



*Demystifying Sustainability:
The design and development of a toolkit
to generate sustainable business narratives.*

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Design led Entrepreneurial Project Report MDE 501
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*Masters
of Design
Enterprise*

Final Report

*Project
Context*

This professional report is the final phase of the Masters of Design Enterprise (MDE), a two-year postgraduate qualification, offered by the School of Design at Otago Polytechnic and is delivered in three phases. The overall aim of this programme is to identify and demonstrate the strategic value of Design Thinking within an entrepreneurial context.

Phase 1 Exploring Design Driven Innovation within the context of seafood harvesting and distribution.

In the initial phase, Human Centred Design, Design Thinking frameworks and tools were used to identify potential opportunities and innovative concepts for Southern Clams, a local Dunedin-based company. The enterprise and overall operations from sea harvesting to distribution were studied in detail.

Phase 2 Learning from Industry – Southern Clams Sustainable Marketing

This phase was based on a negotiated, 12 week industry placement with Southern Clams undertaken from December 2013 until February 2014. The client brief stipulated the need to develop and formulate strategic communications around the sustainable operations of the company. These included print-based promotional materials and resources suited to clients, customers and trade shows as well as visitors of all ages, which improved the profile of the company.

Phase 3 Design Led Entrepreneurship Project

This phase is the final part of the course.

The innovative outcomes of this project is the development of a sustainability toolkit card set. This toolkit has a two fold process of promoting and informing people about sustainability and enables the telling of stories around sustainable issues in business. The overall aim in raising awareness about sustainable performance in this way is to provide structured steps towards effecting positive behavioural change within business. This card based toolkit is a result of a review of existing models of sustainability and of effective story telling structures.



Glossary

Design Thinking - Cognitive process to solve problems.

Eco-efficiency - Is a tool to help reduce ecological damage, whilst increasing a businesses efficiency levels (Shedroff, 2009).

Eco-resilience - is the ability to survive, adapt and act in environmental, renewable and sustainable ways (Shedroff, (2009).

Green-washing - is a form of spin where companies mislead customers about their environmental performance or the environmental benefits of their service or product (Delmas, Cuerel & Burbano, 2011). It was clear that SMEs require a level of transparency about their activities and the need to avoid any perception of green - washing.

Human Centred Design - Taking the users experience into consideration throughout the design process.

Co-creation - Business strategy focusing on customer experience and interactive relationships

Users - The user is the person who is the target for a particular product and or service.

Rapid ethnographic approach - Conducting fieldwork in a timely manner to reduce costs.

Sustainability - Development that, “meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations Department of Economic and Social Affairs (DESA), 1987).

SMEs - Small to medium enterprises.

Triple bottom line - Three aspects of sustainability: social, economic and environmental (Norman & MacDonald, 2004).

List of Figures

figure 0	Illustration by E Rose (Illustrations and photographs by E Rose unless otherwise noted)	Cover Page
Figure 1-2	Blue world and key words of this project	Pages 10 & 11
figure 3	Kumar's Model of the Design Innovation Process adapted from (Kumar, 2013)	Page 18
figure 4	Triple bottom line	Page 22
figure 5	Generalised life cycle of a product	Page 25
figure 6	IPAT Formula adapted from (York, Rosa, & Dietz, 2003).	Pages 26
figure 7	MIPS calculation process, adapted from (Ritthof, Rohn, & Liedtke, 2002 p.16)	Page 27
figure 8	Development of eco-innovative product/service, adapted from (Lettenmeier et al., 2009 p.13)	Page 27
figure 9	Sustainability Scorecard, illustration adapted from a tool provided for free at www.celerydesign.com	Page 29
figure 10	Areas of the triple bottom line covered in the sustainability models discussed	Page 31
figure 11	[Untitled painting of people listening to a story]. Retrieved January 10, 2015 from http://www.greggmorris.com/story-resources	Page 34

List of Figures

figure 12	The Odyssey of Homer - Easton Press edition, [Image], (2011), Retrieved from https://www.flickr.com/photos/jemimus/6018920992/	Page 34
figure 13	[Untitled illustration of social media icons], Retrieved from www.gosimpysocial.com	Page 35
figure 14	Freytag's pyramid adapted from, <i>Analyzing a story's plot: Freytag's Pyramid</i> . Retrieved from http://www.ohio.edu/people/hartleyg/ref/fiction/freytag.html	Page 36
figure 15	Hero's journey adapted from Joseph Campbell's map (Sachs, 2012).	Page 37
figure 16	The impact of a story throughout an organisation, adapted from (Baker & Boyle, 2009)	Page 38
figure 17	Customer - Brand relationship model, adapted from (Walter, & Gioglio, 2014)	Page 39
figure 18	The effects of storytelling of brand experience adapted from (Lundqvist, Liljander, Gummerus, & Van Reil, 2013)	Page 40
figure 19	[Illustrations of Twitter, Instagram & Flickr logo's] Retrieved March 19, 2015 from logos.wikia.com/wiki/Logopedia	Page 41
figures 20	Power of the combination of image and text, image adapted from Hurst, J, (n.d) Dead Laysan albatross on Midway Atoll, Retrieved December 10, 2014 from www.bagitmovie.com/press_kit.html	Page 42

List of Figures

figure 21	[Illustration of 'Dumb ways to die' clip] Retrieved March 3, 2015 from www.visiblemeasures/wp-content/uploads/2013/06/maxresdefault11.jpg	Page 44
figure 22	[Logo of Litterati], (2014) Retrieved from Litterati.org/images/thumbnail.png	Page 44
figures 23	[Illustration of Starbucks community service campaign], (2014) Retrieved from Starbucks.com/cfs-fileSystem.ashx/_key/CommunityServer.Components.UserFiles/00.00.03/79.54/GMoS.jpg	Page 45
figure 24	Image of Fair trade map (2015), retrieved from www.thebodyshop.com.au	Page 46
figure 25	Storytelling to Reputation model, adapted from Gill (2011)	Page 46
figure 26	Key aspects of effective corporate narratives , adapted from Gill (2011)	Page 47
figure 27	Primary specific benefits relating to the use of storytelling in organisations, adapted from Gill (2011)	Page 48
figure 28	Limitations and considerations regarding corporate storytelling, adapted from Gill (2011)	Page 48
figure 29	Southern Clam Limited package in Lake Wanaka	Pages 52 & 53

List of Figures

figure 30	Collage of staff, and clams from clam bed to plate from Southern Clams Limited	Page 46
figure 31	Close up of a Littleneck clam	Page 56
figure 32	Harvesting clams at Blueskin Bay, Dunedin, June 2014	Pages 60 & 61
figure 33	Dry cleaning ready for clients to pick up, Preens Dry Cleaning Limited, 1 Kitchener Street, Dunedin, December 2014	Pages 62 & 63
figure 34	Collage of staff, factory at Kitchener street and continuous towels through ironing machine, old black & white images courtesy of Preens dry-cleaning	Pages 64 & 65
figure 35	Old advertising image courtesy of Preens dry-cleaning	Page 66
figure 36	Logo courtesy of Preens dry-cleaning limited	Page 67
figure 37	Preens worker using the ironing board at Kitchener street factory, December 2014	Page 71
figure 38	Analysis - Business Endurance Toolkit Development Process Map	Pages 82 & 83
figure 39	Participants in a design workshop, Retrieved from http://www.adaptivepath.com/ideas/ux-week-2014-workshops-preview/	Page 86
figure 40	Business Endurance Toolkit - Systems section and examples from other sections	Page 88
figure 41	Delivery - BET engagment map	Page 89
figure 42	Business model canvas for Footprint media adapted from (Osterwalder, & Pigneur, 2013)	Pages 99
figures 43	Photograph of Emmellee Rose	Pages 114



fig 1



fig 2

Part one

1

Sustainability

Research methodology	19
Literature review of selected models of Sustainability	22
What is sustainability in business?	22
Sustainability Methods Review	22
Understanding concepts of overall sustainability.	22
Social Sustainability for small to medium sized business.	22
Overall sustainability for small to medium sized business.	23
Environmental sustainability in small to medium sized business	23
Carbon Footprint	23
Eco Footprint	24
Life Cycle Assessment (LCA)	24
Impact of population, affluence, and production technology (IPAT)	26
Eco Rucksack	26
Material Input Per unit Service (MIPS)	27
Cradle-to-Cradle	28
Sustainability Scorecard	28

2

Storytelling

Literature review: Effective storytelling	36
Dramatic Structure	36
Why use stories in a Company?	38
Power of storytelling internally within a company	38
Storytelling within a company and to their wider audiences	38
Why is storytelling and the use of narratives an effective way to build brand loyalty?	39
Contemporary Media use to tell effective stories	41
Using compelling narratives as a communication strategy.	41
Storytelling using different types of media.	43
Storytelling examples	43
Environment and storytelling	43
Three examples of Social Media Campaigns	44
Corporate storytelling as a means to embed or improve sustainable behaviour	46

Part two

3

Case Studies

Two case studies: Southern Clams Limited and Preens Dry Cleaning Limited.	49
Brief History of Southern Clams	57
Economics of Southern Clams	57
Environmental issues	57
Conflicts with local community	61
Second Case Study: Preens Dry Cleaning	67
Brief History of Preens: Social history	67
Economic developments	68
Environmental concerns	68
Southern Clams storytelling examples	73
Preens example of effective storytelling	73

4

The Business Endurance Toolkit

Introduction to The Business Endurance Toolkit	80
Development of BET	80
Social Sustainability is the main focus of BET	80
Business endurance toolkit cards (BET)	80
BET toolkit card set aims	84
Business Endurance Toolkit card set (BET) prototyping	84
Business endurance toolkit goals and delivery method	84
Target audience for BET cards	85
Co-creation with business	85
Testing the prototype toolkit card set	85
Evaluation of testing cards	87
Review of user trial of prototype cards	87
Example of how BET changed behaviour	90
Implementation of BET	91
Four Stage Quadrant of BET	91
Conclusion	93

Introduction

14

Aim of the Project

This project sets out to address the lack of awareness about issues of sustainability, with specific reference to small and medium sized business (SMEs) in New Zealand. Perceptions of sustainability are often distorted, largely through incomplete comprehension of the issues. The aim of this project is to improve people's understanding of sustainability through structured communication designed to effect positive behavioural change.

Background

Sustainability was chosen as a specific topic of focus because from research it became clear that consumers are choosing companies that exhibit sustainable practices. In general terms, sustainability is the endurance of systems and processes.

Sustainability is a buzzword, frequently used to describe activity but is a concept not well understood by many people. Market Research Company Colmar Brunton conducted a poll in 2014 in New Zealand: 'Better Business, Better Future'. This poll demonstrates the importance of sustainability to a sample of 1000 people across society. Eighty two percent of the 1000 people polled, are concerned for the future (Colmar Brunton, 2014).

