



SUSTAINABILITY REPORT



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INTRODUCTION

This report presents a clear business case for the adoption of a sustainability strategy for craft gin distillery, Papillon. Set out in three sections, the report will first review the company's current sustainability practises, adopting the four key principles of sustainability as an auditing framework. Section 1 will list a number of sustainable rules and action points for Papillon to address. The second section of the report considers the environment in which Papillon operates. The internal and external environment of

Papillon's trading position is examined through SWOT and PESTLE analyses. Section 2 also considers the stakeholders that may influence or be influenced by Papillon and how the consideration of their needs can facilitate a sustainability strategy and long-term vision. These considerations will be depicted through four concepts of value creation. Finally, the paper hopes to summarise the advantages and importance of considering sustainability within strategic business planning for a future growth trajectory.



SECTION 1: PAPILLON'S CURRENT SUSTAINABILITY ACTIVITIES

Papillon are a small privately owned craft gin distillery set in the National Park of Dartmoor in Devon. Founded with a purposeful vision to offer a product that incorporates, where operationally possible, the surrounding landscape into both the branding and product design. Papillon's sustainability strategy to date has concentrated on two elements of the business: packaging solutions and conservation work with charities.

1.1 Community Projects

Papillon's branding and product is centred around butterflies, connecting the core of the company to a local butterfly species, a project close to the founder's heart. Papillon donate 1% of their sales to a conservation charity working towards protecting threatened species native to the surrounding area.

Papillon spent a lot of time learning and researching local wildlife which has shaped and formed product development and inspired new recipes. As such Papillon now have a limited-edition bottle of gin in honour of a rare beetle found in the local woodland. £2 from every bottle sold is donated to a European charity dedicated to the conservation of this endangered native species.

Working on conservation projects immediately enhances stakeholder support and increases both public awareness (Bansal and Roth 2000) of an ecological concern and the reputation and integrity of the brand (Hart and Milstein 2003).

1.2 Packaging Solutions

Papillon have made a concentrated effort to consider the environmental impact of the

packaging materials they are purchasing sourcing innovative and local solutions wherever possible, and looking for immediate and low-impact solutions.

Papillon are plastic-free, as awarded by charity Surfers Against Sewage (SAS, 2021). The only plastic the company uses is the reuse of packaging that has been sent to them. Papillon reuse cardboard boxes that have arrived through their own deliveries and collect boxes from previous delivery runs. Papillon only buy cardboard materials for shipping their products. The glass bottled gin has a biodegradable tamper seal and the use of innovative flexi-hex packaging for shipping orders.

This initiative is an effective first step in reviewing elements of environmental impacts within the production and selling of Papillon's products. However, high product costs and impacts on margins from this siloed method of introducing sustainable materials into the product development are likely to skew the manager's view of the effectiveness of sustainability strategies in reducing costs. This depicts the importance of integrating sustainability within business planning. Reviewing sustainability holistically, as part of an overall strategy integral to business operations, provides a broader view of costs and costs reductions. For example, the increased product cost from the biodegradable cellulose tamper seals can be mitigated through operational improvements i.e. recycling water used in production. Hart and Milstein (2003) agree that sustainability cannot be looked at as one-dimensional, but rather as a multidimensional opportunity.



SECTION 1: PAPILLON'S CURRENT SUSTAINABILITY ACTIVITIES

1.3 The Four Key Principles of Sustainability

Within Papillon's operations there are many opportunities for continued innovation, adoption of new technologies and operational adjustments to further enhance their sustainability strategy and reduce their environmental impact. The four key principles of sustainability (Sustainability Illustrated, 2014) outline conditions of success for sustainable development within organisations. The four principles as outlined below will be used in this report to identify key rules and considerations, which will then define action points for Papillon's sustainability strategy.

1. In a sustainable society, nature is NOT subject to systematically increasing concentrations of substances extracted from the earth's crust.
2. In a sustainable society, nature is NOT subject to systematically increasing concentrations of substances produced by society
3. In a sustainable society, nature is NOT subject to systematically increasing degradation by physical means.
4. In this society, people are NOT subject to conditions that systematically undermine their capacity to meet their needs.

This section aims to outline four rules for Papillon to follow which coincide with the aforementioned principles of sustainability.

