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The Financial, Social, and Environmental Impacts of Sustainable Practices on the Las Vegas Hospitality Market

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THE FINANCIAL, SOCIAL, AND ENVIRONMENTAL IMPACTS OF SUSTAINABLE PRACTICES ON THE LAS VEGAS HOSPITALITY MARKET

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Chapter 1

Introduction

Las Vegas, Nevada was founded in 1905 and has grown to become one of the largest tourist destination cities in the world. In 2014, over 41 million people visited Las Vegas, which is the highest visitation rate on record (Las Vegas Convention & Visitors Authority, 2015). Also, with its over 150,000 hotel rooms, Las Vegas can significantly increase its temporary population. Lastly, Clark County, the county in which Las Vegas resides, has over 2,000,000 residents (United States Census Bureau, 2015). This all alludes to the fact that Las Vegas requires large amounts of energy resources to operate the city.

A major portion of these resources are consumed by hospitality organizations and residents. As we continue to determine the best way to allocate our resources within the Las Vegas hospitality market, sustainability will play a huge role. In general, sustainability is anything a business can do to maximize resources and limit their impact on the environment. Many large operators within Las Vegas participate in sustainable practices. The hope is that those operators realize the impact their participation within sustainability has on our future generations, and smaller operators follow suit. In addition, they will continue to look for innovative ways to make a difference when it comes to their environmental impact.

Purpose Statement

The purpose of this professional paper is to examine the financial, social and environmental impacts that sustainability has had on the Las Vegas hospitality market. The reader will leave with an enhanced knowledge on the topic of sustainability and be able to understand if the aforementioned impacts drive change. This study will differ from previous studies as it takes a three-pronged approach in terms of impacts and will focus solely on the Las Vegas hospitality market.

Problem Statement

Businesses exist for many different reasons: to be a community partner, to offer products and services, and to sustain employment opportunities. Typically above all, businesses operate to generate revenue and turn a profit. This is where one of our biggest problems lies and the question I am attempting to answer is: Do Las Vegas hospitality organizations make sustainable decisions that have positive impacts on the environment and society, regardless of the financial costs?

Justification

Sustainability is important to Las Vegas hospitality organizations because they operate in an environment with constrained resources. Water supply is one such constrained resource and Lake Mead is and has been far below its normal level. This lake provides the potable water supply for Southern Nevada. Southern Nevada, which is anchored by Las Vegas, worked to reduce their water consumption by 32 billion gallons between 2002 & 2014 (Southern Nevada Water Authority, 2015). This pattern tells me that Las Vegas is aware of the footprint they leave on the environment and look for ways to reduce said footprint. This is where sustainability comes into play; efforts like the water reduction are led by hospitality organizations that not only participate, but educate their team members to do the same.

As the years pass, operators will need to strategize on how the choices they make not only affect their bottom line, but what effects they have on society and our local environment.

This study will attempt to clarify what sustainable decisions organizations have made in the past, what their impact has been, what drives change in terms of sustainability, and then what dictates their ability to make future decisions based on those prior practices. As Las Vegas is considered a leader in the hospitality industry, the broader hospitality market can apply practices shown to have relevant benefits. As I plan on making hospitality my long term career, it is important to me to ensure we are practicing sustainably for years to come.

Limitations

Hospitality organizations are not the only businesses that affect the environment. This is a limitation of this study as measurements of environmental impact may be skewed by non-hospitality firms; any positive affect created by a hotel, for example, may be undone by an industrial firm. In addition, as Las Vegas is a unique environmental situation, the results of this study may not be able to be applied to different hospitality markets. This study can only be applied to Las Vegas, or markets similar to it, but those hardly exist. Also, some firms may be unwilling to share their results as sustainable practices are sometimes a sore subject, especially if said firm is an environmental abuser. Lastly, it can be difficult to directly correlate financial impacts to sustainable practices. Some Las Vegas hospitality firms have large teams with vast resources to calculate the significance of sustainable practices, while other smaller firms may find it difficult to calculate the direct impact.

Chapter Two

Introduction

Las Vegas, as a hospitality market, is extremely competitive. Organizations are continuously looking to get an edge over their competition, whether it is through differentiated products or offering more value to the consumer. Sustainability is one of the tools organizations have to gain a competitive advantage. It is also a necessity in today's world with over 7 billion people on the planet. Humans need to ensure the availability of resources for future generations, all while today's businesses try to maximize the output of current resources to produce profit. Because sustainability is such an important factor, it is crucial to define the concept. According to UCLA's Sustainability Committee (2015), sustainability is defined as:

> The physical development and institutional operating practices that meet the needs of present users without compromising the ability of future generations to meet their own needs, particularly with regard to use and waste of natural resources. Sustainable practices support ecological, human, and economic health and vitality. Sustainability presumes that resources are finite, and should be used conservatively and wisely with a view to long-term priorities and consequences of the ways in which resources are used (para.1).

Sustainability is specifically imperative for Las Vegas as it has limited resources in a volatile climate with a large number of residents and high visitation rates. Both residents and visitors put pressure on the environment.

Las Vegas is a city thriving with hospitality. There is much opportunity for individuals, and the companies they work for, to ensure sustainability is captured in everyday interactions. There are also organizations that already lead the way on the topic of sustainability, but there remains ample opportunity for other organizations. One of the goals of this paper is to educate the reader on current sustainability trends and how those trends affect our lives. In addition, the challenges that Las Vegas faces in terms of sustainability will be brought to the forefront. Finally, throughout part two, topics such as the history of sustainability and the impacts sustainability has made on society will be reviewed. In the end, the reader will have an understanding of why businesses make the decisions they do in regards to sustainable practices and how those decisions affect organizations.

History

The history of sustainability is vague and does not have a definitive starting point. The history of sustainability issues can be traced back to ancient Egypt, Mesopotamia, Greek, and Roman civilizations where they dealt with deforestation and land infertility (Du Pisani, 2007). Although it is a buzz word in today's society, sustainability did not appear for the first time in English text until the second half of the 20th century; the equivalent word for sustainability in Dutch, German and French had been used for centuries prior (Du Pisani, 2007).

In the 18th century, concern about population growth and the consumption of resources began to surface. Fast forward to the 20th century, post world war two, there was a fluctuation between optimism and pessimism. After the war ended, there was a renewed optimism about raising living standards and commercial expansion (Du Pisani, 2007). This new found optimism raised many questions about how it would all be sustainable. By the late 1960s and early 1970s, the melting pot of growth and progress all started pointing towards one idea: sustainable development.

According to Mebratu (1998), sustainability became an actual practice after the UN-sponsored World Commission on Environment and Development (WCED) report, *Our Common Future*, was published in 1987. "Despite its acclaimed vagueness and ambiguity, the WCED definition of sustainable development has been highly instrumental in developing a "global view" with respect to our planet's future," (Mebratu, 1998. pg. 2). The WCED was called upon by the General Assembly of the United Nations to come up with a "global agenda for change (WCED, 1987). The WCED (1998) came up with 4 pillars to base their research, mainly describing the necessity to propose long term environmental strategies by garnering cooperation throughout society. The four pillars are

1. to propose long-term environmental strategies for achieving sustainable development by the year 2000 and beyond;
2. to recommend ways concern for the environment may be translated into greater co-operation among developing countries and between countries at different stages of economical and social development and lead to the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environment, and development;
3. to consider ways and means by which the international community can deal more effectively with environment concerns; and
4. To help define shared perceptions of long-term environmental issues and the appropriate efforts needed to deal successfully with the problems of protecting and enhancing the environment, a long term agenda for action during the coming decades, and aspirational goals for the world community (pg. 2).