General approach to address the issue

The research began by exploring concepts in, and perceptions of, sustainability in SMEs. It became apparent through this research that these responses and stories from people involved in company activities became powerful vehicles for understanding. It was also seen as a means to generate consensus within overall business strategies.

Storytelling has been developed as part of the overall enterprise creation process as an effective way for a business to communicate their brand message. Storytelling here is defined as a type of narrative that involves compelling emotions and interests to excite the imagination of the listener, reader, and/or viewer (Langellier & Peterson, 2011).

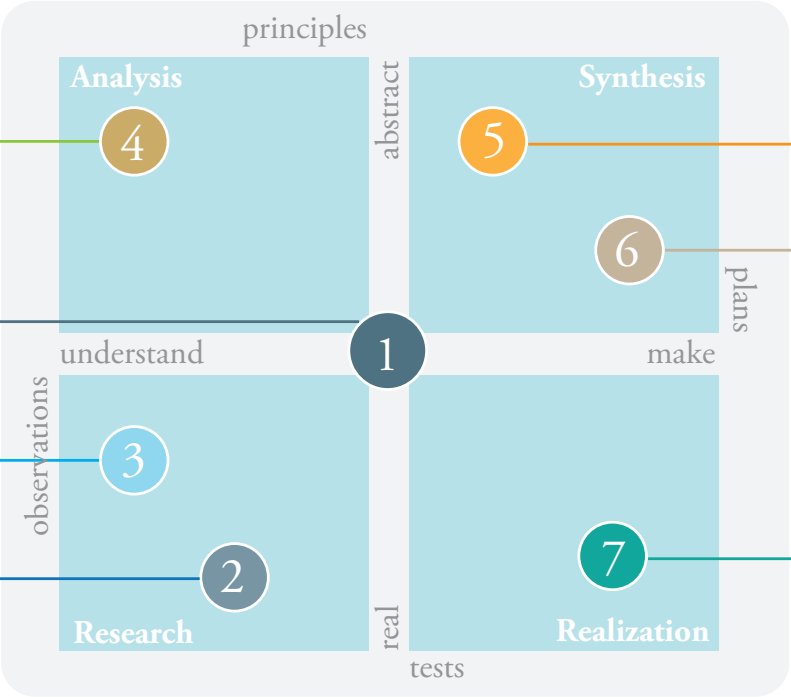
The overall intent of the project then became the design and development of a socially sustainable service enterprise based on creative story telling. The ultimate innovative outcomes included a design driven process template together with a sustainability toolkit which prompted and aligned storytelling of participants with business visions.

Part

one

Kumar's Model of the Design Innovation Process

fig 3



18

The research methodology for this project comprises two linked components. Firstly, a literature review organised around key concepts of sustainability and storytelling provides a broad contextual overview of contemporary understandings of these areas. Secondly, the developed methodology, based on Kumar's design thinking framework for innovation, structures primary research relevant to end users and immediate contexts, with the prime objective of generating innovative outcomes (Kumar, 2013).

Kumar's model also provides a systematic linking of primary and secondary research in a way that generates insights crucial to conceptual development. The main reason for choosing Kumar's framework amongst other innovation processes is because it encourages an open sourced and user centred design approach.

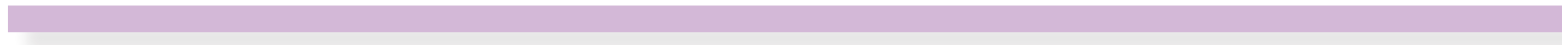
Kumar's design thinking framework for innovation provides a clear design map to research, analyse and understand users, listing defined contexts which themselves are subject to wider and changing influences. This Human Centred Design (HCD) approach prompts individual storytelling as well as articulating the interactions within an organisation and its wider cultural context.

Kumar's approach encourages both a consideration of the past and educated projections about the future. It is therefore an effective framework within which to compose stories of sustainability as well as tools to make sense of business strategy within wider environmental, economic and cultural parameters. Far

from being a formulaic approach, Kumar's framework encompasses a process that is non-linear, iterative and ultimately customisable to any context. Used in its entirety Kumar's model can also identify opportunities for strategic design innovation.

Kumar's framework clearly identifies phases of an overall design process and links these to sets of broad perspectives [modes], targeted ways of thinking [mindsets] and discrete methods. Kumar offers this design thinking framework for innovation to optimise conceptual development based on real needs and within feasible design enterprises. Essentially Kumar provides a very fine grained, customisable and open source kit-set for innovation. The challenge methodologically within this project then is to customise the overall process and match relevant mindsets and methods to each mode.

Within this project Kumar's framework has been applied in two ways. Firstly it has been utilised to understand and generate insights into the operations of two Dunedin companies (Southern Clams and Preens) which are used as case studies. The prime objective in both cases is to understand their activities and aspirations so as to enable the development of narratives about sustainability within effective overall communication strategies and business performance. Secondly, and in response to the outcomes of these pilot studies, Kumar's framework has been adapted to design a sustainability cards toolkit, which is identified through its given title of The Business Endurance Toolkit (BET).



Sustainability

Literature review of selected models of Sustainability

What is sustainability in business?

A sustainable business is one that approaches commerce, trade, manufacturing, services, products, design and development from an environmental, social and economic perspective. A goal identified globally in 1987 is for business to “meet the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations Department of Economic and Social Affairs (DESA), 1987).

At the core of business sustainability is efficiency and resilience, which promote organisational structures necessary to address environmental, social and economic concerns. Shedroff (2009) proposes that resilient systems have a greater chance of surviving as they respond to, and at times promote, change. Businesses that are adaptive and have responsive infrastructure will become more sustainable, developing a business model of eco-efficiency and eco-resilience.

Environmental, social and economic measures in this context are known as the triple bottom line (Norman & MacDonald, 2004). For this research environmental sustainability is defined as how a business can reduce its burden on natural resources. Economic sustainability is the managed use of assorted assets efficiently to allow continued function and profitability over time. Social sustainability refers to the cultural context of both the employees and the wider community, particularly the way business activities enhance the relationship. Social sustainability is an important and overlooked aspect of the three aspects of sustainability: social, economic, and environmental, because unless people are intrinsically motivated to change nothing will happen.

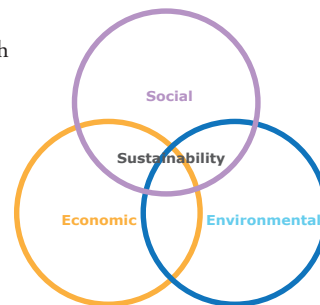


fig 4 Triple bottom line

Sustainability Methods Review

Understanding concepts of overall sustainability.

The following models were selected for review because they are the most commonly used and embody current knowledge in sustainability analysis.

The review compared how well each model assessed sustainability across environmental, social and, economic aspects for small to medium sized businesses. Where expensive evaluation processes are incorporated within some models, the researcher suggests that those may be more applicable to large tier one businesses, which have the necessary resources. The majority of models reviewed focus on environmental concerns, and few include aspects of cultural and economic sustainability.

Social Sustainability for small to medium sized business.

Social sustainability is the ability of a community to develop processes and structures, which not only meet the needs of its current members but also support the ability of future generations to maintain a healthy community (Sustainability Dictionary, 2015). Measures of social sustainability indicate levels of social development and are a way to analyse changes and progress in a society (Jacobs & Cleveland, 1999). Within a business context, involving employees in developments of sustainable practices, provides a strong sense of loyalty and engagement encouraging greater productivity, longer-term employment and stronger sense of community (Jacobs & Cleveland, 1999).

At a community level, basic human needs must be fulfilled before people will consider the environment as a priority. Greater levels of civil concerns for the environment occur in those countries with overall equality (Wilkinson & Pickett, 2010). Wilkinson and Pickett argue that people who are better off

economically, and better educated, tend to care for the environment more than those who are poorer. Discretionary spending allows them to choose sustainable products and engage with recycling schemes. This approach can also be applied to the workforce, encouraging employees to be actively sustainable creating a more productive, engaged workforce (Brady & Haley, 2013).

Social sustainability is the start of a process of being more sustainable and possibly is the most important aspect of the triple bottom line because change only happens when people decide to make a difference. Informing people of issues encourages changes of behaviour and a greater awareness of sustainable issues. A general proposition is that people do want to engage with sustainable practices but may not know how to. By presenting complex information in a simplified, but not 'finger pointing', manner enables people to be informed and to make better choices as employees and consumers.

Overall sustainability for small to medium sized business.

Eccles, Ioannou and Serafeim, (2013) in their research show that highly sustainable businesses outperform others in the longer term. They tracked 180 US based companies over 18 years. Sustainability choices were shown to be positive and enhance rather than cause punitive issues for companies (Eccles et al., 2013). Therefore an argument can be put forward that being sustainable is not only an achievable goal but one of the components to becoming a good corporate citizen.

Environmental sustainability in small to medium sized business

The Carbon Footprint and the Eco Footprint are two popular models of assessing the sustainability of a business. The former estimates how much carbon is released by the choices an individual makes, and the latter reports

the size of land required to support the choices of the individual. Both models can be scaled to assess individual choices, lifestyles, business activities, or for individual products from inception to disposal.

Carbon Footprint

The Carbon Footprint represents the amount of carbon dioxide produced by any activity performed by a person and/or community (Shedroff, 2009). The Carbon Footprint focuses on the amount of carbon produced by any activity and estimates how much carbon dioxide emissions are released throughout the life cycle of a using a product or service (Wiedmann & Minx, 2007). Since the industrial revolution of the nineteenth century, the rising levels of carbon dioxide cause problems that affect the health of the world and its people (Pearman, Etheridge, de Silva, & Fraser, 1986).

This model is persuasive and popular, for example there are a number of easily assessable websites, which purport to measure an individual's carbon footprint. For examples see: <https://www.carbonzero.co.nz/calculators/>, <http://www.carbonfootprint.com/calculator.aspx>, http://www.wwf.org.nz/take_action/reduce_your_carbon_footprint/.

New Zealand has an Emissions Trading Scheme that enables companies to measure their carbon footprint (Ministry for the Environment, 2014). This model is well established within the New Zealand business community, to engage online (climatechange.govt.nz). Examination of this model reveals a narrow focus on environmental concerns, and a failure to link in any depth to cultural and economic aspects.