Rule 1. *Papillon should reduce, or eliminate where possible, any business activities or products that deplete natural resources (Greenwood, 2021).*

- Papillon heavily rely on gas flame for heating during the distilling process and should review and deploy new technologies that are less reliant on the use of fossil fuels (heat pumps for example). Also, Papillon should review the heating temperatures during the distillation process and understand if these can be reduced to limit energy usage.
- Papillon rely on fresh spring water as an ingredient in their gin, this is harvested from a local water source. Papillon must ensure, as the business grows, that future operations do not exploit the resource in such a way that depletes the natural environment. Further, Papillon rely on water for the cooling process during production, a high quantity of water is used/wasted as a result. This wastewater could be on a continuous cycle for reuse. Papillon can also look at rainwater harvesting and recycling technologies to avoid high use and cost of water from local supplier.
- Papillon use a diesel van for deliveries. Papillon could look to move to an electric vehicle for deliveries.
- Papillon should constantly review local supply options and avoid buying any materials that are supplied from further afield that may require air freight delivery.

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Rule 2. *Papillon should support the reduction of waste, and control concentrations of harmful substances (Greenwood, 2012)*

- Papillon should review alternative heat sources for production that do not emit harmful substances. Gas stoves are currently being used which emit nitrogen dioxide and carbon monoxide as well as particle pollution.
- Papillon should measure their scope 3 emissions mainly within the supply chains of purchased goods, and transportation and distribution of 3rd party customers.
- Papillon can reduce scope 1 emissions of greenhouse gases by switching from a diesel fuelled van to an electric vehicle and reviewing alternative heating options for the distilling process.
- Papillon already purchase electricity from a 100% renewable energy supplier.
- Papillon should look to source only organic raw material ingredients for their recipes including the herbs and flowers used and the ethanol spirit, to ensure no pesticides are used during the farming, growing or production of the materials they purchase.
- From the distillation process the botanicals waste is either composted or supplied to a farmer for animal feed.

Rule 3. *Papillon should be conscious of the land it occupies and reduce unnecessary contributions to biodiversity loss and reverse deforestation*

- Papillon have moved to sourcing farmed herbs and no longer harvesting wild to ensure the natural ecosystem is not depleted.

Rule 4. *Papillon should ensure workers across their supply chain are treated fairly and not exploited (Greenwood, 2021)*

- Papillon should ensure all workers within their supply chains are not being exploited, putting pressure on and challenging 3rd party suppliers for transparency of operations.

SECTION 2: THE BUSINESS CASE FOR SUSTAINABILITY

2.1 The Business Case for Sustainability

Globally public concern and awareness of issues surrounding climate change has risen sharply (Revell et al. 2009). Nielsen (2019) found that 73% of global consumers were found likely to change their buying habits to consciously reduce their impact on the environment. Consumers are increasingly demanding businesses and governments to take action on sustainability issues (Collins et al. 2010).

Commissioned by the UK government, the Stern Review (2006) highlights the devastating environmental and economic consequences of companies continuing to adopt a 'business as usual' attitude towards environmental issues (Revell et al. 2009).

As such businesses are now recognising that "implementing environmental and social initiatives" beyond the legal requirements is likely to improve their competitive advantage (Gupta and Benson 2011). Those that do not, not only risk operational challenges, but risk their market positioning particularly as new 'greener' entrants enter the market. This is of particular concern within the highly concentrated gin market which now has over 560 distilleries in the UK, most of which are small independently owned businesses (The Wine and Spirit Trade Association, 2020).

2.2 Environmental Review

Sustainability management includes the internal development of a company, as well as a contribution to the sustainable development of society and economies (Windolph et al. 2013 pg. 28). To help evaluate environmental and societal risks it is useful to carry out an audit of the external environment in which Papillon operates.

A PESTLE analysis is a suitable tool to understand the political, economic, social, technical, legal and environmental factors which can offer considerable risks or opportunities aligned to business activity. (Kralj 2009; Schaltegger et al. 2012). A PESTLE analysis is often used in conjunction with a SWOT analysis to assess a company's position (Kralj, 2009). For the purpose of this report the strengths and weaknesses (internal) of the company have been outlined with the (external) opportunities and threats addressed through the PESTLE analysis. The analysis is displayed in tables 1.1 and 1.2.

It is important while analysing the macro environment managers also identify their stakeholders, and the needs and expectations of those stakeholders (European Commission, 2021; Epstein and Roy, 2003). Planning social and environmental impacts is likely to improve relations with various stakeholders (Bansal and Roth 2000; Epstein and Roy 2003) which can greatly strengthen a brand's reputation. Kralj (2009) agrees learning about the 'needs and wants' of stakeholders helps to determine how best to manage change within the business environment. Table 2 outlines Papillon's stakeholders.

Stakeholder considerations add a long-term perspective which facilitates sustainability strategy in defining value creation for long term success (Horisch et al. 2014). We will now turn to this in more detail.

