet, I. N., Sukoco, A., & Setiawan, M. I. (2019). Influence of Supply Chain Integration, IT Practices and Visibility on Modular Design and Supply Chain Agility, Supported Maritime and Tourism Business in Indonesia. *Int. J Sup. Chain. Mgt Vol*, *8*(6), 420-434.

Sutono, A. (2019). Supply chain management: implementation issues and research opportunities in tourism industry. *Uncertain Supply Chain Management*, *7*(3), 427-438.

Szpilko, D. (2017). Tourism Supply Chain–overview of selected literature. *Procedia Engineering*, *182*, 687-693.

Tan, K. C. (2001). A framework of supply chain management literature. *European Journal of Purchasing & Supply Management*, *7*(1), 39-48.

Tan, K. C., Kannan, V. R., & Handfield, R. B. (1998). Supply chain management: supplier performance and firm performance. *International Journal of Purchasing & Materials Management*, *34*(3).

The Manifest (2022), The top 100 software development companies in China, available at: https://themanifest.com/cn/software-development/companies, last accessed 20/08/2022

Thomas, S. J. (2004). Pilot testing the questionnaire. *Using web and paper questionnaires for Data-Based Decision Making*.

Towill, D. R. (1992). Supply chain dynamics—the change engineering challenge of the mid 1990s. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, *206*(4), 233-245.

Tran, T. T. H., Childerhouse, P., & Deakins, E. (2016). Supply chain information sharing: challenges and risk mitigation strategies. *Journal of Manufacturing Technology Management*, *27*(8), 1102-1126.

Tranfield, D., & Starkey, K. (1998). The nature, social organization and promotion of management research: Towards policy. *British journal of Management*, *9*(4), 341-353.

Tripathy, J. P. (2013). Secondary data analysis: Ethical issues and challenges. *Iranian journal of public health*, *42*(12), 1478.

Vargas-Sevalle, L., Karami, M., & Spector, S. (2020). Transformational leadership in the hospitality and tourism industry. In *Entrepreneurial Opportunities*. Emerald Publishing Limited.

Wang, L. M., Liu, L. W., & Wang, Y. J. (2007). Capacity decisions and supply price games under flexibility of backward integration. *International Journal of Production Economics*, *110*(1-2), 85-96.

Wang, W. Y., & Chan, H. K. (2010). Virtual organization for supply chain integration: Two cases in the textile and fashion retailing industry. *International Journal of Production Economics*, *127*(2), 333-342.

Wang, Y., Wallace, S. W., Shen, B., & Choi, T. M. (2015). Service supply chain management: A review of operational models. *European Journal of Operational Research*, *247*(3), 685-698.

Woiceshyn, J., & Daellenbach, U. (2018). Evaluating inductive vs deductive research in management studies: Implications for authors, editors, and reviewers. *Qualitative research in organizations and management: An International Journal*.

Wong, C. W., Wong, C. Y., & Boon-Itt, S. (2013). The combined effects of internal and external supply chain integration on product innovation. *International Journal of Production Economics*, *146*(2), 566-574.

Yang, J., Zhang, L., & Ryan, C. (2016). *Social conflict and harmony: Tourism in China's multi-ethnic communities*. Emerald Group Publishing.

Yoo, S. H., & Cheong, T. (2018). Quality improvement incentive strategies in a supply chain. *Transportation Research Part E: Logistics and Transportation Review*, *114*, 331-342.

Zailani, S., & Rajagopal, P. (2005). Supply chain integration and performance: US versus East Asian companies. *Supply Chain Management: An International Journal*.

Zhang, X., van Donk, D. P., & van Der Vaart, T. (2011). Does ICT influence supply chain management and performance? A review of survey-based research. *International Journal of Operations & Production Management*.