Eco Footprint

The Eco Footprint is one of several ways that energy and material consumption is measured and reported (Lettenmeier, Rohn, Liedtke, & Schmidt-Bleek, 2009). The Eco Footprint is a way to understand the cost and effect of people's consumption on the environment. The Eco Footprint estimates how much productive land and water are required to support any activity. This model is flexible and scalable and can therefore be applied to a person, a community, a city, a product, a country or countries (Galli et al., 2012). The ability to be scaled means that this model can be tailored to a company's needs, for example, focusing on specific areas such as water usage or the amount of food wasted.

24

Six current models are assessed for sustainability of production within a business framework: Life Cycle Assessment (LCA), Impact of population, affluence, and production technology (IPAT), Eco Rucksack, Material Input Per unit Service (MIPS), Cradle to Cradle (C2C) and the Sustainability Scorecard. In addition the Eco Footprint model, reviewed previously as an individual model that can also be scaled to assess a group or company's choices, is considered. All are designed for, or are suitable for, assessing aspects of production, consumption and the economic viability of commercial businesses.

The models all measure environmental issues related to production. However, they do not necessarily take into consideration the economic and cultural aspects of sustainability. This is an important omission because sustainability is not just about the environment.

Life Cycle Assessment (LCA)

(LCA) is described as a comprehensive model which, when applied, results in an in-depth analysis of the complete life cycle of a product, assessing environmental impact through all stages of development (Shedroff, 2009). According to Vezzoli and Manzini (2008) LCA is a method that measures results and summarises the environmental costs from preproduction, through to use and re-use, and finally end of life of a product.

Although LCA is considered a reliable and valid tool to analyse the design and production of products and services for SMEs, the cost of using LCA can be prohibitive. LCA assessment analysis is time consuming, requires specialist knowledge and has high resource demands, as it requires products to be tracked from origin to disposal. Two basic approaches are used to conduct an LCA. The first is Process-Based and the second is the Economic Input-Output LCA (EIO-LCA) approach (Shedroff, 2009).

The Process-Based LCA, "breaks down the process for producing a product into its constituent activities, and evaluates the environmental impact of each step" (Shedroff, 2009, p.128). The EIO-LCA is a simpler process which focuses "on the likely inputs and outputs that will have the most impact" (Shedroff, 2009, p.128). These LCA models have a greater focus on the environment and do not measure economic and social sustainability to the same level of detail.

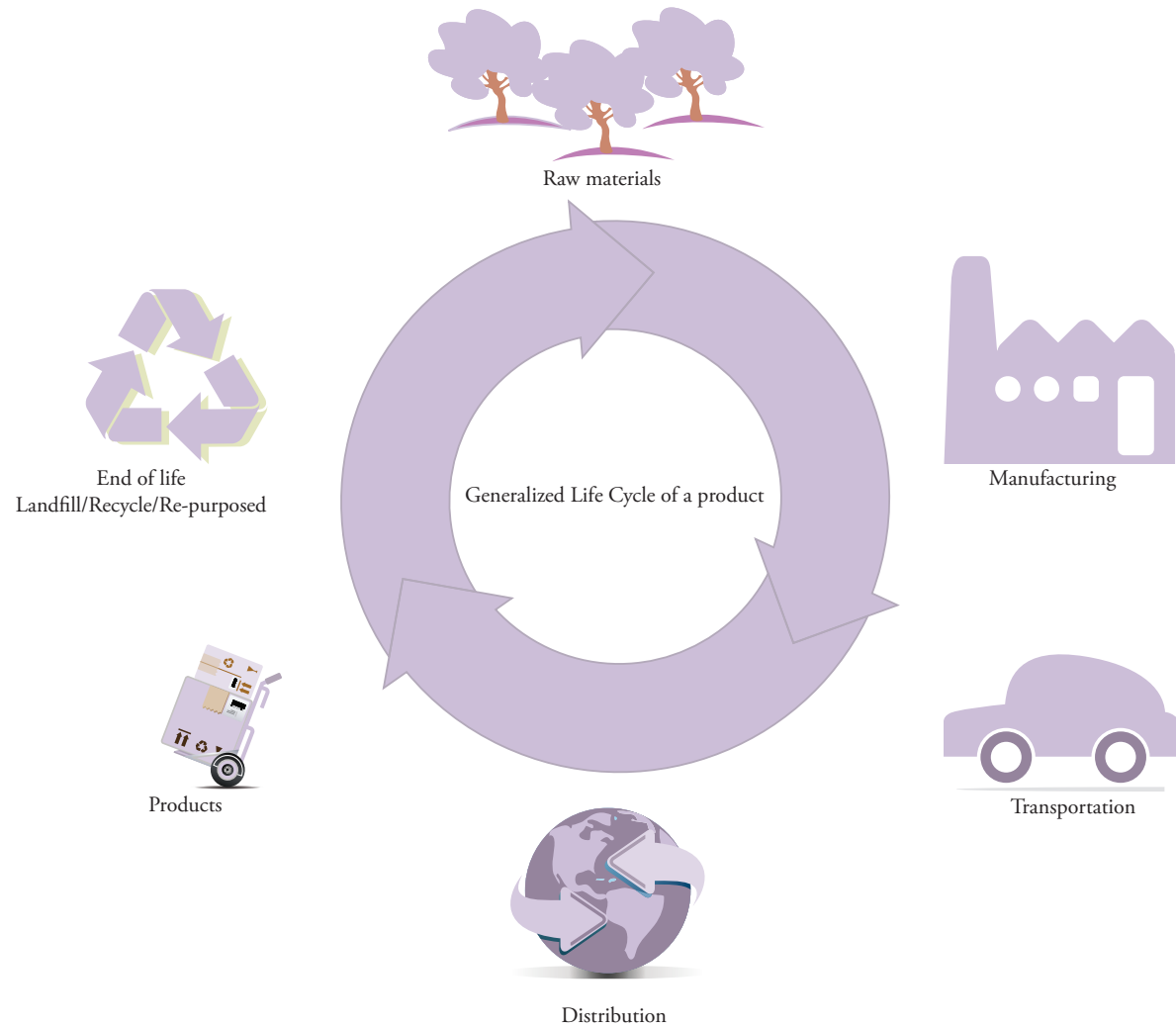


fig 5

Impact of population, affluence, and production technology (IPAT)

An earlier model developed in 1972, is IPAT which was proposed as a way to calculate resource waste based on indicators of environmental impact. The indicators are (I) impact of (P) population, (A) level of affluence and (T) production technology (York, Rosa, & Dietz, 2003). The IPAT formula analyses the issues behind natural resources being used unsustainably. The formula is a good starting point to understand the complexity of economic prosperity and the impact of technological advancement on the environment.

The formula has been adapted and improved many times, and while criticised, remains one of the most reliable methods of assessing sustainability of a defined population (York et al., 2003). IPAT can be used by businesses to indicate the direction they choose when conducting research on the use of alternative non-toxic materials (Chick & Micklethwaite 2011). This model allows both assessment of the current use of materials in a business and also of possible alternative methods or materials, enabling informed choices to be made. However this model requires specialist knowledge, which increases the cost of analysis, which will take it out of reach of most SMEs.

The IPAT equation

$$\text{Impact} = \text{Population} \times \frac{\text{consumption}}{\text{per person}} \times \frac{\text{impact}}{\text{per unit of consumption}}$$

fig 6 IPAT formula

Eco Rucksack

Eco Rucksack is a model which analyses a product or services level of sustainability, by assessing the total input of all natural resources, from their origins to the point of sale (Lettenmeier, Rohn, Liedtke, & Schmidt-Bleek, 2009). Eco Rucksack measures eco-efficiency, resource efficiency and the possibility of sustainable development (Daozhong & Qingli, 2011). This research has focused mainly on the context of open and underground coal mining. However it is worthwhile to consider as a possible model for measuring ‘unsustainable practices’. This model examines “the fact that industrial creation of every object—from mousetraps to infrastructure—requires more natural material than is contained in its [finished version]...the [Eco] rucksack of industrial goods is usually more than 10kg nature for every [1]kg of product” (Lettenmeier et al., 2009, p.8).

This model indicates how unsustainable the majority of industry is. It raises issues of how the overuse of natural resources can be addressed by manufactures adapting and changing their modes of operation in order to move away from using non renewable natural resources and finding suitable alternatives. A shortcoming of this model is that evaluation does not continue after the product has been sold to the consumer. There is no analysis of disposal of products. It covers the environment, but less so economic or social concerns.

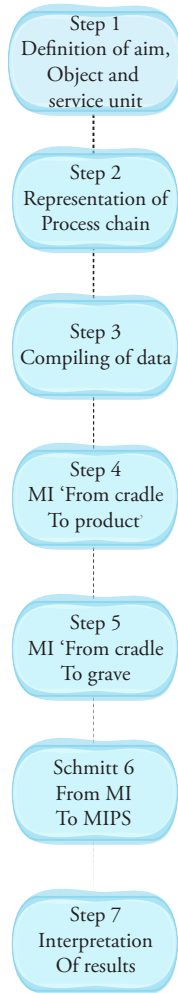


fig 7 MIPS calculation process (Ritthof, Rohn, & Liedtke, 2002 p.16).

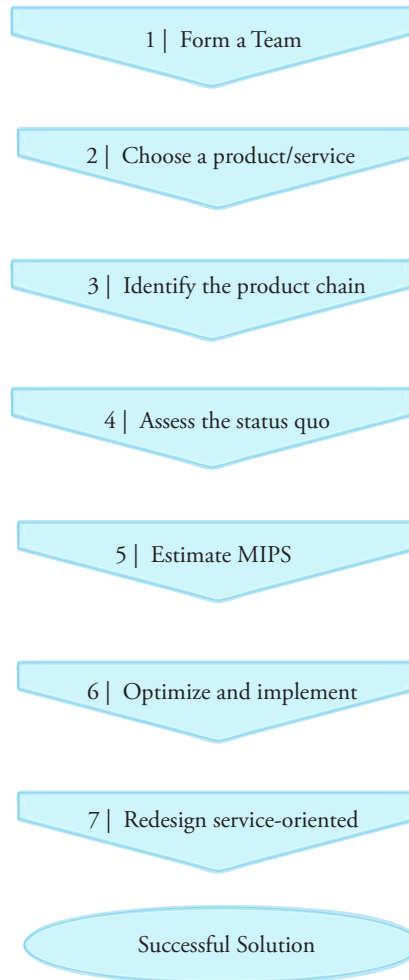


fig 8 Development of eco-innovative products/ services (Lettenmeier et al., 2009 p.13)

Material Input Per unit Service (MIPS)

The Material Input Per unit Service (MIPS) was developed at the Wuppertal Institute in Germany in 2002 by Ritthof, Rohn, and Liedtke (as cited in Lettenmeier et al., 2009). MIPS is a tool that is used to analyse a company's use of natural resources, by estimating the amount of pressure on the environment caused by its products and/or services (Mancini, Lettenmeier, Rohn, & Liedtke, 2012).

