# Athens Journal of Tourism

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## Front Pages

# Athens Journal of Tourism

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The ***Athens Journal of Tourism (AJT)*** is an Open Access quarterly double-blind peer reviewed journal and considers papers from all areas of tourism and related disciplines such as culture, leisure, recreation, geography, urban planning, heritage, sports, historical cities, landscape, architecture etc. The AJT considers theoretical and empirical papers as well as case studies and policy papers. The journal's aim is to be useful to both academics of tourism research and the practitioners of the tourism industry. Many of the papers published in this journal have been presented at the various conferences sponsored by the Tourism, Leisure & Recreation Unit of the Athens Institute for Education and Research (ATINER). All papers are subject to ATINER's Publication Ethical Policy and Statement. A journal publication might take from a minimum of six months up to one year to appear. All papers are subject to ATINER's Publication Ethical Policy and Statement.

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# Athens Journal of Tourism
# Editorial and Reviewers' Board

# President's Message

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The current issue is the second of the tenth volume of the *Athens Journal of Tourism,* published by the Tourism, Leisure & Recreation Unit of ATINER.

Gregory T. Papanikos
President
ATINER

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**17th Annual International Conference on Mediterranean Studies**
**25-28 March 2024, Athens, Greece**

The Center for European & Mediterranean Affairs organizes the **17th Annual International Conference on Mediterranean Studies, 25-28 March 2024, Athens, Greece** sponsored by the Athens Journal of Mediterranean Studies. The aim of the conference is to bring together academics and researchers from all areas of Mediterranean Studies, such as history, arts, archaeology, philosophy, culture, sociology, politics, international relations, economics, business, sports, environment and ecology, etc.You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2024/FORM-MDT.doc).

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- **Dr. Yannis Stivachtis**, Director, Center for European & Mediterranean Affairs and Associate Professor, Jean Monnet Chair & Director of International Studies Program, Virginia Tech – Virginia Polytechnic Institute & State University, USA.

**Important Dates**

- Abstract Submission: **31 August 2023**
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-

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# Athens Institute for Education and Research

*A World Association of Academics and Researchers*

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**5-8 June 2023, Athens, Greece**

The Tourism, Leisure & Recreation Unit of ATINER organizes its **19th Annual International Conference on Tourism, 5-8 June 2023, Athens, Greece** sponsored by the Athens Journal of Tourism. The aim of the conference is to bring together academics and researchers from all areas of Tourism. You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2023/FORM-TOU.doc).

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- **Dr. Valia Kasimati,** Head, Tourism, Leisure & Recreation Unit, ATINER & Researcher, Department of Economic Analysis & Research, Central Bank of Greece, Greece.
- **Dr. Peter Jones**, Co-Editor, Athens Journal of Tourism & Professor of Management, University of Gloucestershire, UK.

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*Athens Journal of Tourism - Volume 10, Issue 2, June 2023 – Pages 81-98*

# Built Heritage Management Systems: Australia and Germany Compared

*By Johari H.N. Amar*[*]*, Lynne Armitage*[±]*, Daniel O'Hare*[°] *& Matthew Moorhead*[•]

*A recent, unreported, focus group of international heritage practitioners from academia, urban planning, land use management and urban design, found interesting similarities and differences between Australian and German cultural built heritage (CBH) management systems. For validation, a literature review provided a methodological framework and is reported in this paper. Its objective is to confirm the principal themes elicited by the initial work, being: assessment standards, transferable development rights, heritage conservation incentives and private property rights' management thereby contributing enhanced clarity to the broader relationship between built heritage and stakeholder roles in heritage conservation. This paper is a precursor of more detailed planned empirical, in-country study seeking further insights into stakeholder interests and value systems based on a recent developed analytical approach known as Cultural Heritage Discourse (CHD). It is recognised that this empirical component is a limiting feature of the current research but anticipated as inevitable due to the preliminary stage of enquiry.*

**Keywords**: *Conservation of built heritage; cultural heritage discourse; heritage management systems; transferable development rights; Germany and Australia.*

## Introduction

In many parts of the world, in order to ensure the effective and efficient conservation of built heritage, the heritage sector has implemented management systems at different levels of government, aligned with international standards. These management systems include preservation, restoration, adaptation and reconstruction, while each management system responds to culturally framed values attached to the authenticity and integrity of built heritage (Australia ICOMOS, 2013), their implementation often varies or is restricted by perceptions of independent stakeholders. As a result, planning policy and regulatory frameworks are being adapted to deliver developments that are sympathetic to the unique character of the built environment. The scale of new developments and the arguably increased preference for contemporary architecture poses challenges for efforts to conserve irreplaceable heritage assets. Di Giovine and Majewski (2018) note that one solution – from an ethical point of view – is for stakeholders to

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incorporate multicultural and intercultural paradigms into innovative frameworks to guide the increasingly tumultuous conservation process.

The paper aims to understand the current systems in two countries, Australia and Germany, by examining each country's legislative and regulatory frameworks and gathering findings to address the challenges faced in the governance, planning and management of built heritage needed to achieve a sustainable built environment amidst significant pressures for growth and change. These two countries were chosen for three reasons. Firstly, both countries experience continual social, economic and environmental shifts that have resulted in pressure to deliver new development within the already existing fabric. Secondly, their management systems have vastly different organisational and hierarchical structures – Australia has a decentralised three-tier structure while Germany has a more centralised conservation framework (Amar, 2017; Holtorf, 2007). Thirdly, both countries, like many other countries around the world, are seeking a sustainable framework that can bridge the gap between the micro-level (perceptions) and macro-level (legislative and regulatory) factors for built heritage conservation (BHC) (Mualam and Barak, 2019).

Within this contextual frame, a review and analysis of heritage literature has been undertaken to evaluate how Australia and Germany can achieve sustainable BHC. The direction and structure of the literature review are influenced by a recent, unreported, focus group of international heritage practitioners from academia, urban planning, land use management and urban design, which noted interesting similarities and differences between Australian and German cultural built heritage (CBH) management systems. The literature confirms and expands on four principal themes elicited by the initial work – assessment standards, transferable development rights, heritage conservation incentives and private property rights management – thereby contributing enhanced clarity to the broader relationship between built heritage and stakeholder roles in heritage conservation.

The paper proceeds as follows: The following section gives a brief overview of each country's background in the context of geography, demographics, history and the protection of heritage assets; the third section undertakes an initial comparison of the Australian and German BHC with the aim of scoping some similarities and variations of policy and practice, as each country presents an integrated management system which reflects heritage continuity; and the fourth section discusses Australian and German culture and the role these play in delivering a sustainable legislative and regulatory framework for BHC. The final section comprises the conclusion.

## An Overview of BHC Management Systems in Australia and Germany

### *Background to Case Studies*

Australia is the sixth largest country on Earth, occupying one-fifth of the world's land mass. However, most of this landscape is classified as desert, which is distributed throughout the western plateau and interior lowlands (Amar, 2017).

Despite a sparse average overall density of 3.3 people per square kilometre, most of Australia's population is concentrated in coastal cities, with 86% of its 25.6 million population living in major cities (ABS, 2020). These cities have a footprint of medium to high density development extending from inner-city districts to urban infill areas as well as outer suburbs with low-density housing (Cresswell and Murphy, 2016). However, the history of the Australian cultural environment reflects both the remnants of over 60,000 years of non-urban settlement by Aboriginal and Torres Strait Islanders (Armitage and Yau, 2006) and the European and non-European settlements established during the century or so either side of the federation of former British colonies as the Commonwealth of Australia in 1901 (Amar, 2017). The Commonwealth of Australia is made up of six states and two territories.

The present-day Federal Republic of Germany (commonly referred to as Germany) was formed in 1990 with the reunification of the 16 states (the so-called *Bundesländer*) of East and West Germany (Schmidt, 2008). Germany is located in Western Europe and had an estimated population of 83.5 million in 2019 (UN Population Division, 2019), of whom 77.3% live in urban settings, particularly in the west of the country. The population is tightly packed together, with an average density of 237.8 people/km$^2$; in June 2018, Berlin, Hamburg and Munich had population densities of between 2,367 people/km$^2$ and 4,672 people/km$^2$. Due to this situation, Germany's urban spatial planning policies have set restrictions on urban density coverage (Krehl and Siedentop, 2019), which facilitate the development of 'new centres' – urban edge densifications of commercial and service sectors – away from the historical places of the inner cities. These historic places include medieval and Romanesque structures of the Germanic tribes, an Indigenous group from Northern Europe, as well as contemporary architecture (Krehl and Siedentop, 2019).

### *An Overview of Australian BHC*

From the second half of the 19$^{th}$ century, Australian cities and towns became increasingly urbanised. This urbanisation was combined with failing infrastructure and environmental problems in the 1880s, prompting stakeholders to establish town planning schemes to transform and improve urban amenities (Hussein *et al*., 2014). As a result, heritage assets were either demolished by neglect or refurbished to pave the way for modern buildings equipped with technology (Amar, 2017). This continued until the 1950s, when BHC was of special interest for two groups: the private sector and community groups. The private sector focused on the commodification of grand colonial architecture and self-efficacy (Freestone, 1993), while community groups, such as the Royal Australian Historical Society and the National Trust, focused on conserving the authenticity and integrity of the historic fabric (Hussein *et al*., 2014). Due to their differing aims, there were often conflicts between the private sector and community groups. Resolution of the conflict sometimes required unusual alliances; for example, the Builders' Labourers Federation (BLF), an environmentally activist labour union, teamed with more conservative stakeholders like the National Trust in Sydney in the

1970s, creating the Green Bans movement to protect significant heritage assets from destruction (Amar, 2017).

Historically, a limited range of BHC decisions were carried out under the *Australian Heritage Commission Act (1975)*, which was repealed and replaced by the *Australian Heritage Council (Consequential and Transitional Provisions) Act 2003*. This was followed by the introduction of state and territory heritage acts as follows: Victoria in 1974, New South Wales in 1977, South Australia in 1978, Queensland in 1992, Tasmania in 1995, Australian Capital Territory in 2004 and Northern Territory in 2011. Since their implementation, these laws have been amended and/or repealed in response to changing management goals for the identification, assessment and interpretation of heritage values of significant places in the face of development pressures and evolving community perceptions. In addition to the state and federal heritage acts, BHC plans are integrated into local governments planning schemes. The current national framework for heritage conservation integrates BHC alongside nature conservation and Indigenous cultural heritage recognition in the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act). The Commonwealth's role in BHC remains limited, however, and the States are the most significant players.

This three-tier heritage management system provides statutory criteria and thresholds which differ widely (Heritage Division, 2008). For instance, the National (Commonwealth) Heritage List inscribes places of outstanding heritage value to the nation such as the First Government House Site, built in 1788 and representing a tangible link with the foundation of European administration and settlement in Australia (Kelso, 2017). The State and Territory Heritage Registers stress the broader context of the evolution and development of the jurisdiction. For example, in Queensland, the Albert Bridge crossing the Brisbane River between Indooroopilly and Chelmer, Indooroopilly, built in 1894, was entered in the State Heritage Register for its contribution to the railway system linking the capital with southern and western Queensland and for its riverscape setting. Local government heritage listings are designed to portray socioeconomic and historical character of local areas. For example, Adelaide's Historic (Conservation) Policy Area 3 protects 1880s bungalows or villas with grand architectural quality representing the special historic residential character of Medindie, Adelaide (Government of South Australia, 2016).

The federal government plays a critical role in conserving heritage assets with *outstanding universal value* inscribed in the World Heritage List in accordance with the UNESCO World Heritage Convention (Heritage Division, 2008). The register is linked integrally to Sections 12-15A of the EPBC Act 1999, which requires international best conservation practice in preserving, restoring, adapting and reconstructing outstanding heritage places. By June 2019, there were around 47,403 heritage assets that had been thoroughly researched, documented and inscribed in statutory heritage lists administered by the three levels of government. In addition to these, community and professional organisations – such as the National Trust, the Royal Australian Institute of Architects and Engineering Heritage Australia (Productivity Commission, 2006) – maintain heritage lists generally consistent with the Australia ICOMOS Burra Charter but provide no legal

protection. Each tier of government employs some BHC initiatives, ranging from grants for conservation works to legal and (limited) financial incentives to compensate heritage-owners for foregone development opportunities. Yet, despite these protections, the illegal demolition of built heritage and loss by neglect have increased in Australia over the last two decades (Amar and Armitage, 2019).

*An Overview of German BHC*

Present-day Germany has over 2,000 years of remarkable history, including ancient civilisations from Germania to Francia and the Holy Roman Empire. Swenson (2013) states that the practice of BHC was introduced in Germany by architect Karl Friedrich Schinkel in 1815 with the institutionalisation of the *Memorandum zur Denkmalpflege* (Memorandum on the Preservation of Monuments). Schinkel's actions were prompted by the French Revolution and the British Industrial Revolution in the late 18th century, both of which prompted political unrest and iconoclastic crusades in Germany (Blackbourn, 2012) and led to the demolition of the oppressive built forms associated with aristocratic and ecclesiastical symbols of the feudal system (Swenson, 2013). In recognition of the impact of iconoclasm on Gothic architecture (Denslagen, 2009) and the disappearance of ancient buildings, monuments and sites, antiquities conservator societies began campaigning actively for the preservation of built heritage (Glendinning, 2013). Subsequently, the *Memorandum zur Denkmalpflege* established a state organisation for the country's inventory of built history and BHC was formally assigned to the *Kultusministerium* in 1835 (Swenson, 2013).

Between the 1830s and 1900, BHC movements in Germany shifted from antiquarian nostalgia to overlapping conservation philosophies riven by Viollet-le-Duc's restoration approach and Ruskin's preservation principle (Glendinning, 2013). The sharing of discourses on the history, use and aesthetics of monumentalism nevertheless contributed to the widespread popularity of Gothic revival styles (Weiler and Gutschow, 2016). This BHC approach was inspired in part by the Romanticism of national identity after the Napoleonic Wars, as argued by the art historian Wilhelm Lübke in the 1860s (Denslagen, 2009); the 1850s Cambridge ecclesiological movements of the Anglo-Catholic church which brought refined structure with Gothic revival architecture (Glendinning, 2013); and the Jugendstil movement in the mid-1890s, which strove to design a new vision of medieval architecture in the industrialised built environment (Swenson, 2013). These three approaches facilitated the modernisation of the built environment and the destruction of built heritage nationally, leading to the *Heimatkunst* movement – a socialist system for the protection of natural and cultural heritage – in the 1890s, as publicised by Adolf Bartels, who argued for a reconceptualised BHC.

The *Bund Heimatschutz* association was established in 1904 following mass protests against construction and development projects impacting historical townscapes in 1903 (Jõekalda, 2019). The protests occurred in response to the *Tag für Denkmalpflege* (Preservationists Congress) held in 1900, which stressed the continuity of pre-industrial national monuments (Carughi and Visone, 2017) in

line with enactment of two comprehensive Monument Acts: Hessen-Darmstadt in 1902 and Duchy of Oldenburg in 1911 (Swenson, 2013). More specifically, heritage legislation prohibited the alteration or destruction of listed historic assets under private and public ownership without an approval from the Council of Historic Monuments (*Denkmalrat*). According to Von Trützschler (2016), the protection of historic assets was embedded in the planning legislation and tax laws as well as the Constitution of the German central government as part of a broader BHC movement between 1914 and 1933. This, however, had little impact on BHC during the Nazi regime. As Veltman (2015) shows, nearly 90% of listed German monuments had been destroyed by 1945.

The post-war split between East and West Germany impacted BHC significantly. In conformity with the international BHC movement, the German Democratic Republic (in East Germany) adopted the Regulation for the Conservation and Maintenance of the National Cultural Monuments in 1952, with each *Länder* (state) formulating legislation for effective BHC between 1971 and 1980 (Von Trützschler, 2016). This period (1965 to 1980) embraced the State Conservation Authorities' responsibilities to conserve built heritage, from classical and biblical through to colonial and national. However, Petzet (2002) found that conservation authorities lacked incentives and funds, resulting in the rapid deterioration of the historic fabric until 1990. However, after unification and based on West German laws (Von Trützschler, 2016), the Regional Office for the Preservation of Monuments (*Landesdenkmalamt*) was established to manage BHC programs related to the federal and *Länder* levels (Haspel, 2011). The *Landesdenkmalamt* is responsible for supervising the implementation of BHC initiatives in planning and development legislation at the local level. Today, over one million historic buildings, monuments and sites are listed under Germany's centralised heritage management system (Ringbeck, 2017).

## Similarities and Differences of Australian-German BHC Management Systems

At first glance, both Australia and Germany appear to have similar management systems for BHC as both are federations with power sharing at different levels of governance *viz* local, state or territory and national (Amar, 2017; Geppert and Meller, 2015). This means that each jurisdiction has its own protection and development of a legal framework for historic buildings, monuments and sites for BHC. However, Germany is a republic *bundestag* and Australia a constitutional monarchy. The analysis of similarities and differences between the countries' heritage management systems for BHC will now be discussed under the four principal themes: assessment standards, transferable development rights, heritage conservation incentives and management of private property rights. These four themes emerged from a focus group of key informants and heritage stakeholders, conducted at the start of what will be a larger collaborative research project comparing BHC management approaches in the two countries and is currently in progress.

*Assessment Standards*

The current BHC systems in Australia and Germany grew largely out of national and, later, international heritage movements that were putting pressure on each country's government to protect heritage assets from destruction associated with the modernisation of their respective built environments. However, their BHC systems have since travelled in opposite directions since the inception of value-based system assessment criteria. As observed by Mason and Avrami (2002, 24), the concept of a value-based system evokes a hybrid-built environment that arises from '*maximising one type of value and minimising other types of value.*' Interestingly, Amar (2017) observes that the perception of heritage is evolving from a static, protectionist, view to one which recognises and incorporates the dynamic nature of cultural continuity and contemporary innovations in architecture, materiality and technology. (Jackson, 2017). The following section discusses assessment criteria in the context of Australia and Germany.

The Australian government's current approach to assessment criteria is the EPBC Act 1999, which aims to facilitate the cultural continuity of heritage assets of national significance. As noted earlier, the EPBC Act sets out frameworks acknowledging the power of state Heritage Councils to conserve built heritage deemed significant by the local, state/territory, national and international communities to varying degrees. A similar approach is underpinned in the two legal systems – the *ipso jure* system and registration system – responsible for the conservation of German Länder's built heritage (RICS, 2007). The former automatically protects heritage assets on the basis of outstanding significant values (Maennig and Just, 2017) and the latter focuses on listed heritage places by virtue of the values they represent at the *Länder* and district levels (Haspel, 2011).