While it's difficult to point to a specific timeframe in history and say that's when sustainability started, overall, Our Common Future set the foundation for what we know as sustainability today. It opened up the world to a global view on the challenges humanity will face in the near future if they don't make conscious efforts to protect the environment. Our Common Future was written as a "clear demonstration of the widespread feeling of frustration and inadequacy in the international community about our own ability to address the vital global issues and deal effectively with them" (World Commission on Environment and Development, 1987, pg. 5). Some of the topics discussed were food shortages, energy conservation measures, or lack thereof, and the cause for environmental change. It was truly one of the first times an organization attempted to define sustainability on a global scale and the first time that research was done in a holistic manner.

In the hospitality realm, it is said that Saunders Hotels was very influential in bringing sustainable practices to light. Many of the initiatives that hotels practice today started with the Saunders Hotel Group in 1989 when they began recycling telephone books (Saunders Hotel Group, 2015). Since that day, more than 100 corporate wide initiatives have been implemented by Saunders, including hybrid cars, waterless urinals, state of the art windows, and ozone safe laundry systems.

Importance of Sustainability

To continue with this paper, it's imperative to discuss why sustainability is important. According to the Global Business Travel Association (2015), sustainability is here for the long term and is on the fast track to become one of the top three most important issues for companies.

Sustainability is important because of the current situation in the environmental world and the need to have a viable planet for our future generations. Some scientists are making projections that areas suitable for growing crops, the length of growing seasons, and yield potential will all decline (Global Citizen, 2012). Some African countries may see agricultural yields decrease by 50% by 2050 (Global Citizen, 2012). An added stressor to these crop declines is our population growth. Some estimates are showing that by the year 2100, there will be over 10 billion people on planet Earth (Skye, 2013). This population amount is a 40% increase from our current population where we barely have enough food to feed people with our current crop yields. Some scientists believe that planet earth can only accommodate a population of 10 billion people while others believe we have already surpassed our maximum threshold (Wolchover, 2011). For the world to be successful in the future, the current generations need to make the right decisions in regards to sustainability.

Aside from the large environmental affect it has, sustainability is also important because it has an educational, business & awareness purpose.

Hundreds of schools including Columbia, Princeton and American University now have degrees in sustainability; many of which did not have these degree programs 20 years ago. These degree programs will prepare the future leaders of this country to understand a lot of the impacts discussed thus far. According to Steven Cohen of Columbia University's Earth Institute (2012), many of the students that come out of Sustainability programs are "looking for new approaches to economic life…while keeping the planet intact" (para. 5).

Businesses are also placing a large focus on sustainability. According to the Project Management Institute (2011), sustainability has become a major component of business and for it to be effective, it must be managed properly. Managers and their teams must define their societal and environmental targets – just as they would their financial goals – if they want sustainable practices to take root within the organization. Along with investing in projects to address societal & environmental needs, forward thinking leaders are attaching sustainability goals to all of their core management processes (Project Management Institute, 2011). Because of this focus on sustainability, coupled with the fact companies realize sustainability is a factor when it comes to consumer choices, leaders are creating entire departments to manage the sustainability process. The "sustainability department's" goal is to ensure that the company decision making process is in line with its sustainable goals. A company's sustainability department may start projects of its own, but much of their work will be done by partnering with a business unit (Winokur, 2008). Some of the other goals of a sustainability department are to lower costs through reducing resource use, improving the work place by making it healthier & less toxic for employees, turning waste streams into revenue streams, and studying the life cycle of the value chain (Winokur, 2008).

Companies are also hiring key leadership positions within the corporate offices. The typical name of this position is the *Chief Sustainability Officer.* Between 1995 and 2008 the number of Chief Sustainability Officers has doubled, twice (Gerdeman, 2014). The Chief Sustainability Officer is responsible not only for the sustainable efforts of an organization, but also for the compliance, efficiency, and innovation of the company's sustainability efforts (Gerdeman, 2014). Therefore, this position often focuses on long-term strategic goals compared to short-term objectives.

Some companies do not yet have a Chief Sustainability Officer and may be forced to create such a position. In the meantime, this is why it is all that much more crucial that other leaders within a company have an awareness of sustainability. As the world continues to evolve, CEOs & other top business leaders will need to have a broader perspective on business, especially on a global scale. Leaders of companies will have to have awareness on the current trends within sustainability. This means they will have to have an understanding of sustainability as it relates to their business. The topic of sustainability will continue to be of concern for society and will likely be a topic of discussion in business for years to come, making awareness even more crucial.

Current Trends

Sustainability is a trend, not a fad. In addition, certain trends within sustainability are currently more popular than others. These trends are widely accepted forms of sustainable practices and are utilized by leaders of industry. According to Kevin Goldstein (2012), "current thought in facility management, and specifically hospitality operations, is largely focused on optimizing operational efficiency (and the resultant cost savings) in primarily three areas: energy, water, and waste" (pg. 4).

Energy

From an operational perspective, depending on the property size and offerings, hotels can have thousands, or even millions of pieces of equipment that require energy usage. Some of these pieces of equipment are HVAC units, lighting fixtures, appliances, and industrial equipment. The strain that these assets have on a municipality's resources can be tremendous. According to Helman (2007), 20% of Nevada's annual power usage, or 5.6 gigawatts (gW), is used by Las Vegas casinos. To put that in perspective, a 2000 sq. ft. house only uses approximately 8000 kilowatts (kW) annually – one gW equals 1 million kW. Companies look to be able to allocate their energy resources efficiently, while still offering a guest their promised level of services. If done correctly, an organization can lower their expenses by reducing energy consumption, through creative initiatives, without guests experiencing a decrease in service. A lot of these initiatives are done through a technical, engineering based approach known as *commissioning* (Goldstein et al., 2012). Commissioning is a quality assurance process that ensures a building is “up to par” for its intended use and that a staff is prepared to operate and maintain the system. Some of the measures that can take place through the commissioning process are lighting retrofits, sealing of the building envelope, equipment maintenance scheduling, heating and cooling sensor calibration, and maintenance of the ventilation system (Goldstein et al., 2012). In addition, companies have also sought alternative forms of energy such as solar, wind, and geothermal sources. Even if some of these initiatives are cost prohibitive, an organization still needs to be aware that they are available, in most instances save on long-term costs and will increase building functionality.