The MIPS model purports to measure all “the material and energy input of a product throughout its life-cycle” (Lettenmeier et al., 2009, p.9). MIPS is measured in tonnes or kilos. An example is that, for one kilo of cooper produced it has a material input (MI), of 350 kilos. This is because all MI will eventually become an output, whether via an emission, waste or effluent (Lettenmeier, M et al., 2009). An outcome is measured in actual weight. “By measuring the input one can arrive at an estimation of the environmental impact [of its output back into the environment]” (Lettenmeier et al., 2009, p.10).

Lettenmeier et al., (2009) have further developed MIPS as a resource productivity toolkit to develop innovative products and services and improve their material footprint. The toolkit is a seven step process complete with templates and worksheets. This programme mirrors similar Human Centered Design approaches enabling a company and external consultants to gather and organise environmental impact data to strategic advantage. MIPS equips companies to reduce MI as much as possible and is aligned to wider environmental performance imperatives such as those bench-marked in Factor 10 and Factor 4 (Sustainability dictionary, 2015). Factor four examines the ability of resource productivity to extract quadruple the amount from one unit of natural resources (Ernst, 2013). Factor 10 is a process to enable manufacturers to be 10 times more productive using half the resources (Sustainability dictionary, 2015).

Although this project concentrates on developing a similar toolkit for social sustainability it is suggested that the above resource productivity toolkit is a useful benchmark of a company's environmental sustainability performance.

$$MIPS = \frac{MI}{S}$$

MIPS equation Material Input (MI) “encompasses all matter and energy flows from natural systems to techno- sphere, in mass units ...[and]... Service Unit (S) refers to the benefit that is provided using material or immaterial goods” (Mancini et al., 2012, p.3).

Cradle-to-Cradle

The Cradle-to-Cradle (C2C) model, examines a product from inception to end of life, and is also known as eco-effectiveness (Braungart, McDonough, & Bollinger 2007). It is a well-known, valid, model that requires a high level of commitment from companies because it requires financial resources, staff, research and development. The goal of the model is for a business to use no toxic material or chemicals, aiming to reduce or eliminate waste, and “upcyclable materials” (Shedroff, 2009, p.96).

This model puts clearly into focus all the material used by a company and asks which are harmful to the environment and people; the model aims to eliminate as much harmful material as possible and investigates alternatives. It asks the pertinent question of why objects are recycled downwards, such as glass becoming brown bottles, and investigates possible ways to recycle products that can then be reused many times. C2C encourages business opportunities to reduce waste at all points in a product's life cycle and think of inventive systems to change their business model. There are difficulties with this model: it can be costly without immediate financial returns, it does not consider cultural differences, and relies heavily on the development of new technologies (Shedroff, 2009).

This model again is mainly focused on the environment, although it does touch on the effects of harmful materials on people. This model covers the environment well but leaves out economic and social concerns.

While the above models are good indicators of environmental measures a company may take, they are highly specialised and therefore cannot easily be generalised. The model below, Sustainable Score card, is a possibly a more cost effective way to audit the sustainability practices of small to medium sized businesses.

Sustainability Scorecard

Sustainability Scorecard is a reliable tool to promote sustainable decision-making. Material used in a business is simplified into three sections: green represents the preferred materials to use, yellow represents materials only to be used when necessary, and red represents materials to be avoided wherever possible (Chick & Micklethwaite, 2011). The advantage of this model is that it is easy to understand, with its clear colour-coding. The Sustainability Scorecard, with its graphic presentation of results, is also a valuable tool to demonstrate visually to consumers what a company is doing to improve sustainability. The Scorecard graphic is adaptable and can be used to show to the consumer a variety of summarised sustainable information in a quick and clear manner. The Scorecard can play a role in promoting how sustainable products are. A disadvantage of this model is that it is limited to the materials used and does not take into consideration other aspects of the business operations, while also leaving out social and economic sustainability concerns.

Sustainability Scorecard

	Where its from and toxicity impact	Energy Impact	Final Destination
Preferred	Sustainable From a renewable resource Non-toxic	Renewable energy Very low embodied energy	Fully recyclable Fully compostable Fully reusable many times
Use with caution	Conventional Renewable resource	Non-renewable Low embodied energy	Incineration or mixed
Avoid	Non-renewable resource Toxic	Non-renewable High embodied energy	Conventional or Hazardous waste Landfill

fig 9 Adapted from a tool provided for free from www.celerydesign.com

Summary

A critical examination of popular models against the criteria of environmental, economic and cultural balance, reveals they all perform well in measuring levels of environmental impact but generally fail to address economic and cultural concerns to the same level of detail.

No single model on its own is a complete tool for small to medium sized businesses. This is the main driver behind the development of the Business Endurance Toolkit (BET) in that these shortcomings are addressed through a more holistic and balanced approach.

It takes a basic the need to remain financially viable as the business becomes more sustainable. Additionally it requires a empowered community of stakeholders to implement the changes required to become a sustainable business.

Areas of the triple bottom line covered in the sustainability models discussed

	Environment	Social	Economic
Life Cycle Assessment	●	○	●
Impact of population, affluence, and production technology (IPAT)	●	●	●
Material Input Per unit Service MIPS	●	○	○
Sustainability Scorecard	●	○	○
Carbon Footprint	●	○	●
Eco Footprint	●	●	○
Eco Rucksack	●	○	○
Cradle-to-Cradle	●	○	○
Key	● Model covers	○ Not covered	

fig 10

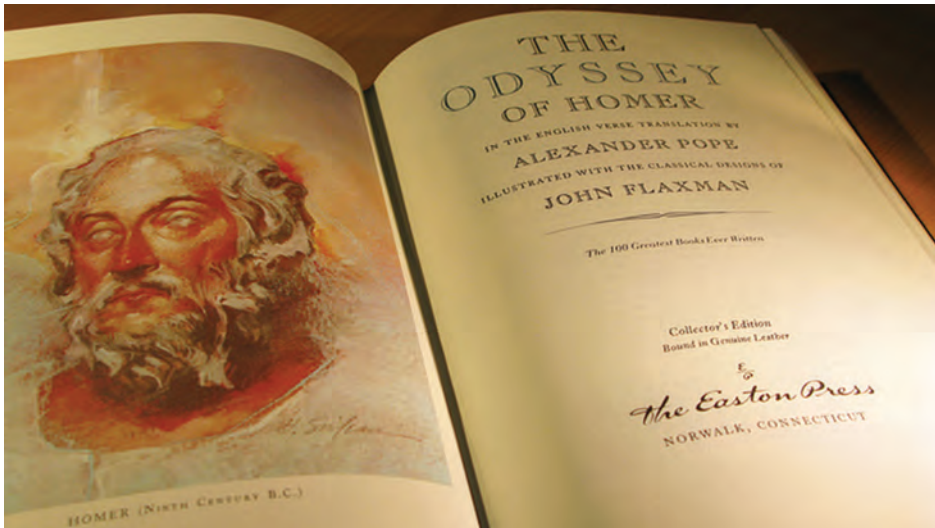


Storytelling



"Great stories happen to those who can tell them"

Ira Glass



fig's 11, 12 & 13 The way people tell stories has evolved, but a good story can succeed across different types of media



LinkedIn



LIVE JOURNAL



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my Blogger



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tumblr.



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Amibbb

Literature review: Effective storytelling

This review evaluates the power of effective storytelling. Telling stories with visual expressions has been an integral part of human culture for several millennium (Segel & Heer, 2010). Stories were oral traditions, passed down through generations. With the evolution of written language, stories became adaptable to the new forms of communication. This tradition of adaptability helps stories develop and evolve with the different forms of media available today.

Stories, in the shape of rich narratives rather than an over-dependence on graphs and charts, are how people construct memory (Woodside, 2010). Stories are used in many ways to connect communities and illustrate examples. People share stories to stay connected with each other. Stories/ narratives are a 'guidance for living'. Stories can include examples of people's actions. Stories about people and the world provide guidance and warnings of dilemmas of moral and dangerous actions. Stories set models of ideal behaviour within cultures. Narratives of individuals who overcome challenges, and who face

moral dilemmas are common to most cultures (Sachs, 2012). This theme, of an individual working towards success, the hero's journey, is found in the ancient Greek literature classic, Iliad and continues through modern times with the contemporary late twentieth century science fiction blockbuster films such as Star Wars from 1977. Both stories borrow and retell a similar human story (Sachs, 2012). The hero's journey has lots of different uses and can be applied to corporate history and product stories.

Dramatic Structure

The dramatic structure of the story can greatly enhance its effectiveness (Jackendoff, 2005). Stories have a recognizable structure described as early as the 19th century by Freytag who developed a pyramid to illustrate the dramatic structure of stories (Ohio Education, 2014).

Joseph Campbell in the book, *The hero with a thousand faces*, 1949, discusses the hero's journey.

fig 14 Freytag's Pyramid.