The Australian and German governments operate assessment standards for BHC very similarly. The noticeable deviation is in finding the middle ground between cultural continuity and heritage modernisation. The *Baugesetzbuch*, *BauGB 2004* (German Federal Building Code) is founded upon its warrant for cultural continuity, so if (re)development projects threaten heritage values, they may be required to be located on the urban fringe away from historic inner-cities and heritage landscapes, as can be seen in Berlin (Rode, 2016). Australian BHC assessment standards, in contrast, tend to attract heritage modernism at the expense of cultural continuity (Amar and Armitage, 2019). For example, in recent history there has been an increase in development approvals which permit new construction to 'hang over a heritage-listed building' – such as the Quest Hotel which is cantilevered over the heritage-listed Charsfield Mansion constructed in 1886 at 478 St Kilda Road in Melbourne – and, taken to extreme, illegal overnight demolition of listed buildings as a consequence of central business district plans such as the Kurilpa riverfront renewal initiative operating under the Brisbane City Centre Master Plan 2014.

*Transferable Development Rights*

Transferable development rights (TDRs) refer to a town planning zoning approach used to mitigate the interaction between property law, land-use planning policy and tradable rights (Shahab *et al*., 2019). Traditionally, TDRs have been used to preserve ecologically sensitive areas, conservation zones and farmland. The main focus thus far has been recognition of development restrictions faced by *place entrepreneurs* (Logan and Molotch, 2007). In the heritage sector, place entrepreneurs are stakeholders who purchase the rights to intensify the use of heritage assets in order to guarantee their preservation and sustainable development (Logan and Molotch, 2007). Thus, place entrepreneurs are ubiquitous to the TDR schemes which are an option available under both Australian and German BHC management approaches.

The *Sydney Local Environmental Plan (SLEP) 2012* is an example of NSW planning policy. Heritage Floor Space (HFS) is awarded to heritage owners for their commitment to BHC which could otherwise lead to the loss of profit due to the 'financial burden' of ownership and maintenance of historic buildings (Freestone *et al*., 2018). Its TDR schemes facilitate infill development by moving from a zoning-based to place-based conservation plan. According to Freestone *et al*., (2018), the HFS schemes have protected over 150 heritage-listed buildings and supplied 174,379 $m^2$ of development potential to infill sites between 2004 and 2019. However, TDRs are perceived as encouraging architectural façadism (Amar, 2017) and, as detailed by Kyriazi (2019), façadism is associated with destruction of the heritage values attached to the structural authenticity and integrity of heritage assets. This is clearly evident in a 2018 case (Lenaghan, 2018), where the Brisbane City Council approved the merging of two heritage-listed buildings at 155 Charlotte Street and 150 Mary Street, allowing the development of a 42,000 $m^2$ premium commercial tower Brisbane's TDR scheme, Transferable Site Area (TSA), has provided much less incentive for heritage conservation since building height restrictions were removed in the Brisbane City Centre Master Plan 2006.

Although Germany does not use TDR for BHC, it has been operating a pilot TDR scheme for reducing urban sprawl, known as the *Flächenausweisungs Zertifikate* (FAZ) (Tradable Development Certificates), since 2009. Under FAZ, the reduction of natural land is compensated by the conversion of brownfield/infill sites into transferable floor area for inner-city development (Proeger *et al*., 2018). In this way, Germany can fulfil the national land consumption limits (30 ha/day in 2020), as demonstrated by a case study of the implementation of FAZ in eleven municipalities in the Hanover region (Henger, 2013). The BHC plan does not enforce FAZ, despite growing interest from German municipalities. TDRs have an impact on heritage assets and Australian and German BHC systems respond to TDRs in different ways. The Australian approach promotes efficiency and profitability in private property rights (Freestone *et al*., 2018), while the German method aims to create a balance of conservation and development (Proeger *et al*., 2018).

*Heritage Conservation Incentives*

The effort to conserve heritage assets has been supported by integrated land use planning policies. Although land use planning policies appear to be a powerful tool for ensuring sustainable development, the heritage sector has had little success in using these in conservation areas due to associated challenges and TDRs are one example of this. While on the one hand, TDRs focus on the capacity of heritage assets to meet the growing demand for urban intensification and the release of enhanced inner-city land values, on the other hand, TDRs have required individual owners to raise funds for the long-term maintenance needs of heritage assets consistent with conservation plans. Consequently, there is an increasing number of cases of demolition by neglect of built heritage, particularly those with limited development potential as found in non-central locations (Amar, 2017). To mitigate this, different countries, including Australia and Germany, have promoted other BHC initiatives – including conservation incentives and heritage exemption certificate – which are discussed below.

In Australia, the implementation of conservation incentives has been via a succession of often short-lived programs, including: a 20% tax-credit under the Tax Incentives for Heritage Conservation program (discontinued in 1999) operated by the Cultural Heritage Projects Program (CHPG) 1999 (discontinued almost immediately); AUD 21.4 million conservation grant linked to the Australian Heritage Grants Program; and ongoing AUD 77,000 conservation subsidies given to the state and territory offices of the National Trust via the National Trust's Partnership Programme.

In Germany, there are also three primary BHC incentives. Income tax law allows a 100% credit spread over ten years for the loss of profit related to heritage maintenance costs and fabric decay. Public grants play an important role, for example the *Städtebaulicher Denkmalschutz* (Protection of the Urban Architectural Heritage) program has funded the preservation in over 300 historic towns and cities. State subsidies are also offered, such as the *National wertvolle Kulturdenkmäler* (Nationally Valuable Cultural Monuments) that has funded conservation projects worth €280 million for the restoration and rehabilitation of heritage-listed assets owned by the private sector.

Both Australia and Germany provide a system of conservation incentives to strengthen and reward the participation of heritage owners in sustainable conservation which, in turn, fosters a whole-of-life management BHC system reflecting the consideration of cost/benefit analysis. However, a demand and supply gap persists in the heritage sector (Pickard, 2001) and, over decades, this has created an environment where demolition by neglect is a common strategy for many place entrepreneurs (Fouseki and Nicolau, 2018). Brisbane is an extreme case example, with McCosker (2018) reporting that over 140 pre-1946 historic buildings were demolished between 2014 and 2018. The same has occurred in Germany. A recent example is the demolition of 180-year-old listed building called *Uhrmacherhäusl* also known as the Watchmaker's Cottage of Giesing in southern Munich. A recent decision on appeal has resulted in the owner being

required to reconstruct the property with the same cubature (The Local Europe 2017)

To achieve sustainable BHC, while taking into account development pressures, raises the need for incentives in conservation areas and Australia and Germany both issue heritage exemption certificates (HECs). In Germany, the HEC system is connected to the federal Income Tax Act. Following the inspection of the heritage asset, the Conservation Authority issues a tax exemption certificate relieving the heritage owner from paying either property, land or inheritance tax (Maennig and Just, 2017). In practice, if a heritage asset has been owned by the same family for at least 20 years or serves the public interest through education, it is granted full tax exemption. Australian heritage acts manage a different HEC system: for example, authorising the carrying out of development for the purpose of meeting building codes or planning overlays such as flood zones if there is minimal impact on the heritage significance of a place. Recently, HECs have delivered positive results. For example, Victoria approved 917 HECs in 2017/18 with successful conservation work valued at just over AUD 977,145,012 (Heritage Council of Victoria, 2018). Yet, HECs can also facilitate heritage destruction; for example, the conversion of the 1870s Brisbane Irish Club into a 'heritage cinema' (Hinchcliffe, 2015). Therefore, more attention should possibly be directed towards developing BHC mechanisms that conserve heritage whilst taking into account the nature of ownership and the financial burden for maintaining heritage assets. Like Germany, Australian HECs should pay more attention to actively managing conservation areas.

*The Management of Property Rights*

The challenges the heritage sector faces in achieving sustainable conservation are the result of an increasingly *laissez-faire* economy and the consequential management of private property rights attached to built heritage (Rappoport and Freestone, 2011). The establishment of tradable allowances can be used to incentivise owners of private property to deliver sustainability in the built environment. This concept is an attempt to mitigate the 'tragedy of the commons' – essentially economic self-interest, resulting in overconsumption (Hardin, 1968). So, the determination of property rights is significant in designing strategies for the development, conservation and accessibility of the built heritage. However, BHC legislation is often viewed as an interference in private property rights; for example, the German *force majeure* system automatically registers places over a certain age as built monuments (RICS, 2007), while Heritage Councils in Australia may inscribe places in heritage registers. This has led to longstanding tension between the public, private and community sectors as heritage owners are not willing to forego their rights to dispose or redevelop heritage assets since such rights are viewed by many as being fundamentally constitutional (Jora *et al.*, 2019; Lubens, 2007).

To this end, in many parts of the world, coercive sanctions such as fines, total bans and even imprisonment (Pickard, 2001) have become a pragmatic necessity in heritage sectors to prevent private owners from destroying built heritage. The

key principle of coercive sanctions is not to deprive these owners of economic opportunities but rather to manage adaptive reuse through mechanisms such as TDRs and HECs in a way that conserves heritage values, integrity and authenticity. However, such conservation tools have been argued as undermining broader efforts to safeguard built heritage (Macdonald and Cheong, 2014) as coercive sanctions generate negative publicity and do not bring back the lost heritage. In a limited number of celebrated cases, Australia has used this tool to impose hefty fines for the destruction of heritage assets as a deterrent. For example, there was wide media coverage in Australia in 2019 when a private developer was fined AUD 600,000 for the demolition of the Melbourne Corkman Irish Pub heritage listed building. Some critics argue that such fines fail to be paid or are reduced on appeal – as was the case here – and owners who criminally destroy built heritage are subsequently given planning approval (Lane 2018).

In both Australia and Germany, the demolition or damage to historic buildings, monuments and sites in a conservation area without approval from the responsible authority is deemed a criminal offence (Pickard, 2001). Germany's coercive sanctions, under the *Historic Preservation Act of the GDR* (1975), are similar to those used in Australia; however, in contrast, their application is considerably stricter (Von Trützschler, 2016). For example, when failure to conserve built heritage becomes evident in Germany, the offender is required to pay a fine in addition to re-erecting the destroyed built heritage and, in extreme circumstances, may be sentenced to two years' imprisonment. In the case of *Uhrmacherhäusl* in Giesing in southern Munich referred to earlier, the heritage owners are expected to be charged a hefty fine of up to €250,000 and must rebuild the 180-year-old protected building brick-by-brick as per Bavarian heritage laws (The Local Europe, 2017). These contrasting examples illustrate that cohesive sanctions as conservation tools for the management of private property rights in these two countries are aligned in principle but vary in practice, being responsive to the local political and social context.

## Discussion: Comparative Reflection and People-centred Models for BHC

Essentially, the Australian and German systems for BHC are more similar than they are different, and their goals are congruent — to preserve, restore, manage and conserve the built heritage of their communities. In the light of the above discussion, however, Australia has a greater opportunity to learn from Germany than *vice versa*. Of the two, Germany has a more robust BHC system embedded in 17$^{th}$ and 18$^{th}$ century values. This may explain why Germany has been able to deliver and sustainably carry out its conservation activities even after experiencing the traumas of many wars, including the Napoleonic Wars, World War I and World War II, as well as during West and East German separation and subsequent reunification. Perhaps Germany's historical belief in cultural monumentalism has sustained its system of BHC and it is no surprise there are over a million listed-heritage places in Germany. This cultural monumentalism

deserves careful study by the Australian heritage community to reduce the gap between BHC policy and practice, as this may help to curb the currently accelerating demolition of Australian heritage assets.

Australia and Germany must both learn ways to limit the intercultural gap in their BCH systems. Croucher *et al*. (2015, 71) define interculturalism as the '*communication between individuals from different national cultures*.' Over many decades, both countries have witnessed cultural changes and increasing pluralism. For example, during much of the 20th century, communities in both countries supported BHC for the purpose of national identity, social justice and diversity and inclusivity while, in the late 20th and early 21st centuries, both have experienced a resurgence of efforts to create a modernised landscape to display technological advances and economic prosperity. In different ways, these generations have created a unique path for BHC that can never be reduced to a single management system with some subcultures proving supportive and others creating challenges for the sector. So, the fact that discussion of perceived generational subcultures in BHC is limited in the Australian heritage literature lends weight to its emerging contribution to the ongoing processes of change with respect to heritage theory, practice and policy.

In the case of the management of property rights, it is evident that owners of heritage assets have the upper hand in Australia due to the lax implementation of sanctions relating to BHC failures. It is unhelpful that land use planning tools are aligned with new development to further the expansion of the built environment to meet social and economic demands rather than also encouraging the conservation of existing built heritage. For example, the Hobart City Council Planning Committee issued development approval for the construction of townhouses at a 55 Mount Stuart Road site where an 1890-era heritage-listed building had been illegally demolished and the developer fined AUD 225,000. This poses the question of whether coercive sanctions really do protect built heritage under private ownership, even though these assets are considered as a public good (Hosier, 2019). However, it might be easier for Australia to adopt a more stringent regime as characterised by the more strict German approach, which is very effective. The lessons drawn can be moulded to fit the Australian BHC system without requiring total restructuring, as both countries operate similar heritage policies for property rights' management. It is in the implementation and enforcement that the differences are greatest between the two countries' BHC systems.

Nonetheless, BHC is undoubtedly complex, especially within the urban spatial structures representing the distribution of human activities in the built environment. In other words, the world is becoming a global village where trade barriers are lessened, and borders are opening up, notwithstanding the temporary impact of the Covid-19 pandemic in 2020-2021. Both Australia and Germany should take the opportunity to learn about BHC systems from other regions of the world. No country is superior in all areas of BHC and, while each country's socio-cultural, political, economic and environmental needs evolve, many basic approaches to BHC flow in parallel. This will facilitate other cultures to easily participate in more effective BHC, particularly now when the world is

experiencing extensive displacement and migration. For example, Amar (2017) indicates a lack of multicultural awareness within Australian BHC which facilitates the destruction of historic fabric in places (such as Hurstville in New South Wales) where heritage legislation tends to favour Eurocentric built heritage as opposed to that of more recent non-European migrants. In Germany, some efforts to protect inner-city heritage may stimulate unsustainable suburbanisation and loss of non-urban landscapes, putting increasing pressures on the land's resources and suggesting the need for increasing residential density in the expanding suburbs.

In this context, a people-centred model would be the most appropriate to reconcile the values, authenticity and integrity of built heritage with the divergent aspirations and experiences of people within the built environment. Perhaps it is more important, in terms of Australia and Germany, to understand how this people-centred model would intricately connect these elements into their current multi-tiered BHC systems and open up a new interdisciplinary and community-led growth perspective. As Chitty (2016, 34) states:

> *There are changing demands on, and expectations of, cultural heritage in society and a need for approaches that are built on greater consensus and collaboration to ensure objectives are met in a sustainable way. Improving the relevance and effectiveness of contributions of those already involved in conservation and management of heritage, as well as facilitating the engagement of new audiences, has become a priority for many countries in the twenty-first century.*

The concept of people-centred BHC (also referred to as *people-centred preservation*) was first introduced in 2017 by the National Trust for Historic Preservation (NTHP, 2017) in the United States. This concept was crafted with democratisation in mind so that the more BHC policies offer recognition by identifying the different ways which diverse stakeholders use to value built heritage, the less resistance to BHC is likely to arise. But firstly, Australia and Germany share the assumption that the discussion is about how a neutral BHC system – one associated with *laissez-faire* policies and the other conservative policies respectively – should treat the values of their people, especially in a time where multiculturalism, interculturalism, liberalism and nationalism have become defining features in the planning and development of the built environment.

## Conclusion

From this introductory comparative analysis of the BHC systems of Australia and Germany, the need for such systems to be sensitive to the dynamic nature of their societies, whose perceptions of the role of BHC continue to evolve in sympathy with broader international trends, has become apparent. The many strengths, and some weaknesses, of both systems have been identified and further empirical work is in hand to more fully investigate these evolving themes with a view to enhancing and strengthening the systems of both countries through mutual exchange of perspectives for the greater benefit of the management and protection

of these assets for long-term community benefit. Further stages of the comparative research will include a more detailed empirical, in-country study seeking further insights into stakeholder interests and value systems based on the recently developed analytical approach known as Cultural Heritage Discourse (CHD) (Amar, 2017).

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# Green Innovation Sustainability & Green Practice Behaviours in Tourism & Hospitality

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*This study aimed to examine the sustainability of green innovation concerning green practices in city-based hotels. As a result of climate change in the global atmosphere, unpredictable weather patterns, and deforestation, the hospitality sector faces new challenges. The hospitality sector has demonstrated efficiency, gaining a competitive advantage through sustainability and gross domestic product (GDP). Travellers and tourists experience quality service delivery, food and beverage, entertainment, and transportation. Extras such as amusement parks, inns, and hotels. This study used a positivist philosophy and deductively tested hypotheses using Structural Equation Modelling (SEM), Confirmatory Factor Analysis (CFA) and random sampling. A sample size of N=250 was from the top team management and employees of the travel and tourism sector in Gauteng province in South Africa. Based on the path model, the best model fit was determined. Several research constructs were examined, including green branding, pricing, environmental sustainability, green innovation, green growth, & green practice. Green innovation and green practices have a correlation coefficient of 0.358, indicating a strong link between green growth and green practices. A p-estimation of 0.001 indicates a 0.05 certainty level, meaning speculation must be maintained. As a result, travel and tourism companies that practice green business strategies showed more significant support for sustainability strategies. It is recommended that tourism & hospitality companies employ green innovation strategies that support their business objectives, enabling them to assess and improve business growth, make contributions to policy within the industry, raise awareness about climate change while in business and improve current strategic relationships while maintaining a high level of preservation of the environment.*

**Keywords:** *green innovation, sustainability, tourism & hospitality, green growth strategy, green branding*

## Introduction

The travel and tourism industry is one of the most significant contributors to a nation's Gross Domestic Product (GDP) and one of the most rapidly developing industries globally (Thieu and Rasovska 2017). As a result of the fact that green innovation development plays a crucial role in boosting the economy (Genc and Genc 2017), and green products, sustainability cannot be separated from it; this is a guarantee, given how climate change is occurring. According to the Organisation for Economic Co-operation and Development (OECD) (2013), green innovation

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and sustainability in the hospitality sector are among the most promising economic influences. It is crucial to portray the green sustainability of innovation as a driving force for a green economy. As stated in the "OECD archive (2011) Towards Green Growth," sustainability and innovation development contribute to the foundation of new markets and new opportunities" (OECD 2013). Environmentally friendly development includes pollution reduction, eco-architecture, recycling, and vitality conservation (Huang and Li 2017). It is imperative to ensure any adverse environmental effects are minimized throughout the entire life cycle of the made product during green development (Huang and Li 2017). Restaurants, food services, lodging, transportation, tour coordinators, cooking services, amusement parks, and other extra fields are among the traveller's goals (Thieu and Rasovska 2017). Weaver (2009) describes travel and tourism as heavily dependent on symbolism and relying on developing novel objects. Incorporating "green thoughts" into their architecture and service delivery will enhance quality and give them a serious edge in the business world. Weaver (2009) defines the industry as "a thought that incorporates green sustainability and utilizes tourism destinations that have a strong visual component, such as gallery shows, handcrafted attractions, and architecture." In the present day, everyone is aware of the changes taking place in the world's air. We are experiencing erratic climate changes, the degradation of rainforests, and an expansion in hereditarily adjusted nutrients. The travel industry is depicted as another subject of research and development in schools and universities, regardless of its relative youth; it has recently accumulated huge amounts of information (Parasuraman et al. 2007). In the currently available information, this study discusses green practices within city-based hotels and inns and what motivates these hotels and inns to implement green innovation and sustainability practices. The following research questions must be answered as part of this study: What is the current situation of green innovation and sustainable practices in the travel and tourism business? How does environmentally responsible growth in the tourism and hospitality industries contribute to developing a green economy? What difficulties and roadblocks must be overcome to make the travel and tourism business more environmentally responsible? What kind of an effect does sustainable green innovation have on the overall performance of the travel and tourism business as well as its level of competitiveness? What role does symbolism play in putting environmentally responsible policies into effect in the travel and tourism sector? How does implementing "green thinking" influence the overall quality and level of competition among city-based hotels and inns?