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Table 1.1 The strengths and weaknesses (internal) SWOT analysis

Table 2 Papillon stakeholder mapping

Strengths	Weaknesses
Strong branding with 'Dartmoor' branded gin (British 'ginassiance' (WSTA, 2020))	High product cost
Gin category worth £1.2b in the UK (WSTA, 2020)	Need for increased subject knowledge for technical decisions around energy usage and carbon emissions
Developed recipes based on local fauna and flavours – consideration for local ecological. landscape	Small scale start-up financial restrictions
Young enterprise with great ability and opportunity to be agile and proactively implement sustainable strategies ahead of scaling up	Brand and production reliant on local and natural materials – therefore at risk of environmental impacts (i.e., depletion of)
Strong brand loyalty particularly in the locality	Product is alcoholic which can have detrimental effects on people's health, plays a large part in society and thus many countries have laws and taxes regulated the production, sale and advertisement of the product
Founded with a passion and vision to do right by the environment	Trades with many 3 rd party suppliers/distributors prohibiting control of emissions (scope 1-3)
Begun the brand with the local ecosystem integral to the company	
Won many trade accolades/awards for esteems awarding bodies increasing brand reputation	
Plastic free	

Table 1.1 Strength and Weaknesses (SWOT)

Stakeholder	Important for...
Employees	Employee involvement, engagement, proactivity
Suppliers	Support with plastic free, reusable solutions, avoidance of supply issues, customer appreciation
Customers	Continued growth and demand, marketing
Bank	Financial risk security, investment, funding
Local community (plastic-free village)	Supporting the local community through increased sales, plastic-free/recycling initiatives, support of business operations to avoid 'conflict'
Dartmoor National Park	Building extensions, planning permissions, operational support
Conservation Charities	The integrity of brand, sustainability principles, product development

Table 2 Papillon Stakeholder mapping

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Table 1.2 The PESTLE analysis, including external opportunities and threats to advance the above SWOT analysis

	Opportunities	Threats (Risks)	Action to take
Political	Brand reputation – British product produced in a National Park from local fauna.	Brexit trade deal has caused significant trading issues with exporting to customers, and importing materials (supply delays, shortages and significant uplift in costs).	Focus a marketing strategy on the domestic market. domestic market. Review sales channels. Consider domestic supply channels, look for contingency suppliers closer to home – more reliable during trading conflicts and better environmental considerations.
Economic	The COVID-19 pandemic has caused global economic turmoil. As a result, the British Government have frozen the duty on spirits (WSTA, 2021).	There are many costs and duties in the production and selling of gin. Reduction in household income reducing alcohol consumption (Ibis World 2021).	The freeze on duty provides an opportunity to rebuild and grow with less overheads as the economy opens up again, which eases pressure on cash flows. Craft distilleries and SME's are growing in the UK offering* a collaborative approach to demand regulatory change. <i>* The WSTA reports 560 distilleries, up from 440 in 2019.</i>
Social	Society increasing awareness and concern for environmental impacts. Consumers demanding ethical products, and transparency of supply chains. The market for craft spirits is growing (Gin production grew 15% from 2015-2020, Ibis World 2021). The interest in local food and traceability means that consumers are increasingly looking to understand more about where their food and drink come from and how they are made. Gin is a widely popular drink in the UK.	Suppliers, Buyers, Sellers demanding more integrity and transparency. More reporting, measures and policies will be demanded. High competition for customer loyalty. Being an alcoholic drink, it has a significant threat to public health.	Opportunity to market/advertise the sustainability principles to improve brand reputation/integrity and competitive positioning. Opportunity to explain where and what ingredients are included, why they are special and local. Market the special water source that makes up such a high % of the drink. Information and guidance of the risks of drinking too much alcohol, how to drink, and how frequently.
Technological	Operational opportunities to improve efficiencies. -Machinery -Temperature monitoring -Production efficiencies -Automatic bottling (packaging) Opportunity to use online platforms to increase awareness (free branding), broader reach of sales, wider distribution network.	If company does not continue to modernise with societal technological advancements the company is at risk of losing market positioning. No longer able to compete in the marketplace.	-Online shopping -Company App -Integrated online channels -Website, social media use -Distribution networks (order fulfilment; local – national – international shipping)
Legal		High Taxes for Alcohol within the UK. Alcohol licensing – several different types. Planning Law, Food Legislation, Health and Safety Laws, Environmental Protection laws, regulations pertaining to the sale of alcohol, rules on advertising etc.	Monitor any changed in legal requirements. Financial considerations around significant trade or tax changes.
Environment	Papillon already have a natural water supply for the production of their gin enhancing flavour and decreasing demand on water supplies from centralised supplier. Recipes are developed based on local botanicals, and flavours.	Local water source could be affected by changes in weather. Supply availability could be affected by changes in weather.	Invest in water recycling, and rainwater harvesting technologies. Source organic and local alternatives, developing loyal relationships to reduce risk when demand increases, and availability reduces.