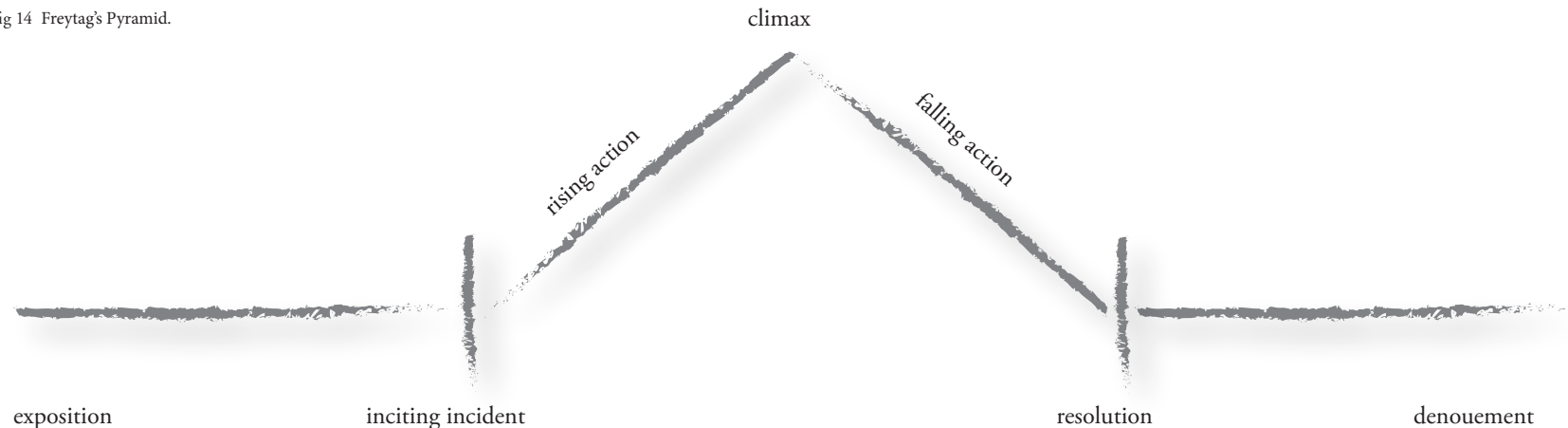
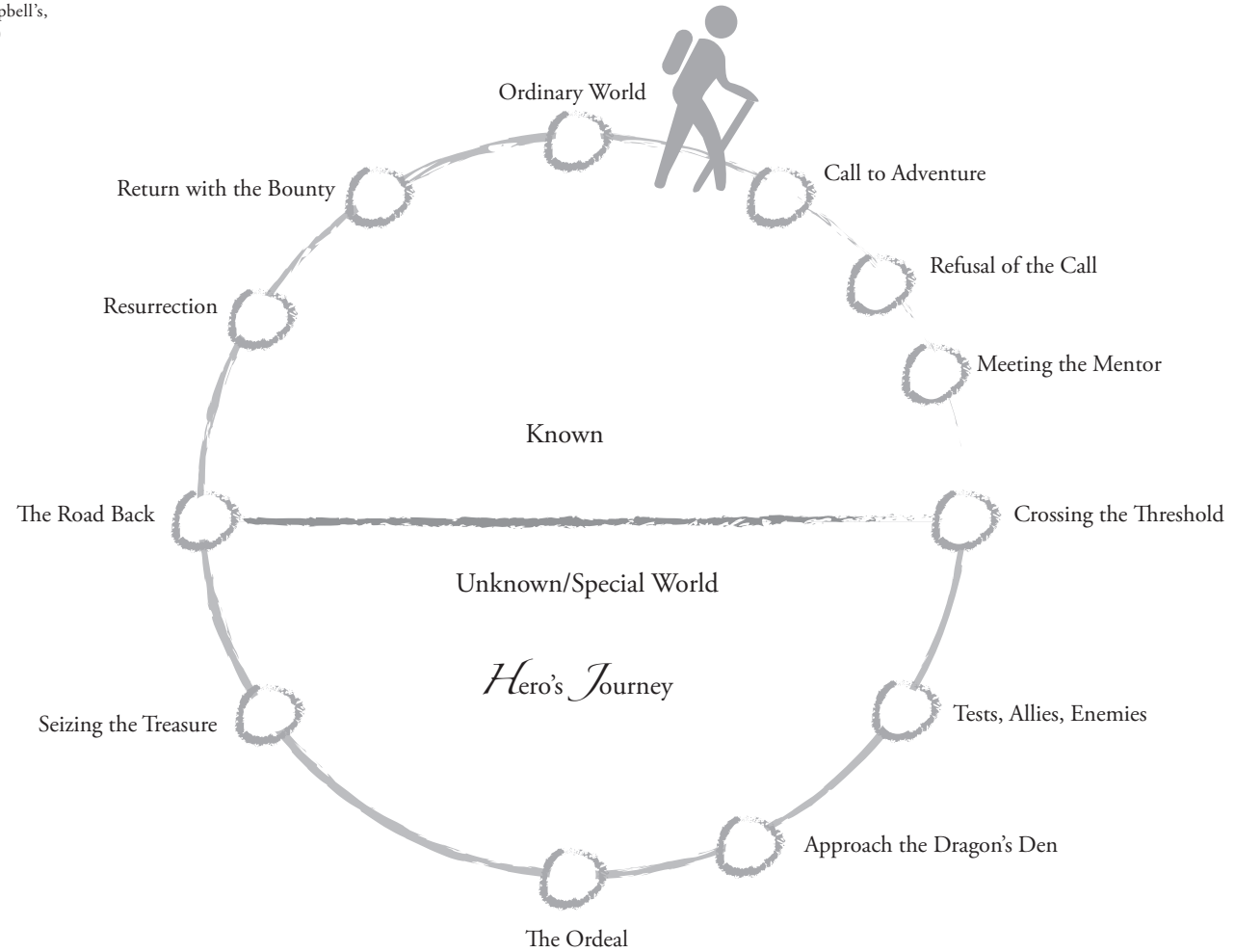


fig 15 adapted from Joseph Campbell's,
Hero's Journey Map (Sachs, 2012)



Why use stories in a Company?

Storytelling is an effective method for conveying a company's vision, including narratives of strategic development and sustainability. Used appropriately stories demystify an organisation and help build stronger brands (Fog, Budtz, & Yakaboylu, 2010). Strategic storytelling increases brand awareness and public perception of a brand (Baker & Boyle, 2009). Storytelling is a vital strategic component to differentiating businesses and brands, and can be used internally and externally.

Power of storytelling internally within a company

Stories are a powerful tool to connect a community and establish shared goals and understanding. In the community of a company, employees pick up and contribute to company philosophy when stories are used in work places to communicate. Communities with shared narratives possibly have a stronger connection than those that do not have a common experience, when the narratives are well conceived (Brady & Haley, 2013). Because stories are such an important connecting factor for communities, companies can use stories to communicate with employees and customers. Brady and Haley (2013) explain that employees make more sense of, and understand, stories more readily than when information is presented in traditional instructional, procedure manuals. Having a strong culture within a company shapes an employee's experience; this helps enable knowledge to be passed on and absorbed more easily. Telling the business's story is a deliberate practice that requires skill and knowledge to be done successfully.

Storytelling within a company and to their wider audiences

Storytelling is not only useful within a community/workplace; stories that create and strengthen community within a business can be used outside the business. Using narratives to convey a company's economic message is a way to

The impact of a story throughout an organisation



fig 16 adapted from Baker & Boyle, 2009

present complex information in a more digestible context. Storytelling, when done well, is one of the most powerful ways to re-present information, with the aim of creating a strong emotional connection for the reader or viewer. The best stories take important but complex information, and transform it into messages that are interesting and engaging.

Why is storytelling and the use of narratives an effective way to build brand loyalty?

Brand loyalty can be encouraged by gathering stories of sustainability from the workplace community (Stuart, 2011). These, with expertise, can be translated into compelling narratives for wider public awareness of the brand. This helps engage the public with the brand, building brand perception and loyalty, adding value to the company. Stuart proposes that businesses that demonstrate they have made changes to become more sustainable, and show that these new sustainable practices are incorporated into their core values and structure of the company, are more successful than companies that do not make any sustainable changes. The kinds of changes Stuart highlights can be identified and documented, then translated into stories for the wider community.

Customer-Brand Relationship Model

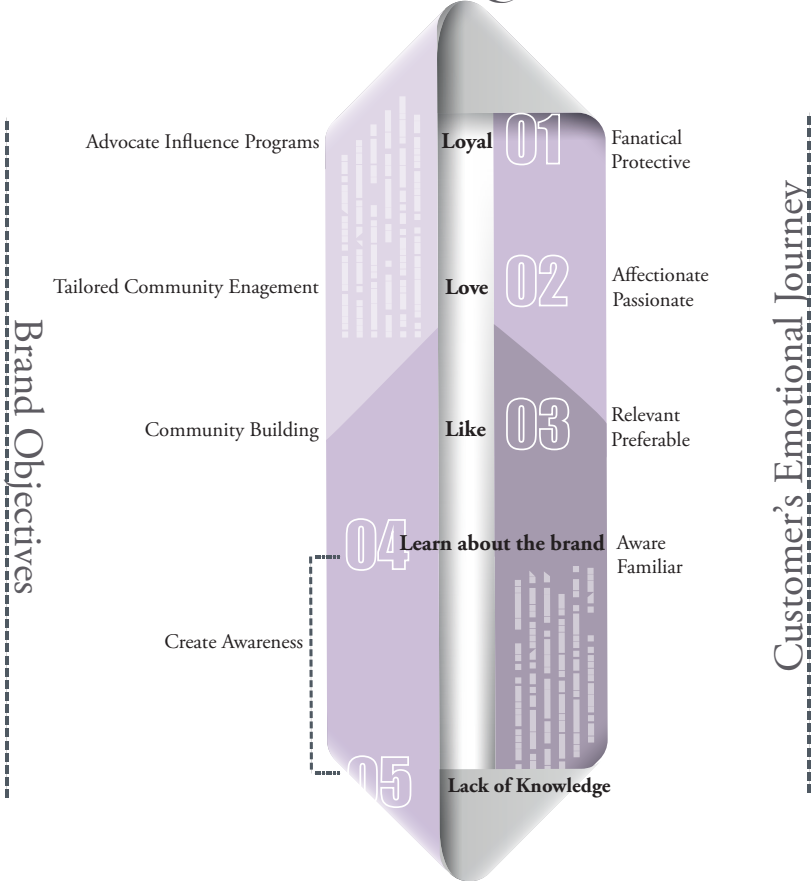


fig 17 adapted from Walter, & Gioglio, 2014

No story - The brand is evaluated based on the package



40

Story - The brand is experienced through the story

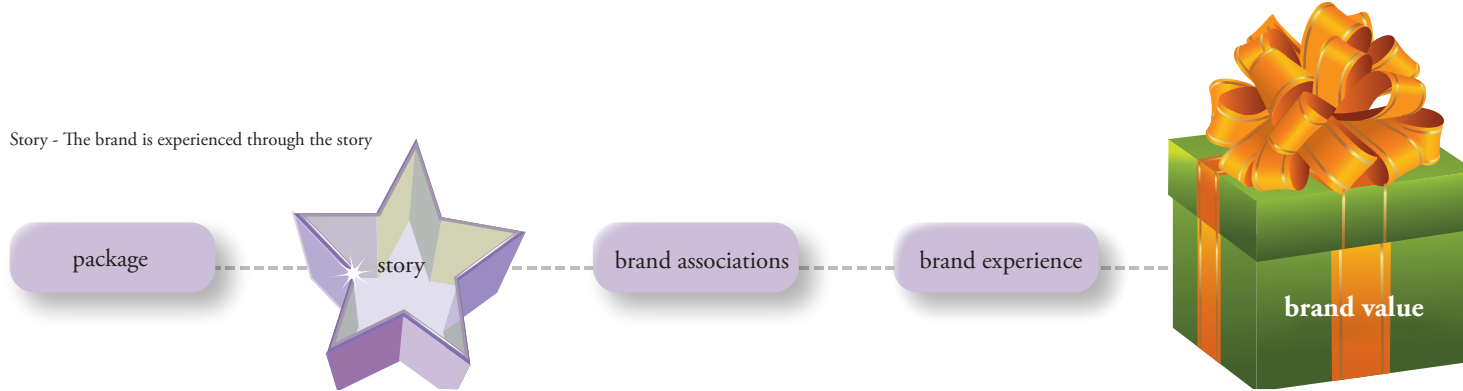


fig 18 The effects of storytelling of brand experience adapted from (Lundqvist, Liljander, Gummerus, & Van Reil, 2013)



Contemporary Media use to tell effective stories

In the 21st Century communities use a wide range of tools to share stories. Platforms to tell stories range from the 140-word character limit of Twitter, through to images via Instagram and Flickr. Twitter is a micro blogging site that was started in 2006; it is a powerful medium with stories trending on Twitter first before they make their way to more traditional news outlets (Papacharissi & Oliveira, 2011). Instagram and Flickr have developed with the rise of new technologies of digital photography, cameras in cell phones, and the advent of Web 2.0 in 2004, with its emphasis on visual content (Vivienne & Burgess, 2013).