Water

Hotels use water for many domesticated functions including bathing, cleaning dishes & linen, and cooking to name a few. In addition, water also has a maintenance function which includes horticulture and HVAC. Again, the water requirements to operate a hotel, especially in Las Vegas, can place a great deal of strain on a municipality’s resources. Hotels are deciding to treat grey water, water generated from some of the above mentioned domestic activities, and sewage water, also known as black water, in an effort to reduce costs and the strain on resources. Los Angeles and other California cities already reduce their water consumption through pumping recycled wastewater into underground aquifers for later use as drinking water (California State

Water Resources Control Board, 2015). While some cities have opened or re-opened ocean desalinization plants to produce water, the cost of saving recycled wastewater for later use is much lower as the earth does most of the cleansing at no cost.

Some of the other water conservation efforts hotels employ are fixture retrofits, towel and linen reuse programs, HVAC and system improvements, and use of recycled/rain water for irrigation use (Goldstein et al., 2012). Depending on the hotels size, companies who employ these methods can save, thousands to hundreds of thousands or gallons of water annually.

Waste

In 2013, the United States created 254 million tons of Municipal Solid Waste, more commonly known as trash or garbage (U.S. Environmental Protection Agency, 2015). Hotels create a percentage of this waste through many different channels. The waste not only needs to be collected & disposed of, but it also needs to be processed by a waste management company, whether that is a public or private institution. The waste channels created by hotels can be sourced from construction & refurbishment projects, consumables (paper, toner, and batteries), durable goods (office equipment and appliances), food & beverage waste, and hazardous materials (Goldstein et al., 2012). As hauling and processing waste costs money, hoteliers are looking to reduce, reuse, and recycle whenever possible. A recently popular form of conservation is "waste to energy processing" services, whereby wastes are processed into alternative energy sources such as natural gas or biodiesel fuel and sold back to hoteliers at reduced prices (Goldstein et al., 2012). According to the U.S. Environmental Protection Agency (2015), another recently popular method to reduce waste is purchasing products that have less packaging. When a product has less packaging, it does not require nearly as much raw material, nor will it create as much waste.

Airlines are also participating in current sustainability trends by reusing waste to fuel planes. United Airlines plans on flying a domestic flight solely on biofuels created from different types of waste that will significantly decrease the amount of greenhouse gas emissions the flight would normally produce (Mouawad & Cardwell, 2015).

It is important for organizations to understand these waste reduction trends are available, not only for the cost savings ability, but also for the positive impact of not creating millions of pounds of additional waste.

Las Vegas Hospitality Leaders in Sustainability

There are many companies in Las Vegas that participate in sustainable practices. Some of these organizations are quite small, others are extremely large. Some of the largest organizations generate billions of dollars in revenues and critics may argue that they're the biggest abusers of our precious resources. Others are of the opinion that these companies set the bar for creativity and participation in programs that promote sustainable practices. Regardless of public outlook, it is important to highlight these companies not only for their holistic outlook on sustainability, but their massive contribution to the practice and for leading the way in innovation. The following companies are leaders of sustainability in the Las Vegas hospitality market:

MGM Resorts International

This company owns and operates more than ten properties on the Las Vegas strip, accounting for more than 20,000 hotel rooms. These rooms can generate a lot of waste and require a large amount of energy and water to run. To combat the issues of inefficient resource utilization, MGM Resorts developed a program called *Green Advantage.* MGM's Green Advantage came up with the commitment to (2015):

> Reduce our consumption of the planet's limited resources. Through our comprehensive sustainability platform, the Green Advantage, we are able to integrate environmentally responsible practices which effectively lower the carbon footprint of our operations, including our resorts, restaurants, retail spaces, meetings and conventions (para. 1).

MGM Resorts has made amazing accomplishments over the years in their reduction of using limited resources. From 2008 to 2013, through strategic initiatives, they reduced the amount of kilowatt hours they used by 383 million. In addition, they've saved over 1.2 billion gallons of water through initiatives like drought tolerant and native landscaping in a water starved Las Vegas climate. Lastly, MGM also reduced their carbon footprint in 2013 by diverting 65,000 tons of material from landfills. They accomplished this through contracting recycling experts and on-property management (MGM Resorts International, 2015).

MGM has a comprehensive sustainable program in place and has many more accomplishments to be proud of, aside from what was mentioned previously. They have greatly reduced their impact on the environment and have made commitments to do so for years to come.

Las Vegas Sands Corporation

The Las Vegas Sands Corporation owns the Venetian, Palazzo and Sands Expo in Las Vegas. Just at these two properties alone they operate more than 7000 hotel suites, 2.2 million square feet of meeting space, and hundreds of retail shops. Las Vegas Sands has been recognized for their commitment to sustainability by the U.S Green Building Council through their Leadership in Energy and Environmental Design (LEED) certification. The Venetian and Sands Expo have received the gold certification for existing buildings and the Palazzo has received the silver certification for new construction, which are very rare and prestigious accomplishments for buildings of their size.

These sustainability accomplishments are achieved through the Sands' *Eco 360* program. This program is very similar to MGM's Green Advantage in the sense that it is a comprehensive approach to sustainability. The Eco 360 program has four pillars: Sustainable meetings, Green buildings, Environmentally responsible operations, and Stakeholder engagement. Through this program the Sands has achieved success in reducing their carbon foot print.

Aside from all of the environmental efforts Sands has made, one of the unique features about their program is that it engages their team members through the stakeholder engagement portion. Las Vegas Sands sends its team members out into the community, providing them with a vast amount of knowledge through an educational platform, to ensure they have a positive impact on the environment.

Caesar's Entertainment

Caesar's Entertainment owns and operates multiple Las Vegas Strip hotel properties, restaurants and night clubs, including the famous Caesar's Palace. Caesar's Entertainment has a code of commitment for how they operate, which contains four pillars. One of the four pillars, which represent sustainability, states that the pillar "represents our [Caesar's] promise to preserve the planet for current and future generations" (Caesar's Entertainment, 2015). This pillar is a sustainability program called *CodeGreen* that has been recognized for its achievements in greenhouse gas management by the U.S. Environmental Protection Agency and their water preservation methods by the Water Conservation Coalition of Southern Nevada. Caesar's reduced their greenhouse gas emissions by over ten-percent in 2013 and reduced their water consumption by 130,000 gallons that same year (Caesar's Entertainment, 2015). Like the other companies, CodeGreen also encompasses numerous other areas of sustainability including green construction, energy conservation, and waste diversion.

Hospitality Leaders Conclusion

It is important to recognize that MGM Resorts International, Las Vegas Sands, and Caesar's Entertainment have made commitments to operate sustainably. They have the resources to engage environmental organizations, invest capital in sustainable expenditures, and market the fact that they have a high participation rate in these areas. They're sustainability leaders in the hospitality industry because they provide vast awareness to the sustainable cause and "practice what they preach." In the end, what they do for the environment is amazing and by all feats, an above commendable effort, but I restate my question in general terms: Do these companies make these decisions because it's the right thing to do for the environment or are they making the decisions for financial gain?