The objectives of the study are as follows: Is to analyse the current condition of sustainable green innovation in the travel and tourism business. Assess the contribution of green tourism and hospitality development to a green economy. To identify the obstacles and problems associated with implementing sustainable practices in the travel and tourism business. Examine the influence of sustainable green innovation on the performance and competitiveness of the travel and tourism business. To investigate the function of symbols in the travel and tourism industry's application of environmentally friendly practices. To assess the impact of "green thinking" on the quality and competitiveness of urban hotels and inns. Justification of the study: The travel and tourism industry has become a substantial

contributor to a nation's gross domestic product due to its rapid expansion worldwide Chimboza and Mutandwa (2007). Sustainability in green innovation is an integral part of the industry, as it is essential for economic growth and promoting a green economy (Lin and Ho 2010). This study intends to evaluate the current level of green innovation and sustainability in the travel and tourism industry, its impact on performance and competitiveness, and the obstacles and problems associated with applying green practices. The study will also investigate the function of symbolism in the implementation of green practices and the impact of "green thoughts" on hotels and inns in urban areas. This study's findings will provide important insights and recommendations for increasing the sustainability of green innovation in the travel and tourism industry.

## Literature Review

There is such a wide variety of eco-friendly innovation practices, and they apply to pretty much every part of the economy, whether it is financial, administration, assembly (both large and small), or even the travel industry (Khandelwal and Kumar 2016), which is the focus of the paper. "Green practices" refers to several initiatives intended to create and encourage trade that results in sustainably meeting human needs and create business innovation in tourism sector. Furthermore, the fulfilment of these requirements and needs occurs with minimal impact on the "regular habitat," as described by Darley et al. (2010) and Khandelwal and Kumar Yadav (2014). Green practices refer to a way of thinking that minimizes ecological impact and resource utilization, repurposes items, and recycles them to improve another item (Pandey 2011). The "American Marketing Association" characterizes eco-friendly advertising "as the investigation of the positive and negative effects of showcasing exercise stagnation, energy consumption, and exhaustion of non-energy assets" (Saoussen and Mokhefi 2018). The above definitions relate to green innovation and sustainability and stress the contrast between green practices. Regular practices centre on sustainability, as well as providing service delivery to the clients in the most effective manner conceivable, though green practices is about ecological manageability just as keeping up the nature of the item so that the client won't have the option to differentiate between the green item and the ordinary item (Chiang and Jang 2008). This paper explores green innovation and sustainability in tourism sector using research constructs that support green practices. The world is changing, and along with it, so is civilization, which is becoming increasingly conscious of the influence of human activities on the environment (Chen and Chang 2008).

According to Cretu and Brodie (2007), the transformation is also evident in the tourism and hospitality industries, where traveller behaviors is altering rapidly, and tourists are pursuing more ambitious objectives. "Green innovation techniques in the tourism and hospitality industries involve examining existing and future financial, social, and environmental implications while taking guests, the industry, the planet, and host networks into account." It is not a unique or outstanding style

of hospitality; rather, all forms of service delivery can be improved using green innovation practices in tourism sector (Saoussen and Mokhefi 2018). Cronin et al. (2010) elude that many green tourism industry standards must be met for long-term green innovation practices to be possible. The standards are summarised as: 1) The Environmental Aspects: "Utilise natural assets that establish a key component in the advancement of the tourim industry; maintain basic biological procedures; and help monitor normal assets and biodiversity." 2) The socio-cultural aspects: "regard the socio-social credibility of host networks; conserve the networks' manufactured and living social legacy and conventional qualities; contribute to the balance between social comprehension and resistance." 3) The Economic Aspects: "guarantee practical, long-haul financial tasks;" "provide financial advantages that are genuinely circulated to all partners;" "provide stable work and pay to gain openings and social administrations to have networks;" and "contribute to neediness reduction."

In South Africa, the tourism industry is concerned about maintaining long-haul manageability and green innovation sustainability (Dangelico and Pujari 2010). The way things are, in numerous parts of South Africa, there is a power supply issue combined with a dry season issue, which frustrates the tourism industry foundations from conveying the green travel sector experience (Chivandi and Maziri 2018). As per the South African Department of Tourism 2020 quarterly report, the travel industry office presented a Green Tourism Incentive Program (GTIP) award for financing to help private sector undertakings in the tourism industry retrofit their offices with practical answers for vitality and water utilization; this is in accordance with the office's travel industry improvement goals (Khandelwal and Kumar Yadav 2014). Under the "Green Tourism Incentive Program" (GTIP), qualifying candidates are qualified for the accompanying: "90% of the expense for another asset productivity (vitality and water) review or the full expense for inspecting a current asset proficiency review led by the National Cleaner Production Center (NCPC); and award subsidizing to qualifying little and miniaturized scale endeavours on a sliding scale from 30% to 90% (topped at R1 million for every candidate) towards the establishment of prescribed water and vitality effectiveness measures." The travel industry advertisement expresses that it contributes 5% of the worldwide GDP, while it adds about 8% to all-out work (Pandey 2011). The movement business is one of the five top wage earners in over 150 countries, while it is the fundamental wage earner in sixty countries (Saoussen and Mokhefi 2018). This is relied upon to develop in the year 2020.

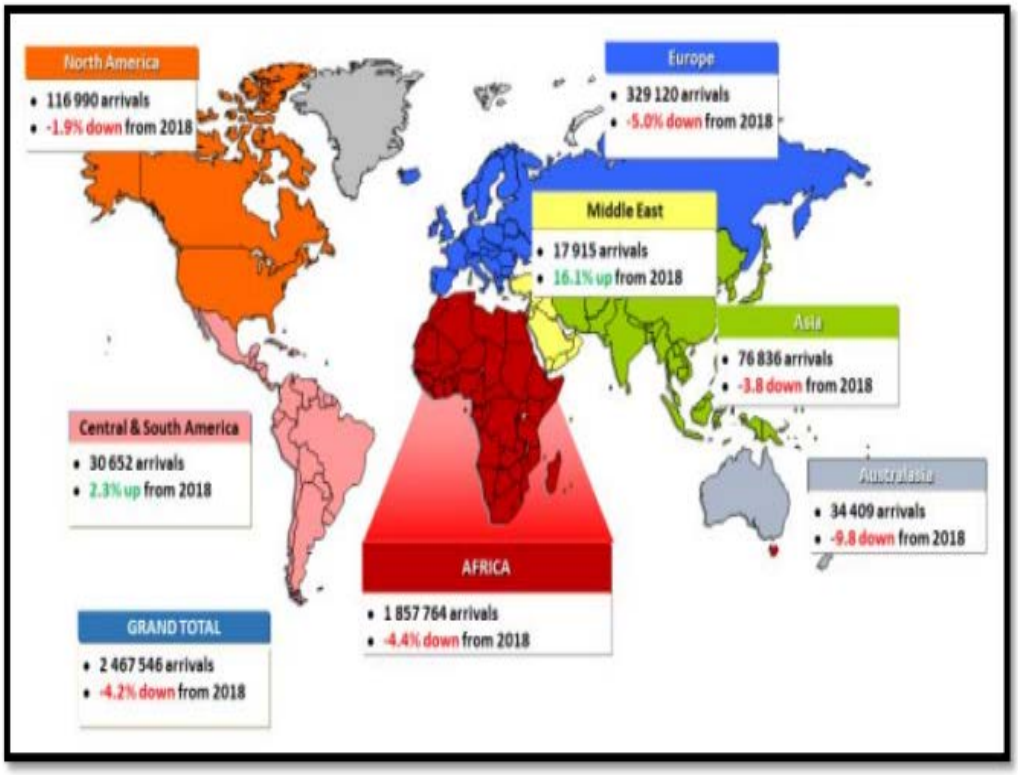
Ecological maintainability makes the two difficulties and new business open doors for organizations in basically all areas (Frambach and Schillewaert 2002). The travel industry and related experience industry is confronted with a portion of these difficulties in a prompter manner than maybe most different enterprises (Saoussen and Mokhefi 2018). One just needs to consider what will happen to lay out lodgings where portion of the contribution is to play golf, yet what occurs assuming the downpour or water circumstance turns out to be basic to the point that it is inconceivable to keep a good fairway? There are innumerable such cases, and they represent a genuine danger to the travel industry and experience industry (Ebrahim 2013). In any case, many organizations actually tackle the issue in a

cautious or uninvolved way, for example presenting ecological detailing, utilizing "green-talk". Chen (2011) in their correspondences, or disconnected endeavors to decrease carbon dioxide ($CO_2$) discharges whilst consumers are getting quality services from the travel and tourism sector, rather than looking at it as a future business opportunity around which the organisation can enhance and construct upper hand. Then again, there are a developing number of organisations that embrace supportability and incorporate "green development" into their whole plan of action (Chen 2012). To do so frequently requires essential changes to the current approach to carrying on with work, and it includes numerous contemplations: what is our business advertising? Who is our client? How might their client experience be? How are we and we doing the same thing? Who ought to be our providers and accomplices? These are key administration contemplations. Additionally, many organisations still try not to have a reasonable development procedure, significantly less have a green development innovation practice, and not very many have a "green development procedure" (Khandelwal and Kumar Yadav 2014). By overlooking the conceivable outcomes of embracing green plan of action advancement, organizations basically forego the capability of making new clients, improving on their conventional items, administrations, and cycles and at last botch a potential chance to "be a distinct advantage" inside their industry (Jamal and Goode 2001). The green plan of action advancement will challenge organisations in numerous ways. It is challenging to survey the business capability of green plan of action development; will the clients pay for it? Or then again is it about to be an additional expense of doing what organizations as of now do? (Khandelwal and Kumar Yadav 2014).

Carson et al. (2001) elude that, at long last, sentiment is that, for travel and tourism organisations to kick off on manageable sustainable development and applying the Green Development Radar framework they might think about posing themselves the accompanying inquiries: The principal question is, "What is the maintainable vital objective of our business?" Offering green practices advancement: What will a practical venture or drive mean for the place of our current items/administrations? Will the drive open additional opportunities for a few contributions? Client development: Which of our current clients are searching for greener arrangements? How does this green idea influence the way associated with clients in any unique situation, for example purchasing, conveyance, backing or administration? Will want to teach existing or new clients and foster new business sectors and clients to succeed? (Deighton et al. 1994) Functional advancement - Does this green improvement offer chances to upgrade inner business cycles to arrive at more elevated levels of functional adequacy in this or different pieces of our plan of action? How should the organization's production network be impacted by this green speculation? Association development, what sorts of elective channels could be considered to best convey our new green assistance/item to our clients (models are in-flight magazines, conventional publicizing, new Web channels and online entertainment, or through vendor organizations and retailers, and so forth)? How is it that management in tourism sector could even more likely serve explicit clients and target green client sections? Delis (2009) further more present , How might at any point manage information

assortment and utilization of ICT arrangements in alignment with green practices in tourism sector? (Pandey 2011).

**Figure 1.** *Travel and Tourism Showcasing Stats; 2010 Africa Synopsis Visitor Appearances in Southern Africa Source: Department of Tourism Execution Report (2020)*




The report in Figure 1, delineates appearances for July-September 2019, compared to a similar period in 2018. Voyager appearances (2 467 546) diminished by 4.2% from July to September 2019 and stood out from visits recorded during a comparable period in 2018 (2 575 193). Total traveller appearances from the abroad market diminished by - 3.7% (- 23 100), which was affected by a reduction recorded in Australasia (- 9.8%), Europe (- 5.0%), Asia (- 3.8%) and North America (- 1.9%). Center East recorded the highest increment (16.1%) from abroad markets, followed by Central and South America (2.3%). Most Middle East nations demonstrated an expansion in vacationer appearances, and Saudi Arabia recorded the most elevated increment in volume of 48.2% (1 539). The expansion in Central and South America was propelled by an increment in vacationer appearances from most nations from this area, with Brazil recording the most elevated volume development of 1 356 (7.3%). The adverse development recorded in Europe was impacted by the more significant part of the nations, which had indicated a decline in visitor appearances from the area. Germany encountered the most elevated volume decay of -530 (-8.4%). The abatement from Asia was driven by a decrease of -10.4% (-2 851) in vacationers' appearances from China. Vacationer appearances from Africa declined by -4.4% (-85 090) during a

similar period. This above information will assist and detect the pace in organizations that may employ turn around strategies and practice green innovation practices in the service offering in travel and tourism sector globally.

A theoretical background is provided to formulate the structure that holds the theory of a research study. This study is grounded in two theories, namely, the theory of innovation adoption and the expectancy theory. If travel and tourism sector and industry players are empowered in green innovation practices and align their green branding strategies using the innovation adoption theory, the sector performance will improve, and conservation awareness amongst the consumers and industry players will be practised. These theories are discussed in detail in the following section.

## Theory of Innovation Adoption

There is a high natural effect cause by hurtful strategic approaches; thus, the United Nations have thought of the technique for ecological innovation selection towards environmentally friendly business practices (Thieu and Rasovska 2017). Based on Rogers' theory of innovation adoption, the research by Thieu and Rasovska (2017) on eco-friendly business practices identifies five characteristics of an invention that influence its uptake: relative benefit, compatibility, complexity, trialability, and visibility (Beltramello et al. 2013). The researchers use these five characteristics as they investigate green practices in the business sector. This research quantifies the value of being green by gauging the extent to which eco-friendly methods are preferred over the status quo. Examining how well green practices align with prospective adopters' beliefs, experiences, and requirements is one way to determine their compatibility (Anderson and Gerbing 1988). Examining how challenging green techniques are to learn and use is one way to establish their complexity. The trialability of environmentally friendly methods is assessed by determining their performance in small-scale experiments (Ballantynea et al. 2017). Finally, the transparency of green practices is assessed by analysing how obvious the benefits are to their adopters. Rogers' innovation adoption theory serves as the theoretical foundation for this study, allowing the authors to explain why organisations adopt green practices and pinpoint the aspects that matter. This research adds to the existing literature on green business practices by stressing the significance of the five traits described in Rogers' theory and providing evidence-based recommendations for fostering their adoption (Wisdom et al. 2014).

## Expectancy Theory

Expectancy theory is fundamental for helping examine human viewpoints and leading at various levels of work and settings (Lawler & Suttle 1973). Fundamentally, expectation theory helps examine and appraise specialist knowledge, aptitudes, and dispositions (Alharbie 2015). Godey et al. (2016) speculates that, in the hospitality industry, "the theory revolves around structures

that target agent motivation and the achievement thereof." Chung and Lee (2008) depicts expectation theory as a "speculation explaining the system individuals use to make decisions on various social different choices", furthermore, "the moving power for a lead, movement, or task is a component of three specific perceptions: trust, instrumentality and valence" (Zott 2001). Trust speculation is speculation about the motivational process (Jang 2008). The speculation method explains how motivation works out as expected rather than simply communicating what drives a delegate (Shahriar Rahman and Mahbubul 2016). The implications of system speculations are, in a general sense, models of robust processes that outperform special exhibits. This is assuming they will be charged with following a certain turn of events and proceeding with a particular degree of advantage. Based on system theory, a lead can be worked with, enlivened, continued, or halted (Chen 2012). Furthermore, Theiu and Rasovska (2017) believe that among current and levelled tourism and hospitality providers, the most viewed theory of motivation is the theory of expectation; this is one of a couple of technique theories.

"Travel and tourism owners need knowledge, work data, and aptitudes, and they need to time the load up regardless of expectations" (Weaver 2009). In addition, insufficient knowledge and resources regarding green innovation, practices, and eco-friendly practices can hamper the industry's progress and gain competitive advantage. The industry will need to implement green practices to keep pace with changing customer demands and industry trends. Ultimately, this will lead to lower competitiveness, reduced profits, and a negative impact on the industry. Therefore, studying green innovation sustainability in travel and tourism is crucial to its development (Chen 2012).

## Empirical Literature

### *Green Branding*

It was mentioned in the earlier fragment that there are a few diversions for implementing green promotion practices in different ventures. Thus, "green innovation" activities will support the association's immaterial image value (Chen 2012). Building a solid brand has reliably been the guideline objective since it gives various preferences, for instance, "bigger edges, more prominent open doors for augmentation, and keeping up a solid situation against contenders" (Henseler et al. 2015)." Brand causes an association to set up shop, separating itself from the opposition. Customers now and again build up an association with a brand in which they have certainty and will, as regularly as would be prudent, return to purchase or buy into a similar thing (MacKenzie et al. 2011). The "green brand" is a title, term, plan, or picture that recognises a seller's items and isolates them from competitors' items. Firms centre around marking since, at the item showcase level, brand esteem expands channel sufficiency, facilitates interchanges, and decreases costs identified with the brand (Hjalager and Corigliano 2011). In a couple of cases, firms are compellingly making motivating cases for items that beat the opposition concerning common concerns. For instance, hotels' meal experience

service brand underscores common fixings intended to improve the regular atmosphere while attempting to achieve sustainability (Hooper et al. 2008). A brand can be isolated from the opposition given solicitations to green brand sustainability on climate change. Firms that set up a well-defined green brand character are bound to yield brand esteem (Sarkar 2012) The Green Brand (GB): "is characterised right now by a lot of observations and relationships in the brain of the customer that are connected to their natural duties and concerns" (Cretu and Brodie 2007).

*Green Price*

In this study, the term "green price" refers to "premiums consumers pay in order to acquire green products" (Sarkar 2012). Maggioni et al. (2013) also propose that the cost of green products contributes to consumers paying premiums repeatedly for green products. These premiums are often necessary since production costs are higher. "While most consumers intend to purchase green products, sales of green products have been below expectations." Therefore, the product quality is directly proportional to the price (Manzini 2015). Customers are more likely to pay a premium price if they perceive the product as high quality. Even though environmentally appropriate products are considered more expensive than their counterparts (Maurer 2011), sustainable green products are expensive due to the high manufacturing costs and the demand for environmentally friendly products. Although Maurer (2011) suggests that trying to sell many products would not allow for profit, products need to be priced at a premium to cover the costs. As part of the marketing mix, psychological, situational, and socio-cultural influences influence the purchase decision process. As a result of those influences, issues like "price," "quality," and "availability" directly influence the purchase decision process (MacDonald and Ho 2002). "Global sustainable economic development depends heavily on the hotel industry, which is a major industry in many countries" (McGinn 2016). According to McGinn (2016) "room pricing decision is one of most important aspects of hotel marketing strategies, since hotel price is one of the main influences on accommodation selection decisions furthermore room prices influence consumer perceptions of service quality and consumer satisfaction."