Over the past decade technological advances have made sharing and distributing audio, video and text easy. Image-rich stories are both straight forward to distribute and have popular primary visual content. Companies who participate in online communities can do the same thing. Online communities promote freer connections. These are networks that companies can use to become integrated into the community both internally and externally. Social media such as Twitter, Instagram and Facebook are unlike traditional media because they are platforms for two-way communication. Companies can now have direct engagement and feedback from their customers.

fig's 19 Twitter, Instagram and Flickr logos from logos.wikia.com/wiki/Logopedia

Gathering the facts, turning them into a story, re-presenting, and sharing the truth to consumers is an effective marketing tool. It is an important part in a company's overall corporate communication strategy.

Those companies that rise to the challenge of making global economy more sustainable will be the winning companies; they will gain the trust of customers and society in general, and they will be the ones that generate the best financial returns to their shareholders (Andreas, Cooperman, Gifford, & Russell, 2011, p.6).

Using compelling narratives as a communication strategy.

In summary, storytelling is compelling because our lives are our stories. Communicating a company's story needs to be told effectively; this requires skill and knowledge in gathering the information and translating it for the wider community. Stories can be used to communicate specific messages, which enhance a company's communication strategy. These stories add value to a company creating a positive public perception of a business and help to maintain brand protection. This is a growing field of practice with a number of advertising agencies specialising in storytelling. In telling engaging corporate histories to demonstrate a company's good citizenship, the outcome of these narratives is to be able to translate complex information into easy to understand formats. To create, in fact compelling narratives around sustainability.

Don't be a litterbug





fig 20 Example of the power of the combination of text and image, adapted from Hurst, J, (n.d)
Dead Laysan albatross on Midway Atoll, from www.bagitmovie.com/press_kit.html

Storytelling using different types of media.

One of the ways to enrich the story is to include images along with text. People's brains are wired to process images quicker than text. When looking at an image, the majority of people, in a culture with shared meaning, would recognise something similar (Walter & Gioglio, 2014).

There is a long history of supplementing text with images. Contemporary media, specifically online media, reduces print costs and offers options for moving images, sound and being interactive. By incorporating images together with texts, more complex messages are able to be encoded, vastly increasing their effect in a community (Barthes, 1964).

Storytelling examples

The following promotional campaigns illustrate successful communication using narrative. They have been chosen because they are successful examples of recent developments of how companies can communicate stories.

Environment and storytelling

Many recognisable international organisations use stories to inform the public about their values and focus. An example of an organisation using the hero's journey to convey their narrative to the public is the environmental agency Greenpeace. Greenpeace uses stories to help convey their particular message of environmental activism. They are effectively using the ancient story of David and Goliath, documenting their stand against whaling in the Southern Ocean. Video footage of their small ships taking on whaling ships is made available to the news media, to be shared with the public. The website, www.greenpeace.org uses first-hand narratives to reinforce their role as a public hero, working to change governments' and large corporations' policies on environmental issues.

Three examples of Social Media Campaigns.



fig 21



fig 22

44

i. A successful example of storytelling to change behaviour is ‘Dumb Ways to Die’, (<https://www.youtube.com/watch?v=IJNR2EpS0jw>): a public service advertising campaign. The campaign was developed by McCann advertising agency for Melbourne’s Metro trains as a safety video.

This campaign ‘stands on the shoulders’ of the ancient tradition of storytelling; it is an example of guidance for living. It shares a lineage with traditional fairy tales with themes about being aware of dangerous situations.

A classic well-known example is Little Red Riding Hood; it is not your grandmother in the bed it is the wolf hiding in there. ‘Dumb Ways to Die’ has been viewed more than 85 million times as at October 2014, on line at Youtube.com. It is a highly successful safety campaign combining visual, audio, and humour, and is available ‘free’ to watch. This successful story aims to guide railway-crossing users into safer practices. Berger and Milkman (2013) maintain that campaigns that have a positive message are more likely to become viral hits, and viral hits are a good thing for business. The successful campaign started with a catchy song and simple animation. As a result of its success the video was then developed into a video game.

ii. Litterati (<http://www.litterati.org>) is an example of a company creating a social media campaign that builds an online community: a website that uses social media to let users share stories about collecting litter. The Litterati campaign uses Twitter, and Instagram to encourage people to collect litter. People are asked to find litter, photograph it, and share it publicly, using the hashtag #litterati, and then recycle, compost or throw the rubbish away. They thereby communally record and share actions, and co-create, encouraging a sense of community and sense of social responsibility to collect and dispose of rubbish correctly. This is a good example of using social media to engage people and include them part of the story. People who feel more involved are likely to care and do something.

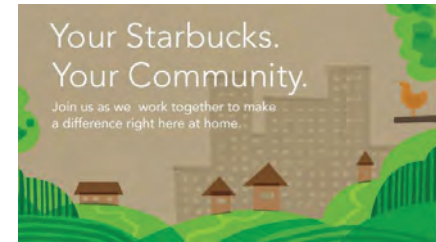


fig 23

iii. Starbucks is an example of a company telling stories to demonstrate what they are doing for the environment. Starbucks uses narratives to demonstrate their commitment to being more environmentally aware using the storytelling tradition in a modern way with the use of videos to convey the message (Grimm & Grimm, 2011). Companies such as Starbucks are engaging in the sustainability message by incorporating 'being a responsible company' into their websites. They have a series of short videos, online, that engage the customer in the processes that they have undertaken to be more responsible for the environment.

See what they are doing at: <http://www.starbucks.co.uk/responsibility>

All advertising is, is telling stories.

Corporate storytelling as a means to embed or improve sustainable behaviour

Overall Benefits of corporate storytelling

“Corporate storytelling is a way to heighten awareness for desired meaning and engender a culture consistent with the organization’s aspired values and brands” (Gill, 2011, p.13). Corporate storytelling is an effective way to improve internal loyalty to the corporate brand. This is achieved with the careful aim of narration at a ‘more individual level’ which has the effect of engaging the internal stakeholder at a personal level (Gill, 2011). It follows that a strong emotional connection is felt by the internal stakeholder to the company and brand.

46

An example often cited is the company, *The Body Shop*. *The Body Shop*, attracts staff who want to align their values to those of the company. The values of *The Body Shop* being against animal testing, community fair trade, activate, self esteem, defend human rights and protect the planet, for further information see their website: www.thebodyshop.co.nz. “Values are guiding principles for commercial decision-making within the company and encourage staff to live these values through their professional work” (Gill, 2011, p.11).

Effective corporate storytelling links carefully generated internal narratives – often best co created with employees- a process illustrated below.

Corporate storytelling as a way to strengthen internal and external loyalty

Gill (2011) makes the general point that companies that engage in corporate storytelling to strengthen internal loyalty links carefully to generating narratives - often best co created with employees. That enables employees to effectively spread their message to external stakeholders. Employees who have a positive belief in their organization are enabled to become brand ambassadors and spread good ‘word of mouth’ about their position and employer to external stakeholders.



fig 24 Image of Fair trade map (2015), retrieved from www.thebodyshop.com.au

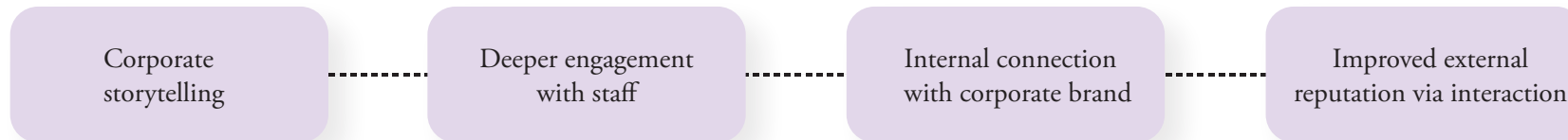


fig 25 Storytelling to Reputation model, adapted from Gill (2011). Corporate storytelling to increase internal stakeholder loyalty by using more personal narratives to engage stakeholders.

Gill provides a framework for effective storytelling by referencing three basic checklists (fig's 26, 27 and 28) - key aspects of effective corporate narratives, primary specific benefits relating to the use of storytelling in organisations and limitations and considerations regarding corporate storytelling. This framework is well suited to generating narratives of sustainability, and easily adapted to the needs of the SME's. The innovative outcome BET, is based on Gill's and Kumar's frameworks used in combination.

Key aspects of effective corporate narratives

Key points of good corporate stories from Gill (2011)

<ul style="list-style-type: none"> Create interest in the organisation Help shape expectations of stakeholders (internal and external) Lifecycle models – unfold over three parts: yesterday, today and tomorrow Where the organisation has come from Where the organisation currently is Where the organisation is heading 	<ul style="list-style-type: none"> Needs to project expertise, sincerity, likeability and powerful characteristics Expertise fosters esteem and respect Sincerity promotes trust and corporate citizenship Stakeholders will identify with the organisation if they like what it stands for Organisations are leaders as a result of their perceived power
<ul style="list-style-type: none"> Springboard approach to the future Future is kept vague so that listeners are encouraged to be part of the solution and direction Employees get a sense of contributing to the future come part of the history of the organisation 	<ul style="list-style-type: none"> Move beyond text to a living example Use collective memory from the organisation Supplement the individual's memory with organisational memory Decentralise the narrative Sense-making from retrospective, here-and-now, prospective narrative
<ul style="list-style-type: none"> Suggests four attributes – endurance, salience, sense-making, and comfort level Durable stories may have changed names and circumstances, but the behavioural lesson remains the same Salience refers to relevance and punch in the story Sense-making, meaning that is true to the receiver's own experience Receivers need to be comfortable with the feeling they get from the narration 	<ul style="list-style-type: none"> Display a struggle between expectation and reality Personalise the message Present all the statistics, including the negatives Acknowledge the weaknesses along with the strengths Self-knowledge is the root of great storytelling
	<ul style="list-style-type: none"> Attention to aesthetics through design Empathise with audiences' circumstances Sympathy through holistic pictures with all the pieces Putting fun into the activity Extend the value beyond the moment

fig 26 Adapted from Gill 2011

Primary specific benefits relating to the use of storytelling in organisations	Benefit	Link
Storytelling is an effective means of communicating with internal employees	Employee engagement	
The use of stories by management is more engaging and appealing to employees	Good employer practice	
Story objectives can remain the same, even when the content is adapted by the narrator to make stories more personal	Internal communication	
Knowledge presented through narration is more believable as receivers apply their own interpretation and experiences to the information	Employer engagement	
Effective corporate stories appeal to emotions and have a lifecycle relating to the organisation	Internal communication	
Employees may adopt a notion of ownership over corporate narrations and stories by applying their own experiences to the message	Employer engagement	
When employees are comfortable with their organisation's values and work practices, they become important assets to enhancing company reputation	Good employer practice	

fig 27 Adapted from Gill (2011)

Selection of limitations and considerations regarding corporate storytelling

Corporate storytelling is but one communication method, strategists must consider the theory of varied communications in order to provide the opportunity for shared meaning across a diverse audience.