The Financial Impact of Sustainable Practices

Hospitality businesses attempt to generate revenue and make profit to ensure they can please investors and keep their doors open another day. Operating a business for profit is at the core of many vision and mission statements; in addition to the promise to operate sustainability for a rising number of companies. Take for example Adidas' mission statement (2015): "We are a global organization that is socially and environmentally responsible, that embraces creativity and diversity, and is financially rewarding for our employees and shareholders" (para. 4). Sustainability has a huge impact on the aforementioned revenues and profits. Some companies invest millions of dollars towards sustainable efforts, in hopes that either their costs get reduced or they're able to generate additional revenues. To understand why these companies invest this much money, it's important to review what the financial impacts of sustainable practices are and how these decisions are made. The goal of the next few sections is to cover the research done on the topics of financial impacts through employee productivity & building design, the financial analysis of sustainable projects, marketing efforts, and culminating with research on the correlation of sustainable practices and financial performance.

Employee Productivity & Building Design

Labor is a cost factor that plagues many companies and is something that needs to constantly be scrutinized by management. It is a variable cost that management has control over and if managed correctly, can be efficiently maximized to meet your customer demand. In addition to the cost of labor, the amount of output that each person, or labor hour, produces can affect how much productivity a company receives.

Sustainability plays a part in the amount of production an employee outputs based on building design. According to a 2003 U.S. Department of Energy research article, the concept of sustainability has three goals, sometimes referred to as the "triple bottom line." The triple bottom line's goals are environmental stewardship, social responsibility, and economic prosperity. Specifically focusing on economic prosperity, the goal is to reduce costs, add value, and create economic opportunity for individuals, organizations and communities. Many designers and planners embrace and would love to include sustainable initiatives in their construction plans, but unfortunately too often capital constraints stand in the way.

Sustainable buildings potentially lower absenteeism and because personnel costs far exceed construction and energy costs, forward looking companies should design buildings that increase productivity (U.S Department of Energy, 2013). The U.S. Department of Energy article went on to state (2003):

> The environmental image associated with an employer that builds a sustainable building and the improved indoor environment within the building may reduce turnover, improve morale, and help create a more positive commitment to the employer, as well as lower recruiting and training costs (pg. 7).

The U.S Department of Energy article based part of their findings on a study that took into account factors such as employee gender, race, crowding, complaints, as well as other factors determined through Poisson Regression that 57% of all sick leave, or approximately five days per year, were attributable to poor ventilation (Milton et al., 2000). This study was able to show employers the importance of creating a work environment that was conducive to worker productivity.

Financial Analysis of Sustainable Projects

All sustainable projects have a goal, whether they are for the benefit of the environment or the company's bottom line. According to a study by the Carbon Disclosure Project, many sustainability projects have different payback periods (as cited in Gaspar, 2013). The Carbon Disclosure Project looked at different projects over a period of time and calculated how long it took the financial savings from the project to equal the cost of the project. The study concluded that sustainable investments need to be individually analyzed from an economical standpoint in addition to an environmental standpoint for each factor to perpetuate benefit.

A separate study by Wagner and Bloom investigated the non-linear and reciprocal relationship between sustainability and financial performance. This report showed that management's analysis of sustainable projects is extremely important (as cited in Gaspar, 2013). The study noted: "both sustainable practices and solid financial performance stem from good management, causing a virtuous cycle: Actions to increase sustainability trigger good financial performance, which allows for additional investments in sustainability, which again improves financial performance." Gaspar (2013), through looking at multiple studies, concluded in his own words that sustainable investments are not a presumed benefit and "silver bullet" for bad financial performance, and in some cases can even worsen matters. It's important for management to make sound decisions and capture the actual, all-encompassing benefits of a project.

Green Marketing

Green marketing is an important aspect of business and a new trend that has been utilized in today's market place. Green marketing, as defined by Forbe's Investopedia (2015), is "…companies seek to go above and beyond traditional marketing by promoting environmental core values in the hope that consumers will associate these values with their company or brand" (para. 2). Green marketing is an important factor in today's business world because it can give a company a competitive advantage, leading to enhanced financial performance. A study conducted by Bhatia and Jain (2013), using a methodology of surveying on a scale of one to five, found that "consumers are not skeptic about green claims…and consumers are concerned about the present and future state of the environment" (pg. 12). Bhatia and Jain used a *Green Consumer Value Scale,* which was developed by Haws et al. in 2010. The scale measures the value of green initiatives to the consumer (Bhatia and Jain, 2013). An alarming fact that the study revealed is that consumers strongly agreed that environmental degradation has risen in the last decade. The research went on to conclude that there is much more opportunity for marketers to take advantage of this gap in knowledge and communicate green benefits to the consumers.

Businesses have a great opportunity to take advantage of marketing their green initiatives and reaping the financial benefits. As consumers become more aware of growing environmental concerns, green marketing will become an even larger aspect of a businesses' marketing budget. Nancy Miller eloquently defined the need for green marketing (2008):

> We all understand the sense of urgency to produce and the need to control costs while still meeting deadlines and sales targets. After all, that's business. However, green marketing is a concept that, when implemented effectively, can improve your customer relationships, image in the market and ability to reach the most targeted audience, while helping grow your bottom line (para. 1).

Robin Tricoles (2012) discussed the psychological effects of green marketing and ways to encourage people to go green. Evolutionary reasons, such as survival is key, plays a huge part in the decisions we make. Short-term goals, like turning on our air conditioning because it's hot out right now, sometimes outweigh the long-term goals of environmental sustainability. Tricoles (2012) felt there are a few ways to combat this natural, raw instinct of "survival of the fittest," using marketing psychology. One way is to use attractive labels for green technology so they stand out when a consumer goes to make a choice. Another option is making energy efficient items the default option if a selection is not made.

Marketing tactics play an important role when getting consumers to make a choice. Companies can assist a consumer is deciding which products to choose and the companies that employ green marketing will be steer their consumers towards green products.

Financial Relationship with Sustainability

Depending on the type & amount of resources that a company puts into their sustainability efforts can directly determine the results of the financial output. Kyung Ho Kang, Seoki Lee, and Chang Huh (2010) conducted a study that measured the impact that corporate social responsibility efforts had on a company's performance in the hospitality industry. Corporate social responsibility involves heavy interaction with sustainable practices as well as community involvement and ethical business practices. Kang and his colleagues looked at multiple subsets such as airlines, hotels, casinos, and restaurants. The research was based on the premise that management of those companies could base their decision making on the results that Kang et al. published. One thing that separated this study from previous ones was that it didn't just focus on the positive impacts of corporate social responsibility, but it also looked at the impacts of activities that negatively affected the environment, giving each their own weight in terms of how it affected a company's overall performance. The analysis was conducted for two different dimensions: accounting profitability for short-term financial performance and firm value to measure the long-term financial performance. The study used a pooled linear regression model where return-on-assets and return-on-equity were used as a dependent variable to measure a firm's profitability; Tobin's Q and PE ratio were used to calculate a firm's value. The results showed for the hotel industry that there was a significant and positive correlation between positive corporate social responsibility efforts and a firm's value. On the other hand, in the casino industry there was a positive correlation for firm's who practiced negative social responsibility and short term financial performance. For the restaurant industry, there was an almost always positive relationship between positive corporate social responsibility and both short-term and long-term performance. There was sometimes seen a slight correlation between negative corporate social responsibility and firm value, but it was usually outweighed by any positive corporate social responsibility activities. And finally, for the airline industry, positive corporate social responsibility negatively correlates with short-term profitability and positively correlates with long-term firm value. Additionally, negative corporate social responsibility has a positive correlation with short-term profits and a negative correlation with a firm's value.