*Environmental Sustainability*

According to Khandelwal and Kumar Yadav (2014), sustainability is demarcated as "creating and maintaining conditions under which [humans] and nature can exist in productive harmony and fulfil the social, economic, and other requirements of present and future generations of Americans." The use and understanding of the word "environmental" have frequently been linked with some kind of human impact to natural systems (Morelli 2011). This context differentiates it from the word "ecological," which can be characterised as a concept of interdependence of elements within a system. "Ecological Sustainability as a Conservation Concept" has been put forward as an ecological definition of

sustainability that goes together with biological conservation, defined as "meeting human needs without compromising the health of ecosystems" (Miroshnychenko et al. 2017). But to precisely use the word "environmental" for this research "environmental" is viewed as a subset of a broader concept of ecology that is the intersection between human activities (hotels) and the ecological systems (Chivandi et al. 2017).

Due to disagreements across academic institutions, the term "sustainability" is rarely used in isolation; nonetheless, it seems to have utility when coupled with a defining modifier such as "ecological," "environmental," "agricultural," or "economic" (Morelli 2011). Further defines "environmental sustainability" as "the maintenance of natural capital and as a concept apart from, but connected to, both social sustainability and economic sustainability" (Moldan 2012). This study uses this definition of "environmental sustainability" to guide its methodology (Morelli 2011). Meeting the resources and services; would include the hotel services that are being supplied to the client; due to rising demand, hotels are finding new ways to be inventive in terms of the services they offer to customers (Chen 2011). Finally, businesses need to be inventive to support and sustain the ecosystem through their business activities; this is where green business practices come into play. Social requirements, biodiversity conservation, regenerative capability, and items made for reuse and recycling constitute "green business practices" (Medlik 2003).

*Green Growth Strategy*

A growth strategy is necessary for every business to have direction. Sustainability has become integral to doing business across all industries due to the growing demand for environmentally friendly products (Huang and Li 2017). As a result of global warming, climate change, and air and water pollution, customers have become more aware of their products and the damage they cause to the environment (Morelli 2011). As a result, organizations need to develop strategies to deal with a new generation of environmentally conscious customers. Getting green is now a viable option for any organization, not just those in the tourism industry, and firms need to integrate green growth strategies into their business processes (Ryu and Lee 2012). It is becoming more apparent that subscribing to triple-bottom-line practices can increase consumer demand as energy and material costs continue to increase. Taking a more subtle, long-term strategic approach to building relationships with green customers is necessary for a business to maintain relationships with green customers (Morelli 2011).

*Green Innovation*

"Service innovation provides an understanding of strategy execution, revenue and profit sources, and financial implications" (Medlik 2003). Green innovation is, to a certain degree, a subtle idea. However, it can be acknowledged by its positive impact on the environment (OECD 2013) and further defined as innovation that reduces environmental impact and optimizes the use of resources during the

lifecycle of related activities. The term "green product innovation" refers to products that reduce the negative impacts and risks to the environment, utilize fewer resources, and prevent waste generation during their disposal. In other words, green product innovation not only protects the natural environment, but it also provides more significant environmental benefits than conventional products" (OECD 2013). The term green innovation is defined as "innovation in hardware or software that is related to green products or processes, including technologies that are involved in energy efficiency, pollution prevention, waste recycling, green product design, or corporate environmental management" (Medlik 2003). There are different types of green product innovation, namely, "radical and incremental." Literature suggests that "radical green product innovation includes the use of new technologies, for example, electric vehicles, or the replacement of one critical component with a completely new one that significantly reduces the overall environmental impact of the product, for example, an insecticide, that is based on a completely new, natural or eco-friendly composition" (Dangelico and Pujari 2010). Medlik (2003) further defined "radical innovation" as "fundamental and revolutionary changes in the technology or the processes and activities, including new ones, that break with current practice and are positively related to the risk that is associated with an attempted innovation." Furthermore, incremental green product innovation "includes the increasing use of existing key dimensions of green products such as eco-efficiency (e.g., incremental improvement of fuel efficiency in vehicles), the substitution of conventional materials with materials with a lower environmental impact (e.g., replacement of virgin materials with recycled ones), or the design of recyclable products (e.g., designed for disassembly)" (Dangelico and Pujari 2010). It is stated that "incremental changes include all the innovation and those current applied technologies that are not that costly but easier to predict" (Henseler et al. 2015). Although few, green product innovation does face a few challenges in terms of developing and implementing amongst others, here are a few challenges; The first challenge is assimilating conventional and environmental product attributes, product quality and at a certain point, there is going to be a trade-off between the product quality and green attributes; second, would be selling at competitive price, high prices mean that industrial and consumers go for alternative products, this is due to the fact unlike other non-green products, green products do not often receive government subsidies or government rebate to consumers; third, would be lack of customer awareness of green products benefits, this can be caused by the lack of understanding environmental sustainability (Randhawa and Scerri 2015).

### *Green Practices*

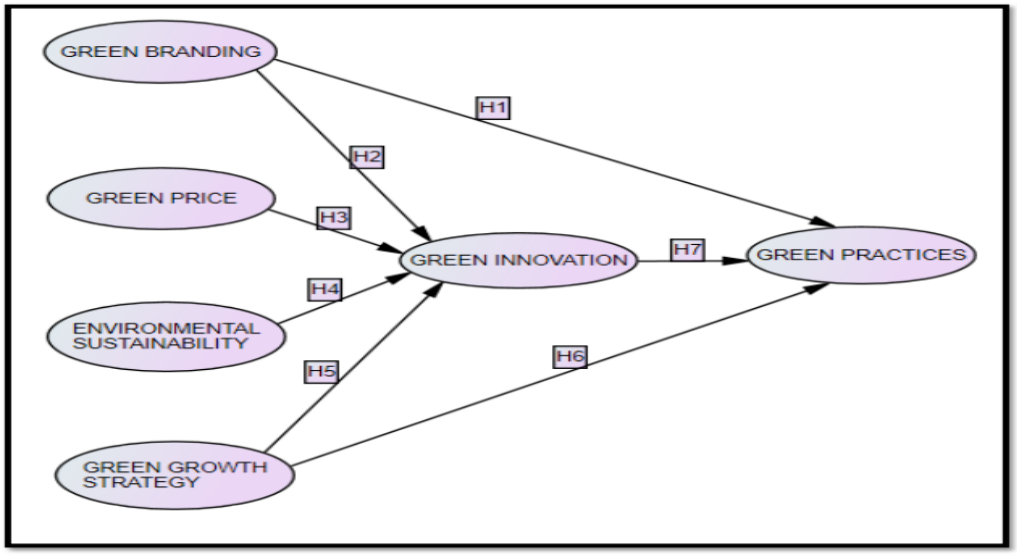
Due to increasing population and industrialisation, the pressure exerted on the infrastructure, environment, and available crude resources has increased tremendously. Environmental problems have influenced all activities, but very few businesses instil environmental issues in their practices (Khandelwal and Kumar Yadav 2014). Chen (2012) postulates that "green practices" in the tourism and hospitality industries can be traced back to the theory of sustainable tourism and

have been widely addressed. Furthermore, they argued that it is vital for the tourism and hospitality industries to take it upon themselves to be responsible for their effect on the environment and contribute to sustainable development for the betterment of society." Green practice has been heavily linked with social responsibility and high financial performance (Miroshnychenko et al. 2017). Green practices go together with going green; in other words, a business seeks information that can lead to more earth-friendly and environmentally conscious choices and practices, which can help secure the planet's resources and sustain its crude resources for people in the future. According to Lin and Ho (2010), implementing new or adjusted procedures, strategies, and frameworks can reduce contamination outflows and energy consumption. As green practices become more compatible with an organisation's existing advances and procedures, they will be more effectively diffused inside the organisation (Lin and Ho 2010). Lin and Ho (2010) believe that "green practices incorporate tacit and explicit knowledge, in addition to the tacit knowledge involved in identifying pollution sources, responding quickly to spills, and proposing preventive solutions."

## Conceptual Framework and Hypothesis Development

Drawing from the literature review and theoretical grounding, a conceptual model/hypothesis was developed. The model consists of six research variables: four variables Green Branding, Green Price, Environmental Sustainability, Green Growth strategy (GB, GS, ES, and GGS); one mediator (green innovation); and one outcome variable (Green practices).

**Figure 2.** *Conceptual Model*



*Hypothesis Statements*

Hypothesis statements were derived and formulated from the conceptual model in Figure 2. The literature presents several validated works, thereby allowing the opportunity to test several hypotheses. Hypotheses were used in this study to establish specific relationships between variables that could be empirically tested. Additionally, the hypotheses were used to validate the theory used in the research and to deduce the interplay between variables by logical analysis. Considering the underlying theories in green innovations and green business practices, the study offered seven hypothesis statements.

$H_1$: Green branding has a positive relationship towards green practices.
$H_2$: Green branding has a positive relationship towards green innovation.
$H_3$: Green price has a positive relationship towards green innovation.
$H_4$: Environmental sustainability has a positive relationship towards green innovation.
$H_5$: Green growth strategy has a positive relationship towards green innovation.
$H_6$: Green growth strategy promotes green practice.
$H_7$ Green innovation has a positive impact towards green practice.

## Methodology

Research design is the strategy one selects to bring together different accepts of the study in a coherent and logical way to achieve success in addressing the research problem. According to Nunnally and Beirnsten (1994) research design is the arrangement of conditions for collection and analysis of data with economy and procedure. Maggioni et al. (2013) stated that there are five approaches to research design which include case study, cross-sectional design, comparative design, longitudinal design and experimental design. This study used a cross-sectional design approach, which studies a particular phenomenon through looking at the relationships of variables at a particular time. Quantitative primary research was conducted using a self-administered questionnaire to gather primary data. The questionnaire design allowed the determination of the Confirmatory Factor Analysis indices, Chi-Square/degree of freedom, Comparative Fit Analysis, and the Incremental Index of Fit. A cross-sectional study was conducted due to time limitations which restricted the use of longitudinal studies. The population refers to the total group and or elements of interest to the researcher which the researcher sets out to interrogate with a view to obtain information and making informed inferences (Bagozzi, and Heatherton, 1994). In this study South African top management and employees travel and tourism sector in Gauteng province were the targeted population.in this study. Data was collected from a sample of 250 topline management and employees' respondents; the respondents were selected using convenience random sampling technique in a 5-point Likert research instrument scale. Data analyses were done using SPSS statistical software in conjunction with AMOS version 25.

Drawing from the literature review and theoretical grounding, a conceptual model/hypothesis were developed. The model consists of seven research variables:

four variables predictor – Green Branding, Green Price, Environmental Sustainability, Green Growth strategy one mediator green innovation and one outcome variable – Green Practices. Research Philosophy took a Positivist Paradigm- Targeted population were Southern African travel and tourism toplines management and its employees and a sample size of N=250 respondents was used. Roberts (1992) state that a sample size should be 10 percent of the target population, and this was done using online Rao soft calculator. The research variables employed in this research were all measured using a 5-point Likert Scale questionnaire, ranging from 1=strongly disagree, 2=disagree, 3=moderately agree, 4=agree and 5=strongly agree. The first variable, green brand (GB) was measured using five items, ranging from GB1 - GB5. The second variable, green price (GP) was also measured using five items, ranging from GS1 - GP5. The third variable, environmental sustainability (ES) was measured using five items and it ranged from ES1 - ES5. The fourth variable which is the green growth strategy (GGS) was measured using four items ranging from GGS1 - GGS4. The fifth variable, green innovation (GI) was measured with five items ranging from GI1 - G 4. Finally, the last item, green practice (GP), was measured with five items ranging from GP1 - GP5. The research model developed in the present investigation was tested using SPSS with AMOS version 25, a structural equation modelling (SEM) approach (Rorbert 1995). To validate reliability of measurement items, Cronbach Alpha, composite reliability (CR) and average variance extracted (AVE), were extracted. Reliability helps the researcher to test the integrity and credibility of the research Targeted population were Southern African travel and tourism toplines management and employees in Gauteng province. The part of the data was also supplied by the Ministry of Travel and Tourism Industry in South Africa. Therefore, a simple random sampling technique was used in this study, because each element of the population had an equal and known chance of being selected as part of the sample (Nunnally and Beinsten 1994). The questionnaires clearly stated that the anonymity of the participants would be guaranteed and that the study was purely for academic purposes. The Rao soft calculator for sample size was used to calculate the size of the sample (Rao soft Incorporated 2004, in Abend et al. 2008). Data analysis utilised, Tested CFA, Model Fit, Reliability and Validity, Path Modelling and hypothesis. Rao soft calculator for sample size was used to calculate sample (Raosoft Incorporated 2004). Calculation considered population of approximately 250 toplines management and employees in Gauteng Southern Africa province, a 5% margin of error, 90% confidence interval and the recommended 50% distribution, and returned a minimum sample size of 190 respondents. Of the 250 questionnaires distributed, 190 returned questionnaires were usable, yielding a response rate of 82%.

## Discussion of Findings

The respondents were requested to report their demographic data, including gender, age, marital status, and kind of business inside the tourism and hospitality sectors. The respondents were females (52.8%) and males (46.2%). The average

age of the respondents was under 35 years (54.3%). Twenty-seven percent of the respondents were single. Around 53% of the respondents demonstrated that they were occupied with tourism sector service types of businesses, including accommodation tourism companies, for instance, hotels, guest houses and guest lodges.

*Green Branding and Green Practices ($H_1$)*

The empirical objective of the study was suggested; to assess whether there is a relationship between green branding and green practice. From the result stated above, the path coefficient is 0.025. This implies a strong relationship between green branding and green practices. The p-value of 0.906 denotes a $p > 0.05$ confidence level, which signifies that the hypothesis is supported and insignificant. There is a positive relationship between the two variables. relationship could be more significant. Chen (2011) has set up a theoretical structure that demonstrates that the value of a green brand can be enhanced by green trust, green fulfilment, and green brand picture. Kotler and Armstrong in Chen (2012) described a brand as "a title, term, sign, picture, or a mix of these that separate the maker or vendor of the thing." The "American Marketing Association" portrays "green branding" as a title, term, plan, picture, or whatever other features distinguish one vendor's items or advantages from those of other vendors. The legitimate term for a brand is "trademark" (Weaver 2009). A brand may remember a specific something, a group of things, or everything from that seller. The travel and tourism service and product brands should be able to enhance a competitive advantage towards the green branding awareness and making the consumers aware of the green practices whilst having great experience.

*Green Branding and Green Innovation ($H_2$)*

Deducing from the result stated, the empirical objective of the study was suggested; to investigate whether there is a relationship between green branding and green innovation. The path coefficient is 0.441, this implies that there is a strong relationship between GB and GI. The p-value of 0.006 denotes a $p < 0.05$ confidence level and this signifies that the hypothesis is supported and significant. There is a positive relationship between the two variables, and it is significant as well. Chen (2012) in Chivandi et al. (2017) postulate that "green practices" in the travel and tourism industry can be traced back to the theory of sustainable tourism and have been widely addressed. Furthermore, they argued that it is vital for the tourism and hospitality industries to take it upon themselves to be responsible for their effect on the environment and contribute to sustainable development for the betterment of society." Green practice has been heavily linked with social responsibility and high financial performance (Miroshnychenko et al. 2017). This is being supported by the above strong relationship of the study.

*Green Price and Green Innovation ($H_3$)*

The study proposed positive relationship green price and green innovation. an Analysis of Moment Structures (AMOS), a statistical software package for structural equation modelling (SEM). It was used for testing and estimating models that examine relationships among latent variables, observed variables, and measurement errors. For this study, due to the complexity of the questions being asked most of the respondent recorded a neutral value so the relationship between green price and green innovation was not considered. But according to Lovelock and Weaver (2009), green innovation is, to a certain degree, a subtle idea. However, it can be acknowledged by its positive impact on the environment (OECD 2013) and further defined as innovation that reduces environmental impact and optimizes the use of resources during the lifecycle of related activities. The term "green product innovation" refers to products that reduce the negative impacts and risks to the environment, utilize fewer resources, and prevent waste generation during their disposal. In other words, green product innovation not only protects the natural environment, but it also provides more significant environmental benefits than conventional products

*Environmental Sustainability and Green Innovation ($H_4$)*

The empirical objective of the study was suggested; to assess whether there is a relationship between environmental sustainability and green innovation. Deducing from the result stated above, the path coefficient is 0.282. This implies that there is a strong relationship between GGS and GI. The p-value of 0.008 denotes a $p < 0.05$ confidence level, which signifies that the hypothesis is supported and significant. There is a positive relationship between the two variables. The relationship is significant as well. The use and understanding of the word "environmental" have frequently been linked with some kind of human impact to natural systems (Morelli 2011). This context differentiates it from the word "ecological," which can be characterised as a concept of interdependence of elements within a system. "Ecological Sustainability as a Conservation Concept" has been put forward as an ecological definition of sustainability that goes together with biological conservation, defined as "meeting human needs without compromising the health of ecosystems". But to precisely use the word 'environmental' for this research "environmental" is viewed as a subset of a broader concept of ecology that is the intersection between human activities (hotels) and the ecological systems (Morelli 2011). So environmental sustainability needs to be taught to the consumers as a way of practising green innovation and can be achieved in green talks in travel and tourism catalogues represented by Go green symbols and trademarks in product and service offerings/this is eluded by the strong relationship realised in this study.

*Green Growth Strategy and Green Innovation ($H_5$)*

The study's empirical objective was to investigate whether there is a relationship between green growth strategies and green innovation. The path coefficient is 0.282. This implies that Deducing from the result stated above, at there is a strong relationship between GGS and GI. The p-value of 0.008 denotes a $p < 0.05$ confidence level, which signifies that the hypothesis is supported and significant. We can deduce that there is a positive relationship between the variables. Beltramello et al. (2013) also agree with the relationship. They stated, "The internal governance of companies often influences eco-innovation projects and business models, the strategies they adopt and the societal values they promote".