Storytelling is a supplement for decision-making by enabling employees and communicators to imagine new perspectives and is more ideally suited to communicating change and stimulating innovation.

Storytelling as a less formal approach to information exchange still applies the general principles of effective communication. Consideration for the audience, their abilities, aspirations and their motivations are still critical to the foundation of any good communication plan.

Careful planning in line with 'good' communication practice applies equally to storytelling when used in a business environment. Research on the target audience and reflection on the desired outcome of the communication still play essential roles in the use of storytelling.

Avoiding greenwashing

Additionally Gill (2011) points to the possible danger that corporate storytelling may be an effective way to change internal and external perceptions but not necessarily behaviour. This is an important point because in working with businesses integrating and promoting sustainable practices, it is important to change behaviour and not just external perceptions, otherwise there is the real risk of 'greenwashing'.

Greenwashing is a form of spin where companies mislead customers about their environmental performance or the environmental benefits of their service or products (Delmas, Cuerel & Burbano, 2011).

Part

two

Two case studies: Southern Clams Limited and Preens Dry Cleaning Limited.

The application of design-thinking frameworks incorporating users' experience, helps gain deep insights into operations of a business. Kumar's Framework for Design Innovation as an example of an integrated Human Centred Design (HCD) is well suited to both case studies and specifically generating business narratives. This process also identifies possible new directions in business development and future product and service innovations.

53

The rationale for using case studies is that they are a real time context to analyse user experiences with an HCD focus. Using a rapid ethnographic approach fits in well with the first four modes: Sense Intent, Know Context, Know People and Frame Insights, of Kumar's seven modes of design investigation (Kumar, 2013). HCD and design thinking have borrowed investigative techniques used successfully in anthropological studies (Brown, 2104).

Kumar's framework organizes four phases around 7 main considerations or modes associated with 35 mindsets and more than a 101 design methods. This framework was not only used to analyse and understand existing business operations but also was incorporated to develop a new sustainability framework, which addresses shortcomings of existing approaches.

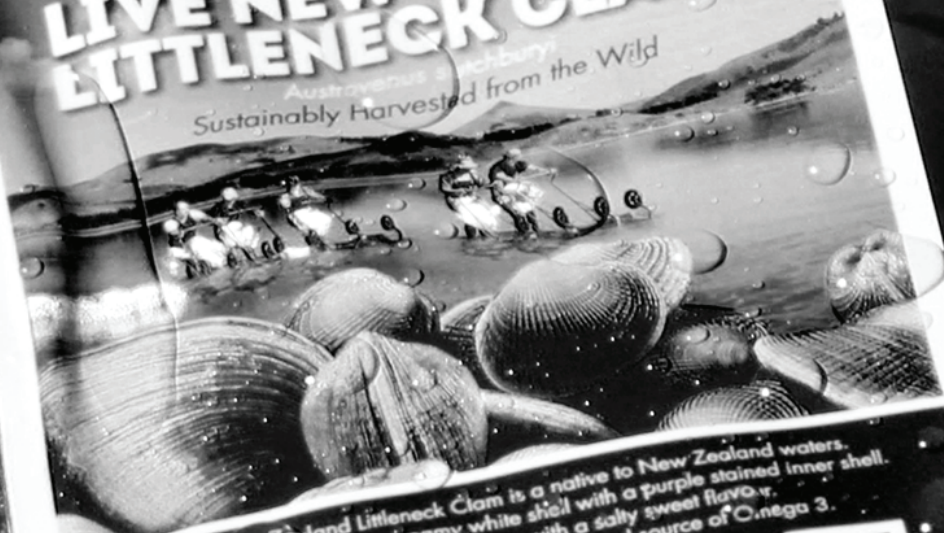


Case Studies

 Southern Clams Limited
www.nzclams.com

LIVE NEW ZEALAND LITTLENECK CLAMS

Austrovenus stutchburyi
Sustainably Harvested from the Wild

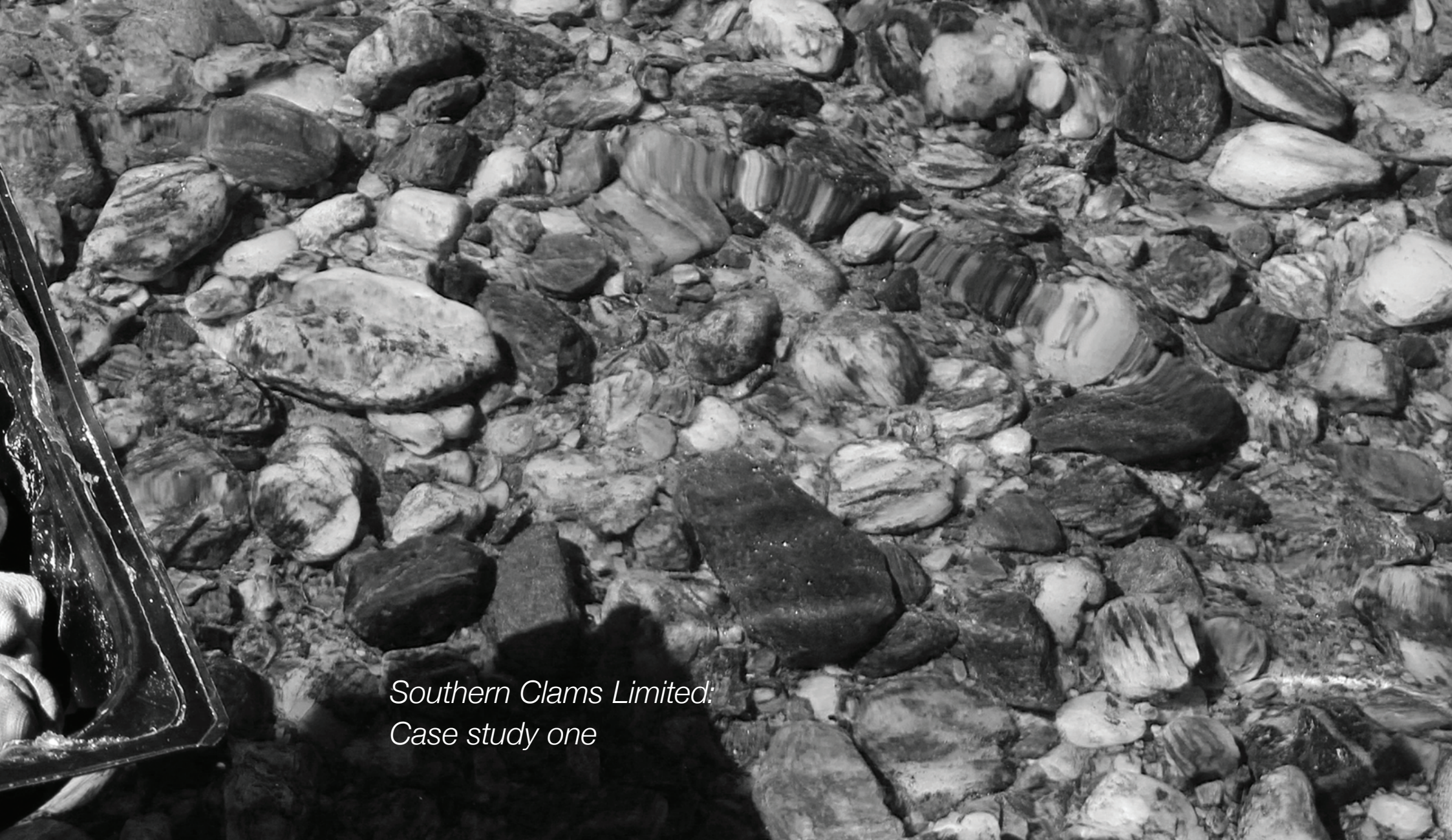


The New Zealand Littleneck Clam is a native to New Zealand waters.
The clam is known for its creamy white shell with a purple stained inner shell.
• The flesh is full and plump with a salty sweet flavor.
New Zealand Littleneck Clams are a good source of Omega 3.

Scan this
QR Code
to discover
more!



NEW ZEALAND



*Southern Clams Limited:
Case study one*





fig 31 Close up of a Littleneck clam



Preceding pages

fig 29 Southern Clam Limited package in Lake Wanaka

fig 30 Collage of people, and clams from clam bed to plate from Southern Clams Limited

Brief History of Southern Clams

Social History

This company is 30 years old, was founded by husband and wife team, Roger and Christine Belton, after time spent living in France experiencing local French customs around harvesting and using local shellfish. Roger was curious why those practices were not part of New Zealand culture when clams are readily available around the local coastline.

The company grew as Roger and Christine settled in at Broad Bay, Otago and raised a family. Christine worked part time to 'put bread on the table'. The family, which now included three children, literally lived off clams while Roger worked hard to create a viable business, keeping his focus on his vision for the company through the 'lean early years' (R. Belton, personal communication, April 9, 2014).

Difficulties in Establishing the Company

Local Pakeha food traditions often did not include clams. Roger's solution was to befriend local chefs who were unfamiliar with using clams. The company history recorded the first transaction: was a 'bucketful of clams' delivered to local eateries.

Economics of Southern Clams

Southern Clams' commercial operations began in 1982, with the granting of a license to harvest clams. Like many businesses, growth occurred but was never smooth. The first decade was especially difficult as clam beds were closed for harvesting twice at Papanui Bay for 18 and 24 months respectively because of high levels of bacteria in the water.