The Social Impacts of Sustainable Practices

As a society, sustainable practices are involved in our everyday decisions. Sustainability has an impact on our lives whether we choose to engage it or not; businesses & governments look for ways to engage these practices and present them to consumers and constituents. Many millennial consumers are expecting more from an organization they conduct business with or from their local or national governments as they're powered by new technologies and are coming of age economically (Hayward et al., 2014). These consumers are looking for ways to improve health, boost the community in which they live, and shift the direction of the world.

The objective of the next few sections is to review the impacts that sustainability has had on society through consumer choice, employee morale, and employee health. These impacts directly align to the decisions businesses make when choosing to engage sustainability.

Sustainability Driving Consumer Choice

As competitiveness in the hospitality industry increases, companies will continue to look for ways to differentiate themselves from competition. As sustainability continues to be a topic of conversation for consumers, companies will make decisions that look to engage sustainability in their practices.

According to a study completed by Hayward, Johnson, Lacy, McLean, and Jhanji (2014), over 46% of Americans will be more likely to base their purchase decision of a product on its sustainable benefits over the next 12 months. In addition, on a global scale, young men aged 25-34 are considerably more likely to actively consider sustainability factors in their purchasing decision (Hayward et al., 2014). The study, which was conducted using a survey, had over 30,000 respondents from over 20 different countries. The study aimed to quantify how consumers viewed a business' responsibility for improving their lives through sound sustainable business choices. In North America, consumers have very similar expectations for businesses to improve their quality of life, through sustainable practices, as they do for the government at 80% compared to 81% respectively.

Information like this is forcing businesses to cater to these types of consumers if they're considering sustainable product offerings. One of the challenges CEOs face is that it is difficult to scale up sustainable initiatives, which is known to some as "pilot paralysis" (Hayward et al., 2014). It is easy for a company to implement an initiative in one location or on a small scale, but to do this on a global level has its own challenges, especially when it goes against a company's traditional pillars of success. To dive deeper into this challenge, although many agree that it's a company's responsibility to practice business sustainably, the business tends to focus on historical corporate behavior that has served them well, treating sustainability like its own separate silo. To combat this problem, Hayward et al. (2014) suggest incorporating sustainability in the heart of a brand's offerings. In addition, it's important for businesses to act with transparency, look to innovate to offer better products that will improve society, communicate tangible impacts, and enable stakeholder and consumer participation.

As more information becomes available for consumers on sustainable product offerings, it's important for businesses to bring awareness to the fact that a product purchase is more than just the cheapest price point. Value is created by more than just receiving "the most bang for your buck." Value is created through purchasing a quality product that offers great benefits, with one of those benefits being a positive impact on the environment.

Social Benefits

Self satisfaction is an important factor when attempting to keep people engaged in a task or project. Whether or not the benefits of sustainability are marketable, i.e. whether they affect people's satisfaction has been studied. One particular study by the U.S. Department of Energy (2003) showed that there is a direct correlation between sustainable building design and employee satisfaction. It was proved that building occupants are more satisfied with lighting and air quality compared to thermal and acoustic satisfaction.

According to Heerwagen (as cited in U.S. Department of Energy, 2003), a factor that improved satisfaction was the quality of lighting; having access to windows and daylight, being able to control lighting, and the occupant's location in the building all made a difference.

In regards to air quality, there was a negative impact on satisfaction if there were low ventilation rates (Seppanen et al. 1999). According to Sieber et al., increasing the ventilation improves perceptions of the air quality if the intake the intake air is located at least 25 feet from an irritant source such as traffic, a dumpster, or exhaust vent (as cited in U.S. Department of Energy, 2003).

According to Leaman and Bordass, who conducted a study of 16 buildings in England, determined that there were a few factors that had a direct affect overall satisfaction. Those factors were “shallower plan forms and depths of space, thermal mass, stable and comfortable temperature conditions, operable windows, views out, usable controls and interfaces, places to go at break time, and a well-informed and responsive building management” (as cited in U.S Department of Energy, 2003).

Satisfaction is a crucial aspect in business, as companies focus on keeping employees happy for retention purposes, but it’s also an important factor for life in general. Looking for opportunities as simple as adding more windows to a building during construction can make the difference between a person who is satisfied or dissatisfied.

Health Benefits

Buildings can affect our health. Studies focused on the health benefits of sustainable building design typically focus on indoor environmental quality, especially air quality (U.S. Department of Energy, 2003)

In 1996, an organization known as the National Institute for Occupational Safety and Health (NIOSH), along with other partners within the health & occupational safety field, developed the National Occupational Research Agenda (Mendell et al., 2002). The agenda identified multiple areas in which research could be done to identify and reduce common causes of building related illnesses, injuries, or deaths. One of the specific areas on the agenda was the indoor environment and how it affected occupant health.

Mendell et al. (2002) were in charge of the study that looked at occupant health and discovered that “improved building practices could prevent many health and performance problems associated with indoor environmental conditions.” The focus of the study was on air quality (e.g. indoor contaminants) within the building and looked at factors such as the number of workers affected by illness & the severity, frequency & duration of the illness to determine if the disease was caused by the building environment. One of the constraints of the study was that it did not take into account adverse effects caused by ergonomic factors and other job stressors that may contribute to decreased health.

In the end, Mendell et al. (2002) determined that sustainable practices such as improved air ventilation, improved air recirculation and temperature controlled climates can greatly decrease the likelihood of sick occupants.

The Environmental Impacts of Sustainable Practices

Sustainable practices are typically noted for their positive environmental impacts. Different climates throughout the world face separate challenges and require different sustainable practices to make an impact. In Las Vegas, the climate is extremely dry and typically hot for most of the year. The annual average temperature is around 68 ^{o}F and they receive 21 days per year of rain in Las Vegas, which is drastically different compared to someplace in the northeast United States (U.S Climate Data, 2015). Take for example Boston, Massachusetts, which has an annual average temperature of 51 ^{o}F and 137 days per year of rain – quite the different climate. The reason for this comparison is to show how challenging of a climate Las Vegas can be and to stress the importance of sustainable practices in this area.

In addition to its challenging climate, Nevada has been the fastest growing state in the U.S. over the last four decades, with a population increase of 66.3% during the 1990's alone (Salvaggio and Futrell, 2012). This added population puts additional pressure on the already limited resources Las Vegas has.

The challenges that Las Vegas faces, because of the climate in which it resides, and the sustainable practices that have been implemented to combat these challenges, will be the topic of discussion over the next few sections.

Air Quality

With Las Vegas being such a hot and arid climate, one of the main challenges it faces is providing high quality air for its visitors and residents. According to Salvaggio and Futrell (2012), air quality is probably the most acute problem in the Las Vegas valley. Air quality challenges are caused from motor vehicles, continuous construction, and industrial & commercial enterprises. Many of the effects from these activities are pollutants in our air; carbon monoxide, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide.