*Green Growth Strategy and Green Practice ($H_6$)*

The study proposed a positive relationship between the variables and the empirical objective stated, to investigate whether there is a relationship between green growth strategy and green practice. The path coefficient is 0.441, implying a solid relationship between green growth strategy and green practice. The p-value of 0.339 denotes a $p > 0.05$ confidence level, which signifies that the hypothesis is supported. There is a relationship between the two variables, a positive relational relationship, but it is the nominal due P value. Deighton et al. (1994) argue that for green marketing strategies to succeed, they need more than broad-brush execution of short-term marketing plans. A hotel in Cape Town, South Africa, is currently applying several green growth marketing strategies and boasts itself as Africa's greenest hotel. To make the hotel carbon-neutral, it has installed a plant room, energy-efficient LED lights, an eco-pool, and a green roof. In addition, the hotel uses wind turbines for energy and sterilizes bath and shower water with UV light before re-using it for toilet flushing (Delis 2009). There can be no doubt that Hotel Verde is implementing extremely green policies.

*Green Innovation and Green Practice ($H_7$)*

The seventh empirical objective of the study was to investigate the influence of green innovation on adopting green practices in city centre-based hotels: a Gauteng province perspective. The research paper suggested a positive relationship between green innovation and green practice. The result suggested the relationship was as follows; the path coefficient came out at 0.358, implying a solid relationship between green innovation and green practice. Whilst the p-value of 0.001 denotes a $p < 0.05$ confidence level, and this signifies that the hypothesis is supported and significant the above results mean that the hypothesis statement (H7) brought forward is true. The findings are in line with previous literature on green innovation and green practice: Hooper et al. (2008) believes that "Green practice adoption involves implementing new or modified processes, techniques, and systems to reduce environmental harms and can be regarded as a technical innovation

process" whilst Beltramello et al. (2013) suggest that "green innovation leads the rise of new business firms to introduce innovations in light of certain factors, for example, guidelines, the availability of public support or market demand" which all those innovations lead to green practice. For example South African city centre-based hotels, it means that hotels that take part in green innovation will have a positive impact on business growth. The results from the scale accuracy analysis are exhibited in Table 1.

**Table 1.** *Scale Accuracy Analysis*

| Research Construct | | Cronbach's Test | | CR. Value | AVE value | Factor Loadings |
|---|---|---|---|---|---|---|
| | | Corrected total to item | a Value | | | |
| GBI | GBI3 | 0.516 | 0.749 | 0.76 | 0.51 | 0.629 |
| | GBI4 | 0.635 | | | | 0.802 |
| | GBI5 | 0.579 | | | | 0.700 |
| ES | ES I | 0.573 | 0.778 | 0.78 | 0.55 | 0.737 |
| | ES2 | 0.694 | | | | 0.810 |
| | ES4 | 0.576 | | | | 0.666 |
| GGS | GGS1 | 0.601 | 0.751 | 0.76 | 0.61 | 0.717 |
| | GGS2 | 0.601 | | | | 0.839 |
| GI | GI I | 0.608 | 0.84 | 0.84 | 0.51 | 0.683 |
| | 012 | 0.659 | | | | 0.722 |
| | 013 | 0.645 | | | | 0.729 |
| | 014 | 0.667 | | | | 0.732 |
| | 015 | 0.645 | | | | 0.721 |
| GP | GPract3 | 0.634 | 0.798 | 0.80 | 0.57 | 0.772 |
| | GPract4 | 0.625 | | | | 0.714 |
| | GPract5 | 0.670 | | | | 0.776 |

*Note:* GBI = Green brand image; ES = Environmental sustainability; GGS = Green growth Strategy; GI= Green innovation; Gpract = Green Practice; CR = Composite reliability; AVE = Average variance extracted

It was observed in items loaded well on their respective (a priori) constructs, that is, if the value was 0.600. At the same time, discriminant validity was evaluated by making sure that there were no significant inter-research variable cross-loadings (Chen 2011). As it is seen in Table 1, all items have loadings ≥ 0.500. These results, therefore, confirmed discriminant validity. Two variables out of seven were incompatible and did not meet the threshold of 0.5, the expected standard, and there were insignificant variables, though they were discussed.

**Table 2.** *Inter-Correlation Matrix*

Correlations

| | | GBI | ES | GGS | GI | GPrac |
|---|---|---|---|---|---|---|
| GBI | Pearson Correlation | 1 | | | | |
| ES | Pearson Correlation | 0.289** | 1 | | | |
| GGS | Pearson Correlation | 0.142* | 0.480** | 1 | | |
| GI | Pearson Correlation | 0.447** | 0.455** | 0.370** | 1 | |

A correlation estimates of less than 0.60 is prescribed in the empirical literature to affirm the presence of discriminant validity (Nunnally and Bernstein 1994). The inter-construct correlation estimates ran from 0.142 to 0.480, below the

dependable guideline of 0.60 (Nunnally and Bernstein 1994), showing the accomplishment of discriminant validity. This way, Table 2 demonstrates that the outcomes are consistent with discriminant validity.

## Path Modelling

According to Nunally and Beinstern (1994), "Path analysis is a method employed to determine whether or not a multivariate set of non-experimental data fits well with a particular (a priori) causal model." Path modelling is followed by hypothesis testing, where the path coefficients and p-values determine the results.

**Table 3.** *Model Fit Indices*

| Model fit Index | Chi-square | GFI (Goodness of fit) | CFI (Comparative fit index) | TLI (Tucker-Lewis Index) | IFI (Incremental Fit Index) | RFI (Relative Fit Index) | NFI (Norm Fit Index) | RMSEA Root (Nlean Square Error of Approximation) |
|---|---|---|---|---|---|---|---|---|
| **Indicator Value** | 1.470 | 0.921 | 0.961 | 0.950 | 0.962 | 0.859 | 0.90 | 0.049 |

As represented in Table 3, the Chi-square met the acceptable threshold, as for GFI, TLI, RFI, and NFI, they marginally met the acceptable threshold, ranging from 0.799 to 0.888 as they did not manage to be greater than or equal to 0.9 whilst CFI and NFI managed to meet the acceptable threshold of the required greater than or equal to 0.9. Finally, the RMSEA met the acceptable threshold by being less than 0.08 at 0.049.

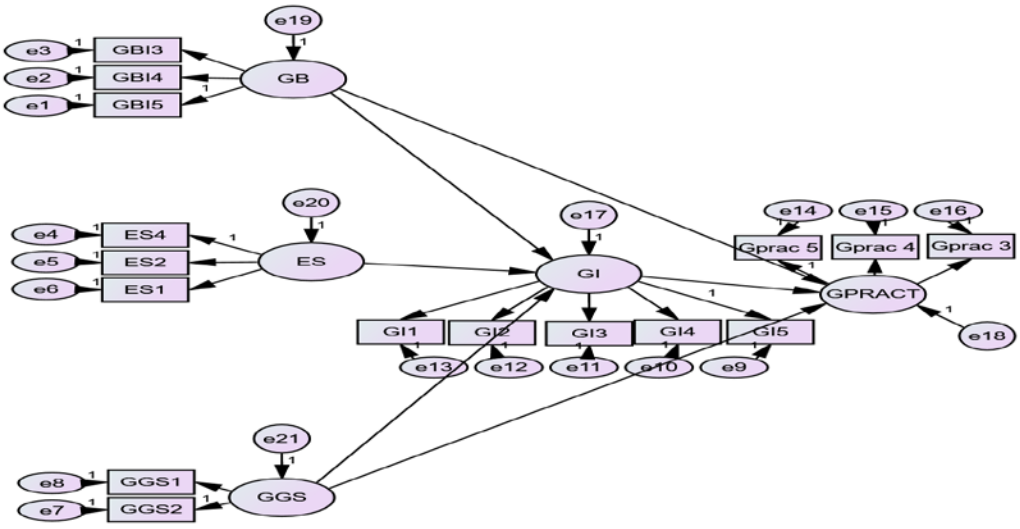
## Goodness of Fit (GoF)

Following formulae given by Ryu and Lee (2012), the global GoF statistic for the research model was calculated using the equation:

$$\text{Goodness of Fit} = \sqrt[2]{(\text{average of all AVEs values} * \text{average of all } R^2)}$$
$$= 2\sqrt{0.48 * 0.44}$$
$$= 0.46$$

where AVE represents the average of all AVE values for the research variables, and $R^2$ represents the average of all $R^2$ values in the full path model. The calculated global GoF is 0.46, which exceeds the threshold of GoF > 0.36 suggested by Nunnally and Beirnsten (1994). Therefore, this study concludes that the research model fits well.

**Figure 3.** *Path Model*




In Figure 3, green brand (GB), environmental sustainability (ES), and green growth strategy (GGS) are the predictor variables. Green innovation (GI) is the moderator variable, and green practice (GPract) is the dependent variable. The single-headed arrows on the variables set the path model apart from the CFA model, which signifies causal relationships.

In this study, the testing of the hypotheses was determined by path coefficient values and the p-values for the structural model obtained from the bootstrapping algorithm (Table 4). According to Nunnally and Beinsten (1994), p-values indicate whether a significant relationship exists between variables within the model, while path coefficients demonstrate the strength of the relationships in the model.

**Table 4.** *Findings of the Structural Model*

| Hypothesis relationship | Hypothesis | Path coefficient | P values | Outcomes |
|---|---|---|---|---|
| GBI > GI | H2 | 0.441 | 0.006 | Supported and significant |
| ES > GI | H4 | 0.296 | 0.008 | Supported and significant |
| GGS > GI | H5 | 0.232 | 0.008 | Supported and significant |
| GB > GPRACT | H1 | 0.025 | 0.906 | Supported and insignificant |
| GI > GPRACT | H7 | 0.358 | 0.001 | Supported and significant |
| GGS > GPRACT | H6 | 0.085 | 0.339 | Supported and insignificant |

*Note:* GBI = Green brand image; ES = Environmental sustainability; GGS = Green growth Strategy; GI= Green innovation; Gpract = Green Practice. [a]Significance Level p<0.10; [b]Significance Level p<0.05; [c]Significance Level p<0.01.

In Table 4, RE confirms the presence of reliability, while the AVE proves the existence of discriminate validity. Two out of seven variables were incompatible, did not meet the threshold of 0.5, the expected standard, and were passively insignificant.

## Conclusions and Implications

This study aimed to examine the links between several variables linked to green practices and green innovation in the travel and tourism sector of Southern Africa. Seven hypotheses relating to variables were investigated, including green branding, green pricing, environmental sustainability, green growth strategy, green innovation, and green practices. Using a structural equation modelling approach and a 5-point Likert scale questionnaire, the variables were measured in this study. The results revealed a significant positive link between green branding and green innovation (H2) with a path coefficient of 0.441 and a p-value of less than 0.05. This suggests that a robust green brand image is associated with green innovation in the tourism and hospitality industry. In addition, the results demonstrated a substantial positive correlation between environmental sustainability and green innovation (H4) with a path coefficient of 0.28 and a p-value of 0.008, which is less than 0.05. This indicates that fostering environmental sustainability may result in green innovation in the travel and tourism industry as Chen (2012) has eluded.

In contrast, the results demonstrated an insignificant positive association between green branding and green practices (H1), with a path coefficient of 0.025 and a p-value of 0.906, which is greater than 0.05. This suggests that no correlation exists between green branding and green activities in the travel and hospitality industries. Similarly, the results were unable to assess the association between green price and green innovation (H3) due to insufficient appropriate questions. Overall, the results shed light on the linkages between green branding, environmental sustainability, and green innovation in the tourism and hospitality industry of Southern Africa. The industry can utilise the results to encourage green practices and innovation, which can result in sustainable development and benefit the environment and society. Furthermore, Special treatment, in the form of a "green bonus" on room rates, is offered to guests who are travelling in an eco-friendly way. Inspired by airline frequent flyer programs, the company developed a green guest club where guests earn green points as they behave and act in a sustainable way during their stay. Customer needs are taken seriously eluded by (Maurer 2011). As a result, only locally produced organic food is served, and e-scooters are provided for rental. By using the word of-mouth marketing concept, the company maintains a high occupancy rate - above 80% - all through the year. An in-house Quality Management System can be developed where the personnel would be important contributors. This will Results in travel and tourism sector in exceling in integrating innovation and greenness. The company personnel and management are true to their values and green mission, "sustainability starts with your attitude". Strong management ensures that quality and creativity continue to flourish. There is a strong relationship on the study variables that implies that, green practices and environmental awareness in South African country can be achieved at a global level, and among the rest of the population. With high per cent of the power coming from alternative energy, and sixty per cent of all waste being recycled, there’s no doubt that South Africa can be the most of the world's leading destinations for sustainable tourism and green innovation practices. A state

of eco-label for travel and tourism can be developed leading to gaining a competitive advantage, through green innovation practices (Genc and Genc 2017).

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## Appendix

*Scale Accuracy Analysis*

| Constructs | | Scale : Frequency and Percentage (%) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Strongly Disagree | | Disagree | | Moderately Agree | | Agree | | Strongly Agree | |
| | | Freq. | % | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| Green brand image | GBI 1 | 10 | 4.5 | 14 | 6.3 | 68 | 30.5 | 73 | 32.7 | 34 | 15.2 |
| | GBI 2 | 5 | 2.2 | 18 | 8.1 | 74 | 33.2 | 72 | 32.3 | 30 | 13.5 |
| | GBI 3 | 7 | 3.1 | 28 | 12.6 | 64 | 28.7 | 81 | 36.3 | 19 | 8.5 |
| | GBI 4 | 3 | 1.3 | 17 | 7.6 | 73 | 32.7 | 66 | 29.6 | 40 | 17.9 |
| | GBI 5 | 4 | 1.8 | 16 | 7.2 | 68 | 30.5 | 69 | 30.9 | 42 | 18.8 |
| Green price stragey | GPS 1 | 7 | 3.1 | 25 | 11.2 | 64 | 28.7 | 70 | 31.4 | 33 | 14.8 |
| | GPS 2 | 7 | 3.1 | 22 | 9.9 | 57 | 25.6 | 64 | 28.7 | 49 | 22 |
| | GPS 3 | 5 | 2.2 | 12 | 5.4 | 51 | 22.9 | 76 | 34.1 | 55 | 24.7 |
| | GPS 4 | 6 | 2.7 | 10 | 4.5 | 46 | 20.6 | 61 | 27.4 | 76 | 34.1 |
| | GPS 5 | 6 | 2.7 | 20 | 9 | 69 | 30.9 | 74 | 33.2 | 30 | 13.5 |
| Environmental sustainbility | ES 1 | 16 | 7.2 | 27 | 12.1 | 54 | 24.2 | 67 | 30 | 35 | 15.7 |
| | ES 2 | 13 | 5.8 | 25 | 11.2 | 67 | 30 | 63 | 28.3 | 31 | 13.9 |
| | ES 3 | 5 | 2.2 | 20 | 9 | 58 | 26 | 67 | 30 | 49 | 22 |
| | ES 4 | 9 | 4 | 37 | 16.6 | 74 | 33.2 | 46 | 20.6 | 33 | 14.8 |
| | ES 5 | 21 | 9.4 | 58 | 26 | 51 | 22.9 | 41 | 18.4 | 28 | 12.6 |
| Green growth strategy | GGS 1 | 19 | 8.5 | 31 | 13.9 | 41 | 18.4 | 57 | 25.6 | 51 | 22.9 |
| | GGS 2 | 13 | 5.8 | 39 | 17.5 | 69 | 30.9 | 49 | 22 | 29 | 13 |
| | GGS 3 | 9 | 4 | 16 | 7.2 | 44 | 19.7 | 54 | 24.2 | 76 | 34.1 |
| | GGS 4 | 39 | 17.5 | 29 | 13 | 54 | 24.2 | 43 | 19.3 | 34 | 15.2 |
| Green innovation | GI 1 | 13 | 5.8 | 32 | 14.3 | 71 | 31.8 | 54 | 24.2 | 29 | 13 |
| | GI 2 | 13 | 5.8 | 28 | 12.6 | 66 | 29.6 | 69 | 30.9 | 23 | 10.3 |
| | GI 3 | 11 | 4.9 | 24 | 10.8 | 76 | 34.1 | 62 | 27.8 | 26 | 11.7 |
| | GI 4 | 21 | 9.4 | 36 | 16.1 | 64 | 28.7 | 56 | 25.1 | 22 | 9.9 |
| | GI 5 | 15 | 6.7 | 37 | 16.6 | 60 | 26.9 | 53 | 23.8 | 34 | 15.2 |
| Green Practice | GPract 1 | 8 | 3.6 | 31 | 13.9 | 61 | 27.4 | 76 | 34.1 | 23 | 10.3 |
| | Gpract 2 | 13 | 5.8 | 40 | 17.9 | 70 | 31.4 | 54 | 24.2 | 22 | 9.9 |
| | Gpract 3 | 9 | 4 | 28 | 12.6 | 69 | 30.9 | 66 | 29.6 | 27 | 12.1 |
| | Gpract 4 | 12 | 5.4 | 22 | 9.9 | 53 | 23.8 | 76 | 34.1 | 36 | 16.1 |
| | GPract 5 | 22 | 9.9 | 16 | 7.2 | 72 | 32.3 | 54 | 24.2 | 35 | 15.7 |

This Appendix represents the scale of accuracy analysis in tabular form by variables and indicate each of the instrumentation used. Green brand image had 5, green price had 5, as well as green innovation and green practices except green growth strategy that has 4 respectively.

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# Towards Net-Zero Emissions in the Global Tourism Industry

*By Peter Jones*[*]

*Tourism is a major contributor to global greenhouse gas emissions, and while the tourist industry is seen to have an important role to play in addressing net-zero emissions, this role has received limited attention in the academic tourism literature. This paper looks to contribute to filling that gap by exploring how the tourism industry is addressing the challenge of net-zero emissions. The paper employs a qualitative evidence synthesis approach, which reveals that many tourism companies are looking to address the transition to net-zero emissions, and provides an outline of how some of the major players within the tourism industry are approaching this transition. By way of a reflective conclusion, the author raises four wider sets of issues, relating to the concept of net-zero emissions, the role of natural capital solutions and offsetting, technological solutions, and the relationship between the net-zero transition, growth, and sustainability.*

**Keywords:** *climate change, net-zero emissions, greenhouse gases, carbon, tourism*

## Introduction

Climate change poses two different sets of challenges for tourism. On the one hand, tourism is vulnerable to climate change in a variety of ways. Rises in sea levels will threaten coastal tourism resorts and infrastructure, rising temperatures will shorten the time span for the winter sports season and threaten the viability of winter sports resorts, while changes in biodiversity will affect eco-tourism. At the same time, Scott et al. (2012) argued that climate change would have profound implications for tourism in the twenty first century including consumer holiday choices, geographic patterns of tourism demand, and the competitiveness and sustainability of destinations. On the other hand, tourism is a major contributor to greenhouse gas (principally carbon dioxide, and to a lesser extent methane and nitrous oxides) emissions, and as such, many of the major players within the tourism industry are increasingly looking to take measures to cut their emission levels. This paper focuses on the second of these two sets of challenges, namely tourism greenhouse gas emissions, and more specifically how some of the major tourism companies, are addressing net-zero emissions, which is widely seen as offering the best way to tackle climate change.