Table 1.2 PESTLE analysis (opportunities and threats)

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2.3 Value Creation

Hart and Milstein (2003) argue that “through the right set of business lenses sustainability can help drive value creation while addressing urgent environmental challenges”. Hart and Milstein (2003) have set out a sustainable value framework which outlines four dimensions of performance to generate shareholder value which, if performing simultaneously and continuously, can “maximise shareholder value over time”.

Being a young and adaptable company in a highly competitive market Papillon are in an exciting position to consider many concepts within their strategic planning to ensure continued growth through implementing sustainable foundations as they scale-up. Planning for sustainability can help drive value creation through managing costs, maintain legitimacy and enhance reputation, repositioning the company through innovation which offers a growth path and trajectory. The four notions of sustainable value creation applied to Papillon are listed below.

2.3.1 Managing costs

- Employee engagement – attracting and retaining employees. Papillon have already experienced this, with enquiries from skilled staff members due to local reputation and integrity of the brand. As the enterprise scales up this is likely to be even more significant saving recruitment and training costs.
- Operational improvements – water recycling and rainwater harvesting would dramatically reduce operational costs for Papillon.
- Reduce exposure to risk – responsible buying; buying organically and locally reduces risk of supply when regulations come in place to reduce pesticide-use in farming.

2.3.2 Maintain legitimacy and enhance reputation

- Credibility amongst stakeholders is important for investment opportunities, customer loyalty in a concentrated marketplace, loyalty from suppliers

when raw material supplies are reduced, loyalty from investors and regulatory bodies with any new tariffs or policies.

- Admiration and support from local neighbourhood can ensure “not in our backyard” conflicts are minimised.
- Reputation may be a critical determining factor when applying for planning permission within the National Park in which Papillon operates.

2.3.3 Innovation and repositioning

- Innovating products that will be sustainable for future growth, amongst a changing society and environment positions the company with a competitive advantage.
- Planning for sustainability often creates new product development – reviewing ingredients in recipes as Papillon look to source organic and local alternatives. In turn this provides marketing opportunities - Papillon exemplify this point well with the limited-edition gin developed in inspiration of and to support (through sales contributions and marketing) an endangered species of beetle native to the area.
- The latest Wine and Spirit Trade Association (WSTA, 2020) report highlights huge growth in flavoured gins (an increase in 22% compared to 2019), providing Papillon with innovation opportunities sourcing local materials.

2.3.4 Growth path and trajectory

- Considering long-term goals through shareholder consideration and social and environmental considerations as outlined in the PESTLE analysis provides Papillon with a clear growth path and trajectory by;
- Identifying product development and new distribution and technology strategies.
- Identifying cost saving strategies through responsible buying and selling, and operational efficiencies.
- Identifying areas for growth and potential areas for investment.
- Developing a long-term vision creates sustainable value and facilitates sustainable success.

SECTION 3: SUMMARY

SME's make up 99.8% of the four million plus businesses in the private sector (Revell et al. 2009). This large sector has a significant impact on the environment. A commonly quoted estimate of SMEs' cumulative environmental impact is that they contribute up to 70% of all global pollution (Collins et al. 2001). Businesses are now realising that to remain competitively positioned amongst changing consumer habits and a driving societal demand to 'do better' environmental concerns can no longer be overlooked.

Integrating sustainability into the operations of Papillon at a time when societal and environmental impacts are becoming more influential in consumer choices can greatly enhance the company's reputation and brand value, increasing sales. Synthesizing social and environmental factors into a business strategy assures managers that the strategy considers short time needs whilst developing a long-term growth trajectory avoiding unknown risks and uncertainties which better facilitates growth, adaptability and evolution.

Planning for sustainability creates new product development, highlights operational improvements, considers stakeholder value creation, improves brand and market positioning, whilst identifying risk management strategies, as well as areas for investment and areas for cost savings (Epstein and Roy, 2003; Schaltegger et al. 2001).

Planning for sustainability is the strategic planning any business needs to undertake. Papillon has made an effective start with some key considerations in their packaging solutions.

This report highlights some important opportunities to strengthen Papillon's current sustainability activities, providing greater opportunity to reduce costs, improve operational efficiencies and mitigate risks whilst charting Papillon onto a growth path that will see Papillon's sustainably scale-up as their profit increases.

"Sustainability is not just good for people and the planet, but sustainable business practices make good economic sense" (Collins et al. 2001).

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