According to Watson et al. (2007), the majority of carbon monoxide pollution in the Las Vegas metropolitan area is caused by vehicle exhaust. State and county officials have taken many steps to mitigate these pollutants such as requiring vehicle inspections, implementing a smog hotline, and offering increased mass transit options. Due to these efforts, along with others, Southern Nevada has not violated national carbon monoxide standards since 1999 (Salvaggio and Futrell, 2012).

Air pollutants are hazardous to our health and symptoms can include watery eyes, coughing, and wheezing. According to Greenfacts.org (2015), particulate matter is the sum of all, mostly hazardous, solid and liquid particles in the air. The particles come in different sizes and come from different origins. Particulate matter enters the air when soil is disturbed, which can happen through high velocity winds and human interaction. Air quality officials in Clark County have been attempting to reduce the amount of particle matter in the air by creating awareness of the problem, increased regulation of construction activity, and limiting other ancillary causes like off-highway driving (Salvaggio & Futrell, 2012).

Hospitality companies are continuously looking for ways to offer better air quality to guests as well. They are ensuring their fresh air flow rates are at high values, using HEPA filters in their ventilation systems, and using carpet cleaners with filters that extract allergens and keep them trapped (International Tourism Partnership, 2007). These activities, along with others, are done in an effort to provide guests with the highest quality experience.

Water

Another major challenge Las Vegas faces is how much water it consumes compared to how much is available. Southern Nevada gets 90% of its water supply from the Colorado River, which is supplied by the snow melt of the Rocky Mountains (Southern Nevada Water Authority, 2015). According to Salvaggio & Futrell (2012), of all the basin states that receive water from the Colorado River, because of "The Law of the River," Nevada receives the least amount of allotment. Because of our small allotment, recent droughts, and low snowfall in the Rocky Mountains, Lake Mead is currently at its lowest levels ever, 1080 feet (Griggs, 2015). This may still seem like a surplus of water, but the lake has decreased drastically from its highest level of 1225 feet in 1983. Not only is this a frightening revelation for water users, but also for electric power users as Lake Mead supplies power from the Hoover Dam, to the Las Vegas valley, Southern California, and Arizona.

People may be quick to make the assumption that Las Vegas hospitality companies are a big abuser of the limited water resources that are available. On the contrary, for example, according to Mulroy (2015), the Las Vegas strip hotels only use 3-4% of the total water use for the Las Vegas valley. These properties treat and re-use a vast majority of the water they require for water attractions, pools and bathrooms.

The majority of the water use comes from Las Vegas residents (Southern Nevada Water Authority, 2015). According to the Southern Nevada Water Authority (2015), approximately 60% of water usage is derived from single- & multi-family homes. In an effort to reduce local water consumption, the Southern Nevada Water Authority no longer allows new homes to have real grass in the front yard and they've created community watering schedules. Also, they've implemented city and county ordinances for offenses like failing to repair malfunctioning irrigation or not emptying out a swimming pool or spa into a public sewer. Lastly, they also offer rebates for residents who switch out their real grass for fake grass.

Through water conservation efforts like the ones mentioned above, over 88 billion gallons of water have been saved since 1999 (Southern Nevada Water Authority, 2015).

Government Role in Sustainability

Sustainability provides an opportunity for companies to innovate and play an important role in the environment. Sometimes it requires government intervention to "force the issue." Governments, whether they are local, state, or federal, play a role in how sustainability is implemented in our everyday lives.

Setting Minimum Standards

One of the roles governments play is to set policies that require minimum standards to be met. According to Gaspar (2013), minimum sustainability requirements can have great value as they force inattentive companies to look at the overall benefits of sustainable practices. A great example of these minimum standards is the Clean Air Act. The Clean Air Act was passed by Congress in 1970 and authorized to have national ambient air quality standards established (U.S. Environmental Protection Agency, 2015).

It's important to note that even though it's beneficial for the government to set minimum standards, these policies should not be overwhelming. There is potential risk at requiring too much of a financially strapped company (Gaspar, 2013). Some may argue that the government shouldn't play a role at all in terms of enforcing policy and that the open markets will push for a higher level of compliance. For example, there are over 1500 regional and 200 global members of the World Business Council for Sustainable Development (Gaspar, 2013). This organization is led by business leaders throughout the world whose agenda is to bring sustainability to the forefront of the business world.

Enforcement

Another role the government plays is to enforce the current environmental laws that are in place. The U.S. Environmental Protection Agency's criminal enforcement program was established in 1982 and congress gave them full law enforcement capabilities in 1988 (U.S. Environmental Protection Agency, 2015). The criminal enforcement program enforces U.S. laws through investigation, evidence collection, analysis, and testimonials. The Environmental

Protection Agency can also issue civil penalties or file lawsuits. If they find an organization to be out of compliance, they will issue them an order to rectify the issue or will rectify it themselves and sue for reimbursement. In 2014, due to the Environmental Protection Agency's enforcement program, there was over $9.7 billion invested by companies in compliance equipment, $163 million penalties and criminal fines issued, and 155 combined years of incarceration sentenced (U.S Environmental Protection Agency, 2015).

Incentives

To create more participation in certain environmental programs, a government may incentivize a person or business through financial means. Specifically in the U.S., federal tax credits are used to increase sustainability projects. In Nevada, there are local incentives as well. For example, new or expanded business may apply for a sales & use tax abatement for qualifying renewable energy technologies. The abatement applies to property used to generate electricity from renewable energy resources including solar, wind, geothermal, & hydro (DSIRE, 2015). These incentives not only create financial rewards for those who act with sustainability in mind, but they also create awareness.

Certifications

In setting minimum standards, governments also recognize those who go above the minimum standards through certification processes. Some companies also go above and beyond by being elite in areas that don't even require a minimum standard. Because of these efforts, and to have certain organizations stand out for their commitment, there are certain government agencies that offer certifications in the area of environmental contributions.

The U.S. Green Building Council has a Leadership in Energy & Environmental Design (LEED) certification program. Being LEED certified means your building has satisfied certain prerequisites and met certain requirements through a point system (U.S. Green Building Council, 2015). The points are based on different activities or equipment that a building has and the points are accumulated to reach certain levels of certifications. The different levels, in order from lowest to highest are: certified, silver, gold, and platinum (U.S. Green Building Council, 2015). Receiving a LEED certification is a distinguished honor in the world of sustainability.

Government certification allows an organization to stand out amongst its peers. Consumers may be more willing to patronize a business because of certain certifications they have, making these businesses more attractive. Companies are investing billions to obtain these certifications which only solidify their importance.

Summary

The financial, social, and environmental factors are key components that make sustainability a highly discussed topic. When considering the factors individually, they have relevance, but when considering all factors together, the rationale for a hospitality company to take them into consideration is immense. Las Vegas organizations will need to utilize these factors to ensure they remain competitive in the market place.

It’s not only important for businesses to take these factors into consideration, but for individuals to do the same. Nayar (2013) argues that we should be teaching children the importance of sustainable in school. Families should also implement these practices in their home life.