While tourism is widely seen as a major contributor to greenhouse gas emissions, the 'The Glasgow Declaration on Climate Action in Tourism' (United Nations World Tourism Organisation 2021) was described as 'a catalyst for increased urgency about the need to accelerate climate action in tourism and to

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secure strong commitments to support the global goals to halve emissions over the next decade and reach net-zero emissions as soon as possible before 2050.' The signatories to this declaration include a variety of tourism stakeholders, but tourism companies were also seen to have a major role to play.

However, while the relationship between tourism and climate change, and the transition to net-zero emissions, have become an increasingly important issue within, and for, the tourism industry, the corporate dimension, namely the role of major tourism companies in tackling net-zero emissions, has attracted very limited attention in the tourism literature, and this represents a gap in that literature. This exploratory paper draws on two sources, namely, a report published by the World Travel and Tourism Council and three mini-case studies, in an attempt to contribute to filling this gap by addressing how the tourism industry is addressing the challenge of net-zero emissions. The paper includes a brief outline of the origin and characteristics of the net-zero concept, a literature review to provide an academic context, two perspectives on how the tourism industry, collectively, and individually, is addressing greenhouse gas emissions, and some reflections on these perspectives.

## The Concept of Net-Zero Greenhouse Gas Emissions

In simple terms, the term net-zero greenhouse gas emissions refers to the balance between the amount of such gases produced in, and the amount removed from, the atmosphere, and net-zero is reached when the amount added is no more than the amount removed. Policies on greenhouse gas emissions are rooted in the Kyoto Protocol and the Paris Agreement. The Kyoto Protocol, which was adopted in 1997, but due to a complex ratification process, only came into force in 2005, committed industrialised countries and economies in transition to limit, and reduce, greenhouse gas emissions in accordance with agreed individual targets. The Paris Agreement, which came into force in 2016, looked to limit global warming, and the vast majority of the world's countries committed themselves to limit global warming to well below 2 degrees Centigrade, and to pursue efforts to limit the rise to 1.5 degrees Centigrade, which would effectively see greenhouse gas emissions fall to net-zero by 2050. The Kyoto Protocol required only developed countries to reduce emissions whereas the Paris Agreement effectively recognised that climate change was a shared global problem and called on all countries to set emissions targets.

Fankhauser et al. (2022) claimed that the 'scientific concept' of net-zero greenhouse gas emissions 'emerged in the late 2000s from understanding what it would take to halt the increase in global average surface temperature due to carbon dioxide emissions.' Hale et al. (2021) claimed 'in the five years since the Paris Agreement, achieving net-zero emissions has become a defining frame for climate action', and a growing number of national and local governments and business leaders are making commitments to reach net-zero targets. That said, Fankhauser et al. (2022) also argued that while 'the concept of net-zero carbon emissions has emerged from physical climate science, it can only be 'operationalized through

social, political and economic systems.' Further, Fankhauser et al. (2022) suggested that carbon dioxide removals should be used cautiously and the use of carbon offsets should be regulated effectively.

More generally, setting net-zero targets poses major economic, social and political challenges. Maintaining political commitment and consensus, in the face of other demands on resources poses a problem at both national and international levels, and governments may need to provide corporate incentives to encourage the transition to net-zero emissions. Economically, net-zero needs to be incorporated into market mechanism, and here the focus, in part at least, will need to be on investment in renewable and low carbon power generation. Socially, people will need to adopt modes of consumption that lead to a lower demand for energy. Moving to net-zero will require cutting greenhouse gas emissions across the economy, but the consensus is that in some industries, particularly aviation, it will be very complex, and /or very expensive, to completely cut emissions and here emissions will need to be removed from the atmosphere, either by changing how we use our land so it can absorb more carbon dioxide, or by carbon being extracted directly through technologies known as carbon capture.

At the same time, it is important to identify different types of emissions in that a distinction is made between scope 1, 2, and 3 emissions. In simple terms, scope 1 emissions, include direct emissions from a company's owned or controlled sources, while both scope 2 and 3 emissions are indirect emission that occur as a consequence of a company's activities, but which occur at sources owned or controlled by another company. Scope 2 emissions include greenhouse gas emissions from purchased or acquired energy, generated offsite, but consumed by a company. Scope 3 emissions include all indirect emissions that occur in a company's value chain.

## Literature Review

Over a decade ago, Kajan and Saarinen (2012) suggested that the relationship between tourism and climate change had been studied for a relatively long time in tourism research, but in the same year, Pang et al. (2012) reported that 'research on the relationship between tourism and climate lagged significantly behind that of other studies on climate change', while Becken (2013) described the academic debate on tourism and climate change as an 'evolving knowledge domain.' During the last decade, research on the impact of climate change on tourism has grown rapidly, and a variety of research foci have emerged. Such research has, for example, included the challenge climate change poses for sustainable tourism (e.g., Scott 2021), the impacts of climate change on coastal tourism (e.g., Arabadzhyan et al. 2021), and on small islands in developing nations (e.g., Pedapalli et al. 2022), and the extent to which vulnerability and resilience to climate change affect tourism and the overall economy (e.g., Dogru et al. 2019).

Scott (2021), for example, claimed, that evidence of the damaging impact of climate change on tourism assets is already accumulating, and more worryingly that the current impacts are 'but the tip of the iceberg versus what is anticipated in

the decades ahead', and that 'sector harm will be much greater under high emission temperature increases.' Further, Scott (2021) argued such impacts are not being studied and that important learning opportunities are being missed, and in conclusion he argued that enhanced inter-and trans-disciplinary research on climate change is imperative if governments are to understand how global tourism is impacted by climate change, and not overlooked in the development of response strategies.

Research into the greenhouse gas emissions associated with tourism has embraced a variety of themes, but such research has an international or national, rather than a corporate, dimension. Khan et al. (2019), for example, explained the nexus of greenhouse gas emissions, with tourism, financial development, energy use and trade in 34 high income countries across three continents from 1995 to 2017. Their findings demonstrated the long-run co-integration of tourism's share of exports, energy use, renewable energy and per capita greenhouse gas emissions. Jones (2012) employed an extended tourism environmental satellite account methodology to examine the case of tourism in Wales, and demonstrated how an estimate of the emissions associated with trips to, and in, the region, from the rest of the UK, and from abroad, can contribute to regional aspirations to reduce greenhouse gas emissions. This analysis suggested that substantial emissions cuts are dependent upon technical developments outside of tourism itself.

Sun et al. (2022) looked to explore whether national tourism growth targets could be accommodated within Norway's national emission targets. Their findings suggested that the carbon intensity of tourism in Norway is twice the national average and more specifically, that aviation is a major barrier to emissions reductions as it accounts for some 17% of national tourism revenue, and that the extrapolation of current trends suggested that tourism will be the largest emissions sub-sector of the Norwegian economy by 2030. More generally, the authors concluded with a call for further work on policies and legislation, cost assessments, and technology upscaling, 'as well as the more challenging questions of changes in the tourism system that will economically affect specific sectors and businesses' (Sun et al. 2022).

Gossling (2013) compared and analysed existing inventories of national emissions from tourism, and despite the difficulties in making comparisons because such inventories use different system boundaries and allocation principles, he was able to estimate the contribution made by tourism to national emissions, and its greenhouse gas intensity in comparison to other economic sectors. The findings suggested that while emissions from tourism were significant in all the countries studied, they did, in some of the 22 countries studied, exceed official emissions as calculated on the basis of guidelines for national emission inventories under the Kyoto Protocol.

In charting the increase in tourism's global carbon footprint and in global greenhouse emissions between 2009 and 2013, Lenzen et al. (2018) revealed that the majority of this footprint is exerted by, and in, high-income countries. Further, the authors suggested that the rapid increase in tourism demand was outstripping the decarbonization of tourism related technology, and looking to the future, that tourism would make up a growing part of the world's greenhouse gas emissions.

More positively, though against the findings of many other studies, research by Banga et al. (2022) revealed that in the OECD (Organisation for Economic Cooperation and Development) countries, tourism did not have any significant link with greenhouse gas emissions. Banga et al (2022) argued that this was explained by the fact that these countries had long started a shift from the use of fossil fuels to renewable sources of energy.

The concept of net-zero emissions and tourism has received only limited attention in the academic tourism literature, and the current work is fragmented and it is not possible to identify specific research streams. Nevertheless, some work merits attention. Scott and Gossling (2021), for example, took the Glasgow Declaration as their starting point, but argued that it lacked specific actions by which a transition to net-zero might be achieved. Indeed, the authors argued that the climate change and tourism literature has predominantly focused on the impacts of changing climate on tourism assets, operations, and on demand, and that less work has been dedicated to assessing tourism sector emissions and strategies to decarbonize tourism operations and travel. At the same time, Scott and Gossling (2021) argued that tourism growth projections for the industry are not compatible with a net-zero scenario, that this poses increasingly vulnerability for the continuing development of tourism, and emphasised the need to develop a critical new research agenda to determine how a transition to net-zero might be achieved and how this would affect tourism development.

Vourdoubas (2018) looked to investigate the possibility of using various renewable energy technologies available in the Mediterranean region in zeroing their carbon footprint due to operational energy use, and to indicate a combination of renewable energy technologies which could be used in hotels to enable them to achieve net-zero carbon emissions. The author suggested that the use of renewable energy technologies was technically feasible in hotels to replace fossil fuels for heat and power generation in the Mediterranean region, and that it met the expectations of environmentally conscious tourists who wish to spend their holidays in green hotels. At the same time, the reduction of carbon emissions would result in environmental benefits mitigating climate change. However, Vourdoubas (2018) also argued that in order to employ renewable energy technologies in hotels in the region, a number of existing barriers, including the lack of hotel owners' awareness of the benefits of using renewable energy technologies and the lack of capital available for investment in such technologies, would have to be removed.

*Method of Enquiry*

This exploratory paper draws on secondary sources, and the method of enquiry deployed is essentially a qualitative evidence synthesis, which Grant and Booth (2009) described as a 'method for integrating or comparing the findings from qualitative studies' that 'looks for themes or constructs that lie in or across individual qualitative studies.' Fleming and Noyes (2021) suggested that this approach is particularly valuable where, as with the current topic, there is a lack of primary qualitative research studies, in that it looks to establish a greater

understanding of the major issues and a richer interpretation of group, and in this case corporate, experiences.

Two sets of information sources were employed in an attempt to obtain some insight into how companies within the tourism industry were addressing the transition to net-zero greenhouse gas emissions. The first draws on a recent report from the World Travel and Tourism Council (2021), entitled 'Net Zero Roadmap for Travel and Tourism.' The World Travel and Tourism Council, established in 1990, draws its Council Members from the Chairs, Presidents and Chief Executives of the world's leading private sector travel & tourism businesses. The second source is mini-case studies to outline how three leading tourism companies, namely Hilton, The Walt Disney Company and Marriott International, report approaching the transition to net-zero. The material for the mini-case studies is drawn from the three companies' latest sustainability/environmental, social and governance reports.

## Findings

In collaboration with the United Nations Environment Programme and Accenture, the World Travel and Tourism Council published 'Net-Zero Roadmap for Travel and Tourism' (World Travel and Tourism Council 2021). This report recognised that travel and tourism is not only strongly affected by the impact of climate change but that as an important source of greenhouse gas emissions, it is actively contributing to such change, and therefore that it is of the upmost importance to decarbonise the sector as quickly as possible and reach net-zero by 2050. The report emphasised that businesses across the tourism sector, including tour operators, accommodation owners, cruise and travel agencies, along with aviation operators, had a crucial role to play in achieving a transition to net-zero greenhouse gas emissions. More specifically, the report looked to provide a current picture of climate action in selected businesses within the travel and tourism industries, an outline of needs, challenges and opportunities, and some insights into what net-zero journeys could look like for different types of businesses.

In recognising that some sectors within the travel and tourism industry had been able to make significant and speedy reductions to their carbon emissions, the report identified a number of companies where early progress has been made including the Accor Group, Bucuti and Tara Beach Resort in Aruba, Intrepid, and Carnival Corporation. The Accor Group, for example, had reported continuous greenhouse gas reductions since launching its first sustainability programme in 2006, and here reducing emissions has been focused upon food waste and buildings. More specifically, the Accor Group reported taking a range of initiatives to reduce food waste and to promote healthy and sustainable food, and that all its construction and its renovation work were low carbon projects. Carnival Corporation, the cruise operator with a fleet of over 100 vessels across ten brands, has set out its ambition to be carbon neutral by 2050, and its activities to reduce

emissions include optimising itinerary planning, utilising more liquefied natural gas, and looking to use cleaner shore power.

More generally, the World Travel and Tourism Council report claimed that the travel and tourism industry was committed to emission reduction targets, and that of a sample of 250 businesses across the industry, 42% had set climate targets. However, there were marked variations within the industry. Some 34% of the 17 hotel chains included in the sample had set a carbon reduction target and 4 were part of the Race to Zero campaign, a global campaign to rally leadership and support from a wide range of stakeholders for a zero-carbon emissions future. While 84% of cruise lines reported defining a decarbonisation target, the majority of these companies did not report their scope 3 emissions or only reported emissions related to employee commuting. Only 14% of the travel agencies reported having a sustainability target and none had a long-term emissions target.

Looking to the future the report identified a number of challenges faced by companies in moving to a net-zero future. Four common challenges, namely emission measurement and reporting; regulatory frameworks and government support; financing; and dependence on local infrastructure; were identified. More specific challenges were associated the different businesses within the tourist industry. Tour operators, for example, were seen to face challenges in addressing target setting, dependency on infrastructure and trip emission calculation, while cruise operators faced challenges posed by the availability, and prioritisation, of decarbonisation solutions, reporting scope 3 emissions, and the fragmented regulatory landscape.

The mini-case studies provided some specific insights into how three of the major players within the tourism industry have approached the transition to net-zero emissions. The Walt Disney Company (2022) emphasised its belief that business has an integral role to play in the transition to a low carbon future and emphasised its commitment 'to achieving net-zero greenhouse gas emissions by 2030.' More specifically, the company reported addressing its scope 2 and 3 emissions through a science-based reduction hierarchy, avoiding emissions through sustainable design, reducing emissions through efficiencies, replacing high carbon energy sources with lower carbon alternatives, and investing in natural climate solutions. The company also explicitly recognised that its extended value chain, including those associated with the production of consumer goods, also generated substantial scope 3 emissions, and claimed to be working to identify all the sources of these emissions.

In reporting its commitment to purchase, or produce, 100% zero carbon electricity by 2030, the company outlined details of some of its initiatives which were contributing to this goal. In 2021, for example, the company reported the completion of the installation of a solar array, which will supply 70% of the power for the Hong Kong Disneyland complex. In Florida, US, by 2023, 40% of the Disney theme parks electricity needs will be met by solar facilities. At the same time, the company, have also invested in energy efficiency projects, including the installation of Edison-style LED light bulbs that reduce energy consumption, utilising fuel efficiencies and low carbon fuels, and trialling low carbon shipping pilot schemes on its cruise vessels.

The Walt Disney Company also reported on its investment in natural climate solutions to 'provide immediate emission reductions until technological solutions are available and accessible' (The Walt Disney Company 2022). Here the company claimed to 'invest in high-quality, verified and rigorously vetted natural climate solutions that generate meaningful carbon reductions as well as positive social and economic impacts' (The Walt Disney Company 2022). In illustrating such investment, the company cited its work with the Wildlife Conservation Society in the conservation of the Keo Seima forest in Cambodia, where the sustainable use of land and resources protects habitats and prevents further release of carbon into the atmosphere from deforestation.

Under the banner 'Paving the Way to Net-Zero', Hilton (2022) outlined is plans to reduce its environmental footprint as part of its commitment to 'pave the way to a net-zero future for our company and the global travel and tourism industry.' Further, the company asserted its belief that it was in the long-term interests of its business to build and operate sustainable, efficient hotels, and that such a goal was consistent with the expectations of a growing number of consumers. Hilton claimed to be the first company in the industry to set science-based targets to reduce its greenhouse gas emissions and to be continually looking to 'promote best practice in emissions reductions and net-zero targets in line with climate science' (Hilton 2022).

The company's primary source of emissions comes from its hotels and the company reported that although hotel occupancy levels declined during the COVID-19 pandemic, 2021 saw an increase in energy consumption, across its global portfolio. However, the company claimed that the pandemic provided an opportunity to collect data to enable it to optimise the efficiency of its hotel operations in times of reduced occupancy, including partial building shutdowns, variable plant load operations and the implementation of enhanced building controls. At the same time, as part of Hilton's partnership commitment to the US Department of Energy's Better Climate Challenge-a national initiative committed to reducing greenhouse gas emissions-the company made a public commitment to a more than 50% reduction in greenhouse gas emissions across its managed hotel operations over the next 10 years.

Hilton partnered with South Pole, a Swiss carbon finance company, to purchase carbon credits, and the partnership has supported a number of projects. The credits supporting these projects were purchased to offset unavoidable emissions. The company is committed to develop mitigation plans for existing properties as well as for developments in high risk areas. The company has also worked with the World Wildlife Fund to identify important destinations that might be experiencing higher social and environmental stress to help prioritise its destination stewardship initiatives. Hilton also reported on a wind energy project in the Indian states of Rajasthan, Andhra Pradesh, Madhya Pradesh, and Telangana, which looks to tackle climate change by providing a renewable source of electricity to the Indian grid.

Marriott International (2022) emphasised that its approach to 'reducing greenhouse gas emissions is centred around the implementation of technologies to track energy consumption, investments in efficiency projects, and the increased

use of renewable energy.' In looking to manage the environmental footprint of its hotels, and to assist with the effective management of carbon emissions and energy consumption, the company's internal reporting platform supports the tracking and management of environmental data across the Marriott's portfolio of hotels. The company also reported regularly reviewing its performance against its carbon reduction and renewable energy goals. Here the company emphasised its commitment to 'a science-based emission reduction target in line with 1.5-degree centigrade emissions scenarios, and set a long-term science-based target to reach net-zero value chain greenhouse gas emissions by no later than 2050' (Marriott International 2022).

Marriott International (2022) reported on its '2025 Carbon Reduction Goal', and here the focus was 'to reduce carbon intensity per square metre of conditioned space by 30% from its 2016 baseline.' However, the company also reported that it expected to retire its 2025 carbon reduction goal and move to an absolute carbon reduction goal as part of its aim to reach net-zero greenhouse gas emissions by 2050, if not before. At the same time, the company also reported on moving towards 'improving energy efficiencies' (Marriott International 2022) and here it reported that it, and its ownership groups, looked to evaluate energy efficiency opportunities, including the implementation of energy and environmental action plans, retro-commissioning, lighting retrofits and building automation systems. In 2021, for example, the company reported that a number of its managed hotels had implemented energy efficiency projects.

Marriott International's '2025 Renewable Energy Goal' was focused on a commitment to 'source a minimum of 30% of its overall electricity from renewable energy by 2025' (Marriott International 2022). Here, the company emphasised that its company properties and its ownership groups, continued to invest in on-site renewable energy solutions, and reported that such investments were beneficial in delivering increased energy security and control over costs and supply. By way of illustrations of such benefits Marriott International cited the installation of a solar photovoltaic system at Wailea Beach Resort in Hawaii, US, the installation of over 400 thermal solar panel collectors at the Dead Sea Marriott Resort and Spa at Amman, Jordan, and the installation of over 2,000 solar panels at the Ritz-Carlton at Male, Maldives.

## Reflective Discussion

The findings suggested that many tourism companies are looking to address the transition to net-zero emissions, and provided some illustrative outlines of how three major players within the tourism industry are approaching this transition. The World Travel and Tourism report reveals a mixed picture in that while many of the sampled companies claimed a commitment to emission reduction targets, the majority did not have such targets, and there was a marked variation in the commitment levels across the sectors of the travel and tourism industry. As such, this can be seen to call into some question the extent to which the transition to net-zero greenhouse gas emissions by the tourism industry by 2050 is a realistic goal.

The three mini-case studies illustrated how the selected companies were approaching the transition to net-zero emissions, and here the focus was a range of initiatives including, improving energy efficiency, a switch to renewable energy sources, and investment in natural climate solutions. That said, the specific illustrative examples used to evidence some of the companies' commitments to transition, and to net-zero emissions, must be seen as just that, examples rather than universal practice.

While there is evidence that the tourism industry is making some progress in transitioning to net-zero emissions, four sets of more general issues merit reflective discussion. Firstly, the concept of net-zero is seen as flawed by some critics. Friends of the Earth Scotland (2022), for example, claimed that 'the concept of net-zero is increasingly used to disguise inaction', with 'companies and corporations adopting net-zero targets rather than real zero targets.' Further Friends of the Earth Scotland (2022) argued 'the problem with net-zero is that it leaves the door open to continue emitting greenhouse gases in the short term on the basis that one day they will be sequestrated or captured and stored', and that 'this kicks real action to reduce emissions into the long grass, by which time devastating climate impacts will be locked in if it turns out the technologies don't work.'

Secondly, while many companies within the tourism industry have emphasised the role of natural capital solutions and offsetting, for example by avoiding deforestation and sequestering emissions through tree planting and peatland restoration, this approach has its critics. Friends of the Earth (2021) argued that 'carbon and nature offsetting does not work', and that 'it cannot be made to work at scale, undermining the claims that offsets are a valid part of net-zero strategies.' More specifically, Friends of the Earth (2021) argued that 'carbon offsetting and nature offsets' are 'founded on assumptions of equivalence – that it is possible to trade off harm in one location with good intentions elsewhere. But it is clearly not the case for nature, if only because each habitat is unique and not replaceable.' Further, Friends of the Earth (2021) argued that 'burning fossil fuels releases geological carbon from what is essentially a permanent carbon store. But capturing carbon biologically in natural habitats and ecosystems – by tree planting, peatland restoration and so on – is very different because carbon is retained for a much shorter duration.'

Thirdly, some tourism companies, including the Walt Disney Company, as cited earlier, have reported employing natural climate solutions, until technological solutions are available, but visions of technological solutions promoting a transition to net-zero emissions have met a mixed reception. On the one hand, while McKinsey Company (2022), for example, argued that 'developing and deploying climate technologies is critical for the world's net-zero agenda', it also suggested that 'reaching net-zero emissions will require an immense effort to invent, refine, and deploy climate technologies.' Friends of the Earth Scotland (2022) argued many of the 'speculative negative emission technologies' are 'politically and practically unfeasible, and are also likely to cause wider environmental damage and human rights abuses.' More generally, Schor (2005) suggested that 'the popularity of technological solutions is also attributable to the

fact that they are apolitical and do not challenge the macrostructures of production and consumption.'

Finally, the tourism industry's vision for the transition to net-zero greenhouse gas emissions must also has to be seen within the idiom of the continuing growth of tourism, and this, in turn raises 'the growth paradox', namely 'can tourism ever be sustainable?' (World Economic Forum 2017). Here the World Travel and Tourism Council (2021) takes a positive position arguing that 'the adoption of sustainable practices can strengthen business performance through reduced energy consumption and costs, fuel efficiency improvements, waste reduction, increased risk preparedness, as well as increased brand awareness and revenue growth opportunities. These in turn can increase the competitive advantage of a business and make it more attractive for consumers, employees, and investors.' However, Fankhauser et al.'s (2022) argument that 'net-zero must be aligned with broader sustainable development objectives, which implies an equitable net-zero transition, socio-ecological sustainability and the pursuit of broad economic opportunities', would seem to pose daunting, and possibly intractable, challenges for the tourism industry.

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# Assessing the Internal Critical Success Factors of Service Quality in Boatels: A Case Study of Egypt

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*Critical success factors (CSFs) are inputs that, directly or indirectly, can contribute to a project's success. CSFs contain a variety of components, traits, requirements, or characteristics that, if properly upheld, can have a significant impact on the project's performance. Primarily internal and exterior CSFs can be easily recognized. Each of these factors cost a lot of investment whether it is internal or external. Finding essential internal success variables that have an impact on service quality for better use of investment is the aim of this study. Holistically, this study aims to examine the key success internal factors and their impact on providing high-quality service in Cruises. Internal CSFs include six variables. i.e., Senior Management Experiences, Human Resources Management (HRM), Customer focus Service culture, Management Information System (MIS), and Social Responsibility. A scale for each of these variables was used. Two hundred sixty-four returned forms were analyzed using Structural equation modeling (SEM) was used to test the measurement model of service quality internal critical success factors using AMOS 4.*

**Keywords:** *internal CSFs, CSF elements, service quality (SQ), cruise*

## Introduction

Cruises are regarded as one of the tourist attractions that set them apart from other tourist attractions because, in addition to offering all the amenities, services, and entertainments found in other facilities, they provide an extra privilege in the itinerary (Alsaid et al. 2020). A cruise is described as "to travel by sea aboard a ship for pleasure, generally visiting several ports, which carries guests from place to place." With restaurants, bars, sports facilities, retail malls, entertainment venues, communication centers, etc., these floating resorts replicate their land-based equivalents (Dowling 2006). Numerous archaeological sites may be found along the Nile River, particularly at Luxor and Aswan. These attractions blend historical sites with plateaus and greenery, making them a haven for tourists looking to learn about the culture and enjoy the attractiveness of nature (Alzoka 2006). This wonderful atmosphere complements travel through Cruises and cruise ships. Some of these hotels are also equipped for conferences and corporate meetings and are an unprecedented experience to blend work with pleasure and entertainment (Alglad 1996). The advantages of Cruise activity are 1. Flexibility to move between affects tourism areas spread from Luxor to Aswan. 2. Enjoy a healthy atmosphere, natural climate, sun, and outside. 3. Increase the duration of the tourist's stay in the

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visiting area, thereby increasing the occupation.4. Reduced investment size used to create Cruise compared to the hotel is at a ratio of 1:10 (Hago 2003).

Definitions of "Cruise": It is a mobile tourist facility that contains the means of subsistence, rest, and recreation according to many variables, including the size of the cruise, the length of the trip, and the type of water in which it sails, the quality of guests and other variables (Alsaid et al. 2020). A cruise is "a passenger boat offering cruises on the Nile with accommodation and food and beverage services" (Egyptian Hotel Association 2020).

## Service Quality

Mahdi (2017) said that businesses nowadays face numerous difficulties, particularly in light of the growing competition and the fact that customers' purchase decisions now also take into account the service quality, which has evolved into one of the key facets that visitors seek out. Additionally, he stated that the word "quality" has its roots in the Latin word "qualitas," which originally denoted precision and perfection. Today, it refers to a thing's nature or the degree of its hardness. The American Society for Quality (ASQC) defined it as "the overall attributes and characteristics of a good or service which capacity corresponds to the required loyalty or implicit needs" (Al-Khulani 2007). The American Marketing Association (AMA) defined service as activities and benefits that are offered for sale or those associated with a useful commodity (Raqad 2008).

The activities that are supplied to guests, such as food, lodging, and relaxation, to fulfill and gratify their desires and requirements, are aong the attributes of service quality; it is also described as being moral (Mishal 2009). Shiyad (2017) defined it as a collection of operations with a utilitarian focus, made up of a variety of tangible and intangible components that customers perceive to meet their wants and generate profits for the business. The result of a customer's assessment of their expectations for a service and their judgment of how effectively the service was delivered is known as service quality (Lehtinen and Lehtinen 1982, Parasuraman et al. 1994).

## Importance of Service Quality in Cruises

Quality was examined by Rust et al. (1995), Alwan (2005), Qotb (2014), and Baris (2016), who concluded that it is the foundation of many activities, particularly in the field of hotel activities. As a result, quality has become a key component of the procurement process and a crucial element of survival in the hotel industry market. Enhancing product quality results in a) achieving customer satisfaction; b) customer confidence in the product and keeping customer loyalty; c) maintaining a good reputation in the market and among competitors, thus increasing demand; d) improving performance level of services and employees’ competencies; e) feeling of pride among employees' that leads to decrease in turnover rate; f) increasing

profitability. This is aligned with (Knutson et al. 1991) that when people choose a place to stay and accommodate most individuals evaluate service quality factors.

## Measurements of the Hotel Services Quality

Abd el-mohsen (1996), Altaie and Qadara (2008), Al-sawaf and Ismail (2007), Qotb (2014), Cherfi (2002) and Mahdi (2017) detected the dimensions of service quality in four magnitudes: a) reliability or the ability to continue providing services with the required quality without failure; achieving service promises, b) tangibility or the elements used in the provision of services; like tools and equipment, c) assurance; or matching service design and performance to pre-determined specifications and standards, d) responsiveness; or the speed of response and flexibility in meeting the customers' needs and providing them with appropriate service, e) credibility, safety, and trust; or confidence and security in meeting the needs and services of customers and satisfying their service needs, f) competency; or performance competencies of employees and their functional and personal skills and g) empathy; or the sense of standards, general form of service, the gain of the client's sympathy through courtesy, polite treatment, and the ability to understand his needs.

## Cruise's Service Quality Critical Success Factors

Whether in the zone of industrial sector establishments or the zone of service sector establishments, CSFs are the foundation of the majority of establishments (Daniel 1961). Rubin and Seeling (1967) assessed the impact of project managers' experience as a success factor in product quality and employed CSF for the first time in project management. These are a few crucial areas where success is required for the company to prosper. If the outcomes in these areas are unsatisfactory, the organization's efforts will not only be necessary but also strongly recommended (Rockart 1979). CSFs can be generated from a company's internal environment which includes goods, processes, people, and perhaps structures of the company. These will represent the company's fundamental skills and competencies that are crucial to its competitive advantage (Duchessi et al. 1989). CSFs fall into two categories, i.e., Internal CSFs that highlight a company's essential competencies for market survival such as people, goods, and processes (Berry et al. 1997, Duchessi et al. 1989) and External factors such as competition and market conditions that are often difficult to manage and handle (Howell 2010). And external CSFs "are less controlled than internal CSFs, yet they may nonetheless be amenable to various degrees of monitoring and management" according to one characteristic (Brotherton and Shaw 1996). Several researchers in the hospitality industry have conducted field or survey-based studies to identify CSFs (Eyster and Goldman 1992). However, organizations that identified CSFs and implemented their use through adequate measurement, feedback, and

management had a greater return on equity, than companies that didn't use CSFs (Jenster 1987).

Critical success factors (CSFs) are "those few key areas of activity in which favorable results are necessary for a manager to reach the goals". These are a group of factors that must be present for a project to succeed (Rockart 1982). And are “those things that must be done if a company is to be successful” (Freund 1988). They are also a limited number of variables, which secures satisfactory outcomes and successful competitive performance of an association a division, or an individual (Russell and Jaselskis 1992). CSFs are also a set of activities carried out by the organization that contributes greatly to the success of work for an organization and will ensure its successful competitive performance for it (Richard and William 2008). It is possible that 20% of critical success factors can stimulate about 80% of an organization's achievement (Mohammed 2018). Each organization has its critical success factors which are determined by its structure, strategy, location, and service activity (Alharthi 2014). CSFs will provide a business with a competitive advantage and are the top line of a project management company's success in performing responsibilities. Based on the foregoing debate the researchers decided to investigate the effect of six internal CSFs that were continuously regarded as critical to service progress. The following parts are devoted to exploring the internal critical success factors, which are senior manager experiences, human resources management, Management Information systems (MIS), service culture, social responsibility, and Customer focus (Howell 2010).

*A) Senior Management Experiences*

It is common knowledge that employees will work harder and know more about how to accomplish tasks and goals the more effective the managerial leadership. An effective manager may go from managing to leading because he possesses both the management and leadership skills necessary to accomplish organizational objectives. The Organization must concentrate on these aspects if it is to grow, prosper, maintain a high degree of success, and keep up with changes in the environment (Khamis 2018). Lester (1998) explained that senior management commitment is a critical success factor for service quality. Al-Ageeli and Alzobaee (2016) also indicated that the commitment of senior management is a critical success factor in improving the service quality.

*B) Human Resources Management (HRM)*

In several pieces of research, it was found that how supplying good care to your staff can lead to providing excellent care to your customers (Rauyruen and Miller 2007). However, a depressing fact is clear. When employees are dissatisfied or unhappy with their employer, they may express their displeasure to the customers (Reynolds and Harris 2005). HRM concept has been drawn in the middle of the nineteenth century in British institutions and organizations in particular where a number of those organizations were concerned with the need to improve and develop working conditions (Osman 1998). It is the administration

that believes that working individuals at various stages and functional levels are the most important resources in the organization and its duty is to provide them with all the means through which they can carry out their work and perform the tasks assigned to them (Omar 2021). Some authors said that HRM is a critical factor for service quality success (Sureshchandar et al. 2001). Some HRM practices can become a success factor for SQ achievement (Brah et al. 2002). Howell (2010) gave evidence to this proving that human resource management is a critical success factor in service quality.

### *C) Customer Focus*

Customers evaluate the quality of service based on whether the company meets and perhaps even exceeds their expectations, Service quality can be defined as a performance comparison to expectations, and clients use comparable criteria to assess service quality depending on the type of service. However, satisfaction with service is mostly determined by the customer's experience, and only after receiving the service, the customer can rate the quality. Service failures, which are gaps in the service delivery that results in failure to meet a customer service expectation, are rather common in the hotel industry (Parasuraman et al. 1996). These failures frequently involve worries about service quality, reservation challenges, and lodging accommodations issues. Eventually, they result in low client satisfaction a proclivity for unfavorable word of mouth, and a desire to switch to another product (Browning et al. 2013). Sureshchandar et al. (2001) said that customers focus on CSF to rest assured of service quality. Customer focus is the most critical success factor for managing the product or service quality and improving business performance in the services sector (Brah et al. 2002). Some researchers had detected and classified CSFs in UK Budget hotel operations in terms of customer focus specifically (Brotherton 2004). Customer focus and satisfaction are CSFs for service quality in the hospitality sector (Fryer et al. 2007)

### *D) Service Culture*

Without Service culture "standards" the business and service sector would be unable to operate. It could be units of measurement such as quantities or distances. The results will be chaotic without standards. It's also required to protect society and enterprises from potentially detrimental factors, such as environmental pollution, potential automotive safety difficulties, and employment discrimination issues (Geltzer 2009) the last of which encompasses the relationship between employees and employers. Typically, the government introduces these guidelines after a significant amount of public outcry requires something that "should be done" (Crandall and Crandall 2008). Service culture is a critical success factor that makes deference and success of service quality in hotels (Sureshchandar et al. 2001). Service culture, attractive image, and value for money are the focused factors by guests (Wilensky and Buttle 1988).

*E) Management Information System (MIS)*

Continuous improvement in the efficiency and effectiveness of Management Information systems (MIS) is necessary in light of recent breakthroughs. In this field, the introduction of new concepts and philosophies in terms of politics and economics is fierce (Abu-Musa 2009) to maximize advantages and minimize risks associated with Management Information System (MIS) initiatives. Firms must have a strong relationship between business and Management Information systems (MIS) (Grembergen 2004). There is a connection between the effect of information system communication and the quality of tourism services. Examples include technology to build philosophical thinking about the nature of the product and the current administrative vocabulary, to apply them to the quality of tourist desired and hotel services preferred (Hamady et al. 2018). Management Information systems (MIS) is a critical success factor for service quality (Sureshchandar et al. 2001).

*F) Social Responsibility*

According to Sureshchandar et al. (2001), social duty is a significant CSF for SQ. Howell (2010) demonstrated the importance of social responsibility as an "SQ" success factor in hotels.

In general, these internal critical success factors can assist managers in improving the quality of the services provided by the Cruises, particularly during lean business times. Although it could take some time for department managers and their workers to adopt these criteria, doing so will enable them to improve service quality performance.

In the case of this research, there is a special enterprise that is responsible to remove rubbish from areas designated for garbage collection that is contracted by hotels and Cruises. The trash from Cruises is picked up by a speedboat. Hotels and restaurants that are contracted purchase garbage pickup bags. These are collected by hotel staff members who then check them for security before stacking them in these designated areas of pick up. These sacks are loaded onto the contractor's car. The Al-Hubail area's official dumpsite is where waste is moved and disposed of. The comment on the service offered by the contractor is overall positive (Egyptian Ministry of Local Development 2010).