Many of the topics researched above show the critical need to include sustainable practices in everyday life. The reasoning for implementing sustainable practices is multifaceted. As we move into part three, the reader is now more prepared to understand the rationale company's use to make decisions towards sustainable practices and any recommendations made in part three as alternatives to current practices.

Chapter Three

Introduction

As previously reviewed, sustainability has multiple impacts that affect whether organizations choose to engage it as part of their business offerings. Even more specifically, sustainability is a major factor in the Las Vegas hospitality market as Las Vegas is considered to be a leader in the clean energy market.

After reading Part Two, the reader is now better prepared to understand why businesses make sustainable decisions. Part Three will review the findings of Part Two and discuss how the analysis can be applied to current business practices. The different methods that hospitality firms can utilize to determine whether sustainable practices bring value to their firm will be presented. In addition, the problem statement, which is *Do Las Vegas hospitality organizations make sustainable decisions that have positive impacts on the environment and society, regardless of the financial costs?,* will be addressed. Finally, the limitations of the research and future recommendations will be discussed.

Measuring Performance

To have a better understanding of why Las Vegas hospitality companies make sustainable decisions, it is important to understand how companies track results for sustainable projects in regards to financial, social, and environmental impacts. The three methods the following sections will review are the triple bottom line, electronic tracking programs and the more sophisticated balanced scorecard. These sections will give the reader a clearer understanding of how companies are able to measure the success of sustainable projects, making it easier to answer the problem question.

The Triple Bottom Line

There are different ways a company can determine whether sustainable practices have an impact on their business. One popular method is the looking at the company's triple bottom line. The triple bottom line was developed by John Elkington in the mid-1990's and is an accounting framework that incorporates three dimensions of performance: social, environmental and financial (Slaper & Hall, 2011). Prior to this method, it was difficult for companies to measure whether they were being sustainable and whether they were pursuing sustainable growth. One of the challenging methods of the triple bottom line is that the three dimensions of performance don't have a common unit of measurement or are sometimes individually difficult to measure. An additional challenge of the triple bottom line is that it doesn't take into account the firm's strategy as it looks at only historical data, not current processes (Rohm and Montgomery, 2011). To combat some of the challenges it faces, instead of assigning solely monetary values to the triple bottom line, Elkington decided to utilize it as an index which allows companies within the same fields to be able to compare "apples to apples." Examples of the types of measures that go into the index are personal income and job growth for financial; electricity and fossil fuel consumption for environmental; and, unemployment rate and life expectancy for social (Slaper and Hall, 2011).

Many different entities utilize the triple bottom line including businesses, government entities and non-profit organizations. According to Slaper and Hall (2011), "the TBL framework allows organizations to evaluate the ramifications of their decisions from a truly long-run perspective" (Para. 2). By utilizing the triple bottom line approach, companies will be more aware of the impact sustainable decisions have on their business. Companies can also determine and measure the impact, if any, of specific projects on their business and understand the reasons they are making those decisions. As discussed in Part Two, the importance of key leadership understanding sustainable impacts will increase over time. The triple bottom line will be a part of the leadership's "arsenal" to better understand the impact the company's sustainable practices, in turn making them better leaders.

Electronic Tracking Programs

To assist in determining why companies make sustainable decisions, it is important to track the progress of the project. This not only includes the check points during the project, but it also includes the ideation stage. This is the stage where brainstorming is crucial to the success of the project. Leaders of a sustainable project should utilize the ideation process to creatively think outside of the box for potential solutions. An additional reason why this part of the project is crucial is because it assists an organization in determining why they are making fundamental decisions in regards to sustainable projects.

There are digital tracking programs that currently exist to assist organizations in tracking the progress of a sustainable project.

According to McCorry (2012), there are two types of metrics that need to be tracked: predictive and performance. Performance metrics measure progress that has already happened and whether the performance has met the goals of the project. The predictive metrics measure the processes need to get to the intended target.

In regards to the actual tracking, there are systems called Environmental Management Systems and Sustainable Management Systems that help companies monitor performance in these realms. These systems can be quite expensive and allow a company to track extensive qualifiers. These systems are typically unobtainable for small organizations as the cost can be high and out of the scope of most projects those companies will take on. These systems are more suitable for companies with a large number of resources, both capital and human, in addition to multiple sustainable projects being managed simultaneously. For smaller companies, they may already have a data tracking system in place that they can just add an additional field to or they can just utilize a paper spreadsheet or a digital spreadsheet.

Balanced Scorecards

As businesses are continually looking for ways to measure or quantify their success, the balanced scorecard has become an industry standard for this practice. According to Rohm and Montgomery (2011), "A balanced scorecard system provides a basis for executing good strategy well, and managing change successfully."

Although balanced scorecards aren't solely meant to measure sustainability, they do work very well as a measurement method. According to balancedscorecard.org (2015), a balanced scorecard is defined as:

> A strategic planning and management system that is used extensively in business and industry, government, and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals (para. 1).

The balanced scorecard was developed by Dr. Robert Kaplan and Dr. David Norton of Harvard Business School. The theory behind a balanced scorecard is that it takes traditional financial measures and combines them with more qualitative, non-financial measures to create a more accurate depiction of a company's performance. The balanced scorecard gives a holistic representation of the company and allows the company to measure performance versus goals. An additional advantage of a balanced scorecard it that it allows an organization to determine the health of short, medium and long-term objectives (Bowen and McDonough, 2011). This will allow a company to make decisions at a timelier junction in the objective completion process. A final advantage is that a company can ensure the strategic action matches the desired outcome because a balanced scorecard can be checked throughout the project.

One difficulty of the balanced is that it requires forethought. Although this is an easily overcome challenge, sometimes companies struggle with this aspect as it requires innovative thinking.

Overall, balanced scorecards assist companies in measuring success within sustainable projects. Companies are able to outline the goal of a sustainable project, have multiple measurement check points throughout the process, and capture the end results to match them against intended results.

Results

As discovered in Part Two, sustainable practices have many benefits. Las Vegas hospitality companies choose to conduct sustainable practices because of those perceived benefits. Society continues to require companies to conduct business in a sustainable manner, as witnessed in their purchasing trends. Based on the previous research, Las Vegas hospitality firms would continue to conduct business in a sustainable manner, regardless if there were financial benefits, as long as the financial requirements are not overly detrimental to the company's bottom line. "Overly detrimental" can change based on the size of the company and how important sustainability is to their core values.

In general, the environmental benefits are the driving factor for companies to engage in sustainable practices. To be clear, companies still pursue financial benefits, and would prefer to reap financial gains, but if the net gain to the bottom line is $0 for a sustainable project, the majority of large Las Vegas hospitality firms would still engage the project. Some projects can be suffocating it terms of the amount of human capital resources a company would have to provide, but if the company can reap the intangible benefits, like social standing within the community, they may still pursue a project.

Nidumolu, Prahalad, and Rangaswami (2009) believe that sustainability is already changing the competitive landscape amongst companies. They believe that the key to progress is innovation and organizations can make innovative sustainable practices into a competency that competitors will find difficult to match.