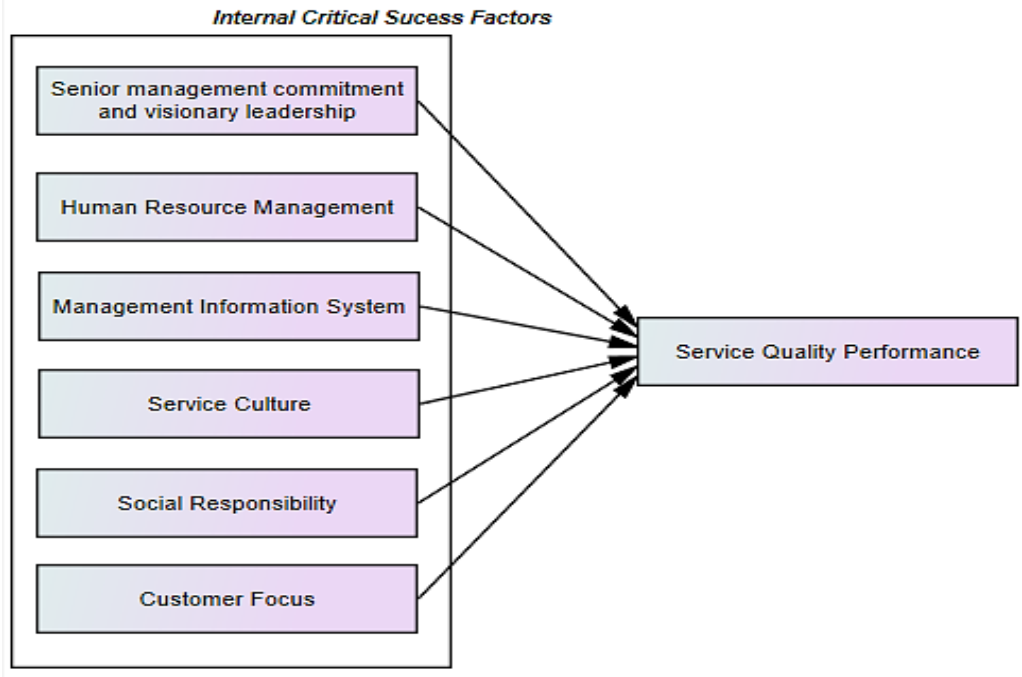
Hence, literature confirms the importance of defining critical success factors to improve employees' service performance therefore, the researchers focused on examining the internal critical success factors of service quality specifically in Cruises at Luxor and Aswan. Following these views, six hypotheses and a proposed model (see Figure 1) are presented below:

**H1:** Senior management commitment and visionary leadership have a positive impact on service quality performance

**H2:** Human resource management practices have a positive impact on service quality performance

**H3:** Management Information System has a positive impact on service quality performance
**H4:** Service culture has a positive impact on service quality performance
**H5:** Practicing social responsibility rehearses has a positive impact on service quality performance.
**H6:** Customer-focused processes has a positive impact on service quality performance

**Figure 1.** *Proposed Research Model*




## Research Methodology

This study employed a paper-based survey because the data-gathering instrument was adapted and revised from previous studies (Uppal et al. 2018, Stefano et al. 2015, Irfan and Kee 2013). This survey was used to examine the effect of independent variables of internal critical success factors over the dependent variable of service quality performance in the Egyptian Cruise sector.

The final version of the survey was divided into two main sections. Firstly, managers were asked to rate six variables using 5 points Likert scale (33 items); Senior management commitment and visionary leadership (SMC) scale with four items, Human Resource Management (HRM) scale with seven items, and Management Information System (MIS) (IAS) scale with five items, Service Culture (SC) scale with four items, Social Responsibility (SRP) scale with four items, Customer Focus (CUS) scale with five items and Service Quality Performance (SQ) scale with five items. Managers were invited to fill out their demographic profile in the second section

A stratified random sampling technique of level managers in Egyptian Cruises was considered for this paper from Feb 2021 through January 2022. Moreover, the Cruises that took part in this study were chosen from 5 star cruises using a convenience sampling technique. Three hundred (300) sampled managers were selected from fifty Cruise, 6 managers were selected from each cruise. Two hundred and sixty-four (n 264) surveys were returned and were ready for utilization representing a response rate of 88 percent.

For the descriptive analysis, SPSS version 20 was used. On the other hand, Structural equation modeling (SEM) was used to test the measurement model of service quality internal critical success factors using AMOS 4. Moreover, goodness-of-fit measures were utilized to assess the structural fit of the hypothesized model. The final questionnaire items are listed in Table 1.

**Table 1.** *Construct Measurements*

| Construct | Code | Measure | Mean | Std. dev. |
|---|---|---|---|---|
| **Senior management commitment and visionary leadership** | SMC1 | Senior managers are committed to the TQM philosophy | 3.939 | 1.49 |
| | SMC2 | Senior managers allocate resources and time for quality improvement | 3.901 | 1.39 |
| | SMC3 | Senior managers consider employees a valuable resource | 3.992 | 1.38 |
| | SMC4 | Senior managers integrate quality in strategic planning | 3.803 | 1.46 |
| **Human Resource Management** | HRM1 | The HRM department of Cruises relies on selective hiring of employees | 3.859 | 1.41 |
| | HRM2 | The HRM department of Cruises organizes various training programs for employees | 3.935 | 1.34 |
| | HRM3 | The HRM department of Cruises involves employees in decision-making | 3.568 | 1.36 |
| | HRM4 | The HRM department of Cruises applies fair and attractive reward system | 3.462 | 1.35 |
| | HRM5 | The HRM department of Cruises patronizes attention to cross functional and quality teams | 3.450 | 1.32 |
| | HRM6 | The HRM department of Cruises cares about employees empowerment | 3.363 | 1.30 |
| | HRM7 | The HRM department of Cruises encourages employee for quality initiative | 3.632 | 1.31 |
| **Management Information System** | MIS1 | Cruises apply an effective customer care system | 3.731 | 1.44 |
| | MIS2 | Cruises apply an effective communication system | 3.727 | 1.34 |
| | MIS3 | Cruises use advance technology | 3.545 | 1.28 |
| | MIS4 | Cruises have a system for efficient use of data | 3.450 | 1.28 |
| | MIS5 | Cruises have a documented procedures | 3.947 | 1.31 |
| **Service Culture** | SC1 | Cruises' customer service is the first priority | 3.871 | 1.38 |
| | SC2 | Cruises' service is critical for success | 3.863 | 1.34 |
| | SC3 | Service involvement in Cruises of everyone at all levels | 3.693 | 1.45 |
| | SC4 | In Cruises there is a strong relationship among employees and employer | 3.246 | 1.62 |
| **Social Responsibility** | SRP1 | Cruises believe in social citizenship principles | 3.697 | 1.44 |
| | SRP2 | Cruises have the sense of public responsibility of | 3.715 | 1.33 |

| | | | | |
|---|---|---|---|---|
| | | environmental matters (i.e., Water use; Air pollution) | | |
| | SRP3 | Cruises apply procedures of health and safety at work | 3.689 | 1.36 |
| | SRP4 | Cruises respect the concept of treating all type of customer at equal level (ensure equality) | 3.636 | 1.37 |
| **Customer Focus** | CUS1 | Services as promised | 3.882 | 1.41 |
| | CUS2 | Service at promised time and schedule | 3.818 | 1.34 |
| | CUS3 | Effective use of customer feedback | 3.738 | 1.32 |
| | CUS4 | Providing services right the first time | 3.609 | 1.32 |
| | CUS5 | Responding customer complaints promptly | 3.431 | 1.32 |
| **Service Quality** | SQ1 | Cruises' customers belong to a very exclusive class whose needs are unique | 3.878 | 1.43 |
| | SQ2 | Cruises' customers are very particular about the service they receive | 3.950 | 1.34 |
| | SQ3 | Cruises would not succeed in hospitality market without providing excellent service | 3.780 | 1.39 |
| | SQ4 | Cruises seeks to meet customer expectations | 3.791 | 1.41 |
| | SQ5 | Cruise customers are satisfied with the speed of response and flexibility of service provided. | 3.526 | 1.37 |

## Results

### *1. Personal Profile*

This section concentrated on the demographics of the managers, including age, gender, education, department, and experience. According to Table 2, the majority of participants were middle-aged, with 29.5 percent of respondents between the ages of 41 and 50 and 30.3 percent of managers between the ages of 31 and 40. In terms of gender, 79.2 percent of managers (n=209) are male, which means that they represented a somewhat higher proportion of respondents than women (20.8 percent) (n=55). Simply 20.8 percent of participants have post-secondary education (two years technical diploma), whereas the majority of participants (79.2 percent) only have a university degree. Moreover, the majority of managers work in the departments of human resources and sales and marketing with percentage of 31.1 and 26.9 respectively. Finally, regarding the length of employment, the majority of managers had worked for the hotel for longer than 11 years.

**Table 2.** *Profile of the Respondents (N=264)*

| **Demographic Data** | | **Frequency** | **%** |
|---|---|---|---|
| **Age** | 21 up to 30 years old | 52 | 19.7 |
| | 31 up to 40 years old | 80 | 30.3 |
| | 41 up to 50 years old | 78 | 29.5 |
| | More than 50 years old | 54 | 20.5 |
| **Gender** | Male | 209 | 79.2 |
| | Female | 55 | 20.8 |

| | | | |
|---|---|---|---|
| **Educational level** | University | 209 | 79.2 |
| | Post | 55 | 20.8 |
| **Department** | Rooms 'cabins' | 47 | 17.8 |
| | F & B | 40 | 15.2 |
| | Sales & Marketing | 71 | 26.9 |
| | Human Resources | 82 | 31.1 |
| | Maintenance | 11 | 4.2 |
| | Other | 13 | 4.9 |
| **Experience** | 1 up to 5 years | 27 | 10.2 |
| | 6 up to 10 years | 37 | 14 |
| | 11 up to 15 years | 137 | 51.9 |
| | More than 15 years | 63 | 23.9 |

## *2. Analysis of Measurement Model*

Confirmatory Factor Analysis (CFA)

In this research paper, a fit of confirmatory factor analysis (CFA) model was used to perform configuration reliability and validity tests. Table 3 shows both the results of the structural model and its constructs' factor loading. These results imply that the initial model was not a good fit. Therefore, it is required to modify some indices to enhance the overall model's fit. Standard residual covariance was examined to see if it may considerably reduce the model fit. As a result, few items were covariate in the latent variables. HRM3 and HRM4; HRM5 and HRM6 in HRM latent variable, MIS1, and MIS2; MIS1 and MIS3; MIS3 and MISA4 in MIS latent variable, SC1and SC 2; SC 2 and SC 3; SC 3and SC 4 in SC latent variable, CUS1, and CUS2; CUS1 and CUS4; CUS3 and CUS4 in CUS latent variable, SQ1 and SQ2; SQ1 and SQ4 in SQ latent variable were covariates.

Finally, the results of the estimation from the model yielded the overall fit indices for the good fit of the model fit was achieved for the measurement model, which was an acceptable threshold, with $\chi 2=1180.198$ with 493 degrees of freedom, $p<0.0001$, $\chi 2/df=2.39<3$ (Hair et al. 2010). To determine the model fit, indices at least three of NFI, RFI, CFI, IFI and TLI exceeded the minimum acceptable value of 0.90 (NFI=0.927, RFI=0.917, IFI=0.956, CFI=0.956 and TLI=0.950), representing a good fit model (Tucker and Lewis 1973, Hu and Bentler 1999). In addition, root mean square error of approximation (RMSEA) is $0.063<0.08$ (Arbuckle 2011).

**Table 3.** *Factor Loadings, Validity Analysis, and Reliability Test of the Measurement Model*

| **Construct** | **Factor Loading** | **CR** | **A** | **AVE** |
|---|---|---|---|---|
| Senior management commitment and visionary leadership | | **0.970** | **0.970** | **0.892** |
| SMC1 | 0.972 | | | |
| SMC2 | 0.953 | | | |
| SMC3 | 0.910 | | | |
| SMC4 | 0.941 | | | |
| Human Resource Management | | **0972** | **0972** | **0.833** |

| | | | | |
|---|---|---|---|---|
| HRM1 | 0.942 | | | |
| HRM2 | 0.893 | | | |
| HRM3 | 0.912 | | | |
| HRM4 | 0.913 | | | |
| HRM5 | 0.924 | | | |
| HRM6 | 0.910 | | | |
| HRM7 | 0.894 | | | |
| Management Information System | | **0.963** | **0.962** | **0.839** |
| MIS1 | 0.969 | | | |
| MIS2 | 0.960 | | | |
| MIS3 | 0.891 | | | |
| MIS4 | 0.896 | | | |
| MIS5 | 0.858 | | | |
| Service Culture | | **0.926** | **0.918** | **0.763** |
| SC1 | 0.978 | | | |
| SC2 | 0.971 | | | |
| SC3 | 0.858 | | | |
| SC4 | 0.646 | | | |
| Social Responsibility | | **0.969** | **0.968** | **0.887** |
| SRP1 | 0.969 | | | |
| SRP2 | 0.960 | | | |
| SRP3 | 0.947 | | | |
| SRP4 | 0.889 | | | |
| Customer Focus | | **0.965** | **0.966** | **0.848** |
| CUS1 | 0.956 | | | |
| CUS2 | 0.957 | | | |
| CUS3 | 0.942 | | | |
| CUS4 | 0.915 | | | |
| CUS5 | 0.829 | | | |
| Service Quality | | **0.974** | **0.973** | **0.880** |
| SQ1 | 0.957 | | | |
| SQ2 | 0.940 | | | |
| SQ3 | 0.955 | | | |
| SQ4 | 0.945 | | | |
| SQ5 | 0.893 | | | |

*Source:* Adapted from Uppal et al. (2018), Stefano et al. (2015) and Irfan and Kee (2013).
**CR** = composite reliability; **α =** Alpha reliability; **AVE** = average variance extracted

Reliability, Convergent Validity, and Discriminant Validity

Table 3 displays the results of CFA, which demonstrated that the lowest Cronbach's and construct reliability values were 0.918, indicating that the data is acceptable and reliable. This is done to ascertain the reliability of the managers' impression of their particular Cruise (Pallant 2005). Convergent validity was also estimated using CR and AVE. Furthermore, discriminant validity was assessed using both MSV and ASV values. Convergent validity for the CR and AVE indices was above the minimum allowed level, showing sufficient convergent validity. On the other hand, the square correlation of each pair of constructs and the AVE of each research construct were evaluated to ensure the discriminant

validity (see Table 4). This is a satisfactory level of internal consistency of the measures and there exist some common points of convergence (Hair et al. 2010).

**Table 4.** *Discriminant Validity for the Measurement Model*

| Variables | SMC | HRM | MIS | SC | SRP | CUS | SQ |
|---|---|---|---|---|---|---|---|
| Senior management commitment and visionary leadership (SMC) | **0.892** | | | | | | |
| Human Resource Management (HRM) | 0.891 | **0.833** | | | | | |
| Management Information System (MIS) | 0.837 | 0.827 | **0.839** | | | | |
| Service Culture (SC) | 0.742 | 0.737 | 0.733 | **0.763** | | | |
| Social Responsibility (SRP) | 0.786 | 0.793 | 0.819 | 0.750 | **0.887** | | |
| Customer Focus (CUS) | 0.831 | 0.815 | 0.806 | 0.725 | 0.842 | **0.848** | |
| Service Quality (SQ) | 0.781 | 0.795 | 0.781 | 0.770 | 0.829 | 0.808 | **0.880** |

*Note:* The bold values along the diagonal line are the AVE values for the constructs, and the other values are the squared correlations for each pair of constructs.

## Structural Model and Hypotheses Testing

*The Hypothesized Relationships*

Given the above, the hypothesized relationships were tested using standardized path coefficients (ß) as shown in Table 5. These estimates can be described as positively strong since the majority of Absolute t-value>3.29, p<0.001. The findings revealed strong relationship between human resource management, social responsibility, customer in focus and service quality performance, supporting H2 (β=0.116; t value=4.89); H5 (β=0.209; t value=9.37); and H6 (β=0.571; t value= 24.5) respectively. Meanwhile, senior management commitment and visionary leadership (β=0.049; t-value=2.31); Management Information System (MIS) (β=0.056; t-value=2.38) and service culture (β=0.002; t-value=0.110) do not have any relations with Cruise service quality performance, rejected hypotheses of H1; H3 and H4 respectively.

**Table 5.** *Standardized Parameter Estimates of the Structural Model*

| H | Path | | Beta coefficients (ß) | t-values | Results |
|---|---|---|---|---|---|
| H1 | Senior management commitment | Service Quality | .049 | 2.31 | Rejected |
| H2 | Human Resource Management | Service Quality | **.116** | **4.89*** ** | **Supported** |
| H3 | Management Information System) | Service Quality | .056 | 2.38 | Rejected |
| H4 | Service Culture | Service Quality | .002 | .110 | Rejected |
| H5 | Social Responsibility | Service Quality | **.209** | **9.37*** ** | **Supported** |
| H6 | Customer In Focus | Service Quality | **.571** | **24.5*** ** | **Supported** |

*Absolute t-value>1.96, p<0.05; **Absolute t-value>2.58, p<0.01; ***Absolute t-value>3.29, p<0.001.

## Discussion and Implications

Cruises seek to improve its service quality by identifying critical success factors through dynamic tools whose measurements are determined by a model adapted from Uppal et al. (2018), Stefano et al. (2015), and Irfan and Kee (2013). This adapted model consisted of six critical success factors of service quality: Senior management commitment and visionary leadership (SMC), Human Resource Management (HRM), Management Information System (MIS), Service Culture (SC), Social Responsibility (SRP) and Customer In-Focus (CUS).

Firstly, the model found rejected for H1 which posits that the managers' commitment and their visionary leadership will raise service quality level in the Cruises. This hypothesis was assumed as a result of numerous studies (Irfan and Kee 2103, Çınar and Kaban 2012) which confirm that service quality levels increase effectively through committed managers. In this regard, this interpretation is consistent with (Jabnoun and Rasas 2005) research, found that management commitment is an essential part of the operation process, and there is not necessarily a relationship between the committed manager and the quality of provided service.

Several studies have emphasized the importance of human resources management to increase staff performance in all departments within the hotel (Çetinel et al. 2008). These studies indicated that the more attention paid to human resources management, the more improvement of provided services quality in hotels gets. Human resources management relays mainly on "selective hiring; various training programs; involve employees in decision-making; employees' empowerment. The research findings confirm these studies, supporting model H2.

With regards to Management Information systems (MIS), the results of this research revealed that there is no significant relationship between Management Information systems (MIS) and service quality performance in Cruises. This is probably because the information analysis system used may be various from one hotel to another, according to the system imposed by the top management of the hotel chain, or it may differ according to the ability and efficiency of the employee who deals with the system and not the nature of the system itself. For these reasons, the H3 model is not supported.

However, the results found rejected H4 which posits that considering service culture is one of the critical factors that play a positive role in increasing service quality in Cruises. These findings are inconsistent with Ueltschy et al. (2007).

Moreover, H5 suggests that there is a significant positive relationship between deference social responsibility and service quality performance in Cruises. The results provide support for (Morrison 1996).

At the end of the adapted model, the study emphasizes the significance of customer in-focus in Cruises. The results confirm the positive influence of such significance on service quality level, supporting H6. A customer's sense of sufficient attention will reflect on customer satisfaction. These results are similar to like the study of Heinonen et al. (2010) and Janvan and Wendyvan der Valk (2008).

In a nutshell, human resources management, social responsibility, and customer focus were highly supported as critical success factors in Cruises. The main conclusion here is that the most effective CSFs in cruises' case are all centered on

people other than management or even service culture. This means that guests tend to tolerate service snags attributable to toleration with people other than toleration with management or managerial systems.

## Limitations, Implications, and Future Research

Although this research examines the service quality critical success factors, as manifested by the level manager's evaluation and expanded on relevant research literature, it includes several limitations. First, this study solely focused on the Cruise industry and there are many differences between hotels regarding their types and characteristics. Therefore, future research can examine service quality critical success factor in other types of hotels. Moreover, this study employed only the internal critical success factors of service quality. Hence, future research can examine external CSFs. Finally, regarding methodology, the paper results were based on a questionnaire survey from the perspective of level managers, semi-structured interviews can be utilized as a qualitative approach to discussing the validity of these findings. It is evident also that investment in service quality should focus on people other than systems or managerial issues.

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