Joyner (2005) states there are ten reasons firms have a sustainable strategy: government regulation, public relations, employee retention, increased sales, attractiveness to investors, reduction of operating costs, encouragement of creativity, increased productivity, risk reduction, and brand loyalty. Many of these topics are discussed in Part Two and are reasons that companies would engage sustainable practices. Each topic has its own baring on whether a firm practices sustainability, but based on a company's core values, they may focus more on one topic compared to other.

Sometimes companies may be solely focused on profits causing the implementation of sustainable practices to be solely focused on profits. Szekely (2013) is a firm believer that companies are quick to innovate if short-term profitability is increased, but they need to focus on innovations that actually improve society and the environment. Szekely (2013) went on to say that companies must lengthen the timeframe for returns on investment and prioritize sustainability over profitability.

Government entities play a huge role in the sustainable decision making process. Because government bodies set certain minimums, it requires companies to operate within those preconceived standards. Bekefi (2008) recommends that companies take a proactive stance to sustainable practices as this will save them money in the long-run. In being proactive, companies won't have to change practices to meet regulations.

Sustainable practices also begin at the top; it is up to leadership to set the tone and provide guidance on sustainable initiatives. According to Bekefi (2008), "sustainability strategies are typically top-down and that the most effective implementation occurs when top management is clearly committed to the strategy."

One of the inconsistencies in the research of Part Two is that not all Las Vegas hospitality companies, or the leaders of those companies, tackle the challenge of sustainability in the same manner. According to Kang (2010), the different subsets of hospitality organizations may reap different benefits from sustainable practices, therefore may approach sustainability in a separate manner. This is what makes it extremely difficult to apply the findings of Part Two to all Las Vegas hospitality firms. Each individual company will need to determine the right amount of investment that is suitable for them.

Another inconsistency based on the research is that the rationales behind sustainable projects, whether they're financial, social, or environmental, can have conflicting agendas. For example, although a sustainable project may be great for the environment, it may have steep financial costs without a worthwhile return. This is turn deflates the company's financial performance and may require them to lay off workers, in the end hurting society. On the other side of the coin, a sustainable project may be great for the bottom line, but has limited benefits for the environment. This is where a balanced scorecard, in conjunction with the triple bottom line may come in handy; to reduce the conflictions between the different impacts.

Overall, there are multiple factors that come into account for whether companies will engage a sustainable project, but the environmental impact, in conjunction with the financial and social benefits are the biggest factors. Some companies may be solely focused on profits, but the majority of them look for the additional benefits prior to excusing the project if it does not reap financial gains. As the world continues to mature, the hope is that companies will practice sustainably regardless of the financial benefits.

Applications

The research conducted in this paper has applications in the Las Vegas hospitality market. Companies, small and large, can use this research to determine the rationale behind engaging in sustainable practices. Organizations will be able to understand what resources they will need to commit, how they should approach and measure success, and what benefits they can expect prior to engaging sustainable practices.

Marketing firms looking to promote Las Vegas could also utilize this research. It will build brand awareness for Las Vegas all over the world because of the amazing things Las Vegas hospitality firms have already accomplished and the projects that are on the cutting edge of innovation. As Las Vegas is considered by many to be the hospitality capital of the world, adding the potential title of most sustainable hospitality market in the world is an enticing premise.

This research can also assist companies in creating an organizational structure if they are new to the sustainability world. For first time entrants into sustainable practices, this paper outlines challenges a company may face, topics of discussion needing to occur, measurements of success needing to be in place, and organizational infrastructure. The proper leadership will need to be in place, whether it is a comprehensive CEO or an experienced Chief Sustainability Officer, to manage the sustainability process. Companies also looking to enter the Las Vegas hospitality market may want to understand what trends currently exist and what information their competitors have access to.

Limitations

This research has limitations as it is only focused on certain areas of the topic. One specific limitation of this paper is that there is a lack of empirical data. Although some of the research has come from papers that provided empirical data, this specific paper is not based on empirical data.

A second limitation is that the implementation of sustainable programs can sometimes be quite costly compared to the money saved. This goes back to the lack of empirical data as this paper didn't focus on this aforementioned notion. Regardless of how many benefits incurred because of sustainable practices, some companies who lack capital resources may not be able to participate. There is a barrier to some sustainable programs as they require not only financial resources, but human capital. This fact will exclude some Las Vega companies from applying this research.

An additional limitation is that this research is not based on organization size. Being able to apply this research to companies of differing sizes may be difficult. Most research data is only available from companies with large amounts of resources within the Las Vegas hospitality market, so some of the information contained within this paper may only apply to those companies.

A final limitation is that this research is based solely on the Las Vegas hospitality market. It may be difficult for other hospitality markets to adapt the same principles. Other hospitality markets face different environmental challenges and the cost of resources & research may differ in those locations. Those locations also may attract different patrons who have different values and may not care as much about sustainability.

Conclusion

Sustainable practices in the Las Vegas hospitality market have a major influence in how companies operate. These sustainable practices require time, effort, investment, and devotion on behalf of employees of these organizations. As these practices require resources, it is important to understand why companies make these sustainable decisions. It would be nice to believe that they're all made because it's the right thing to do for the environment. On the other hand, Las Vegas hospitality companies aren't in business to enhance the environment, they're in business to offer a good, product, or service to their clientele, and generate revenue/profit. Somewhere along the way, some Las Vegas hospitality companies realized they can have the best of both worlds by generating profits, yet still doing the right thing for society and the environment. Much can be learned from these organizations and hopefully their practices will trickle down to other areas of business across the globe. Las Vegas hospitality organizations are leaders in sustainability and it's important to understand why they make decisions for sustainable practices so others can follow their lead.

This research paper was intended to demonstrate how financial, social, and environmental impacts affect sustainable practices in the Las Vegas hospitality market. It has done so by analyzing the impacts and gaining a better understanding of the Las Vegas hospitality market in regards to sustainable practices.

Recommendations

There are recommendations to be made from this research and how to expand on its topic of influence. A topic of research that would expand on what is already known from this research is to look at companies of varying sizes and focuses. Because hospitality organizations can vary greatly in size and focuses, for example, “mom & pop” restaurants compared to mega casinos or airlines, it would be beneficial to narrow the research to look at the impact of sustainability on these firms. Doing so would allow these companies to apply the research to their specific areas of expertise.

To further understand why leaders in Las Vegas hospitality organizations, it would be beneficial to survey actual decision makers within these firms. By conducting these surveys, you’re going directly to the source and it would be hard data on why companies make the decisions they do in regards to sustainability. The leaders within these hospitality organizations may allow you to research further from data their companies collect. For example, a Las Vegas casino executive may give you access to the data on financial resources utilized to conduct sustainable projects. This would allow researchers unprecedented access to first-hand data. Once gathered, a researcher could apply this data to a balanced scorecard or Environmental Management System, further benefiting the casino.

Lastly, it would be beneficial if there was an algorithm or regression built that could test causation for sustainable projects. If the algorithm or regression could apply different weighted averages to the different impacts (financial, social, and environmental) to tell what a company is looking to accomplish with engaging sustainable projects. This would be able to answer my problem question based on the inputs and outputs of a sustainable project.

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