Development of the export market

Eighty percent of current production is exported following exploration of international markets. Additionally the implementation of harvesting practices used internationally and adapted for local harvesting conditions. Clams are now exported to Boston, New York, Los Angeles, London, and Japan and they are currently exploring the Chinese market.

Stable economic development has been achieved with significant struggles. Initially Southern Clams required significant banking support, and at one point the business was put up for sale. Finding a buyer was difficult as the 'license' to collect quota was yearly, making purchasing the business an uncertain investment. Failure to attract a buyer for Southern Clams spurred on investigations and development of more robust market options.

Tenacity may be another word for it; in the researcher's contact with Roger it became clear Southern Clams has succeeded because of Roger's willingness to keep trying and not concede defeat. Currently Southern Clams have had a proposal to farm oysters in Dunedin harbour, which has been rejected twice, and now they are on to their third attempt to gain Dunedin City Council approval. Roger has fought with the different government agencies over the years to keep the clam beds open; with each new government there can be a significant change in policy and Southern Clams needed to respond to those changes. Roger seems to enjoy, and yet be frustrated by, these encounters with government bureaucracy.

Environmental issues

Southern Clams rely on environmental balance for success, and to be able to stay in a sustainable business. Clams are harvested 'wild', from natural conditions, working within regulations designed to safeguard clam populations, using specialized harvesting processes and practices. A further

requirement is to keep bacteria levels of clams within current food regulation Codes of Practice.

In 1982 little was known about environmental consequences of harvesting, so Southern Clams developed an ongoing relationship with research students from Otago University, spanning the lifetime of the company. Currently they are undertaking five-year project in Otago Harbour to investigate the environmental effects of harvesting in that location. This is Government approved research, and is important because it shows Southern Clams are willing to expand their operations, with such a large, long-term project.

To off set their carbon footprint, Southern Clams planted 83 hectares (205 acres) of bio diverse forestry in the Otago region and plans to plant 300 hectares (740 acres) by 2018. The company has planted a range of species with varying growth rates which include Larch, Douglas Fir, native beech and Eucalyptus (Southern Clams, 2014).

Developing Southern Clams Story

Southern Clams' core values, are summed up by Roger Belton as: we are straight up and down, not fashionable, we are durable, we are here to stay, old fashioned, robust, looking after habitat, conserve, not changing, want to be the best (R. Belton, personal communication, April 9, 2014).

In developing the story of Southern Clams, it was realized that the narrative needed to focus on Roger: the lone hero's journey struggling to establish the business in the early years continues a tradition of stories that date back to ancient Greek times. In addition to Roger's story, telling the company's story was also important. In the story of Southern Clams there is also 'guidance for living', as to why shellfish are a more sustainable source of protein than say, beef. Developing this story required skilled selection and presentation, to avoid 'pointing the finger' at consumers and making them feel bad about their

choices (Bain, Hornsey, Bongiorno, & Jefferies, 2012), but rather to make consumers have a 'feel good factor' about their purchase.

Design Outcomes

Part of the investigation at this initial phase was analysing the company's processes incorporating Kumar's model of Frame Insights, to generate potential innovative developments.

In this first phase possible areas for development included:

- During the harvest, the need for a mechanical device for lifting bags of clams into the barge, to reduce injuries, and the possibility of having a workstation on the water. This would reduce double handing and lower transport costs.
- Mapping of the harvest, creating a colour-coded mapping system in a phone app to monitor the clam beds. This would enable made-to-order harvesting to be more efficient.
- Packaging, analysis of ways to improve packaging, such as improvement to the cardboard boxes currently used, and alternatives to expandable polystyrene packaging.
- Brochure
- The development and design of promotional materials that emphasised Southern Clams' commitment to sustainability were developed and communicated to the public.

After completing the research in the initial phase, a brochure was designed to communicate part of Southern Clams' story and highlight their commitment to being sustainable.

Industry Placement with Southern Clams

Part of the Masters of Design Enterprise (MDE) was industry placement with Southern Clams. For this the promotional material produced placed an emphasis on Southern Clams' commitment to being sustainable. A proposal was drawn up between the MDE researcher and Southern Clams for the work to proceed over a 12-week period. At the conclusion of the placement a full report was produced as part of the MDE.

Southern Clams have spent the last 30 years researching the clam beds. There are numerous Masters and PhD reports in Roger's office that detail research and the environmental impact of the wild-stock rotational harvesting system on the clam beds. The consensus of the reports is that Southern Clams' environmental impact has been minimal. It is very important to Roger and the team working at Southern Clams to maintain the optimal environmental levels of the clam beds.

The company see themselves as care-taking the beds, with three strategies in place: firstly the harvest is done by hand which has less impact on the environment than mechanical methods; secondly they monitor the water quality in Blueskin Bay; thirdly, by careful sustainable practices over the last 30 years, their practices have enhanced the clam beds to produce some of the best quality clams available, which are sold worldwide. With this careful management Southern Clams are protecting the clam beds for future generations. This demonstrates commitment to being sustainable, because if the company did not monitor and care for the environment there might be no more clams to harvest. It is this message that needed to be communicated to the wider community.

A brochure was designed, to entice new customers, which described the history of Southern Clams. Twenty thousand copies of the brochure were printed and distributed around New Zealand and to their customers overseas. In addition a booklet was produced: 'The Story of Southern Clams'. After consultation

between the researcher and Dave Redshaw, the booklet has been refined to include Roger's story of the early years of the business.

The updated booklet of 'The Story of Southern Clams' required two print runs, and two copies were posted to the Labour and Green MPs who visited Southern Clams in March 2014. Booklets were taken by Dave Redshaw, Operations Manager, to England for feedback from their customers. Feedback about the brochure has been positive; Fraser Booth, Domestic Sales Manager, has reported back that customers like the lighter style.

In addition the booklet is being used as part of the background for Southern Clams' bid to farm oysters in the harbour. Ron Sutherland, marine consents consultant, viewed the booklet and told Dave that it was good, particularly as he needs to give background of the company for the application for oyster-harvesting consent (D. Redshaw, personal communication, April 30, 2014).

With feedback from outside sources the booklet is being updated on a regular basis to continue to tell the current story of Southern Clams. The design of a booklet is part of a larger strategy it will be added to an updated website as a downloadable PDF. The overall aim is for a corporate communication strategy to get the Southern Clams' story across to the consumers via web, print, and possibly social media.

Ongoing contact with Southern Clams

Since an excellent relationship has been achieved with Southern Clams and a new model to measure sustainability refined, design experiments have continued through to the third phase of the Masters of Design Enterprise. This has included consulting with Southern Clams on updating their website. A meeting with Southern Clams and Myth, a Dunedin based web development company, was held in early April 2014. Discussion revealed that eighty percent of people viewing the Southern Clams' website use their



mobile devices. At that time the website was not mobile-friendly; it was proposed that the website be updated to be more user-friendly

As a direct response to users' needs, Southern Clams have agreed to the development of a mobile website. Currently, because the site is not suited for that platform, visitors are moving on after less than 10 seconds. This has been discussed in a meeting conducted at Southern Clams, with Roger Belton, Managing Director, Fraser Booth, Domestic Sales Manager and Dave Redshaw, Operations Manager, and a new mobile web site is in development.

As consumers become more aware of the environmental costs of the food they eat, clearly communicating to the public that clams are a renewable resource and Southern Clams is committed to sustainability, will help future-proof the company by building brand protection and developing good public perception.

Southern Clams provided a situation to refine the new sustainability card set and resulted in the development of a brochure, mobile website and booklet.

Conflicts with local community

However not everyone in the community is happy about Southern Clams taking clams from Blueskin bay and Otago Harbour. The local Maori Ngai Tahu, see commercial harvesting as possible threat to their ancestral rights of collecting clams; for the Maori in the South Island sources of food are an integral part of their culture. This issue effects not only Maori but local fisherman in a recent article in the *Otago Daily Times*. Two fisherman raise concerns about Southern Clams research permit that allows them to harvest clams in Otago Harbour for five years they say its 'not sustainable' and 'they are harvesting the best beds out of existence' (McAvinue, 2015).

The article also discusses the how the Otaku runanga have applied for a maiaitia reserve which means control of 'all non commercial fishing in the harbour'. Additionally the runanga will oppose the renewal of Southern Clams permit in Otago Harbour next year (McAvinue, 2015). This highlights some of the conflicts that Southern Clams have to negotiate with members of the community. The natural of clam harvesting is a culturally sensitive area that perhaps Southern Clams could do much better, to increase the companies levels of social sustainability.



fig 32 Harvesting clams at Blueskin Bay, Dunedin, June 2014



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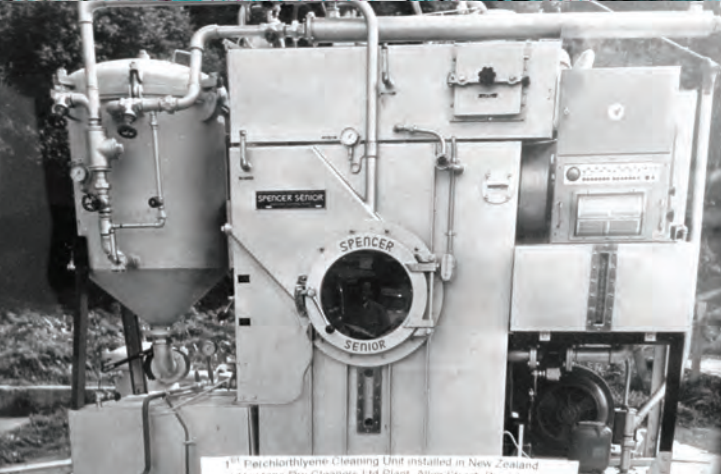
PREENS
KIRSTEN DRYCLEANING

Tax Invoice

Preens Drycleaners Wharf St
1 Kitchener St
Dunedin
Phone: 477 2140
007 9 515 88
Email: info@preens.co.nz

NZ Fire Service Area
Office

*Preens dry cleaning limited:
Case study two*





**PLAY
GOLF FREE**
While having your **SUIT PRESSED**



Preceding pages

fig 33 Dry cleaning ready for clients to pick up, Preens Dry Cleaning Limited, 1 Kitchener Street, Dunedin, December 2014

fig 34 Collage of staff, factory at Kitchener street and continuous towels through ironing machine

Left fig 35 Old advertising image courtesy of Preens dry-cleaning

Right fig 36 Preens dry- cleaning limited logo

Second Case Study: Preens Dry Cleaning

Preens, is a Dunedin SME business that dry-cleans and launders clothes and soft furnishings. This case study comprises three sections: a brief history of the social, economic and environmental aspects of Preens, the development of narratives, and thirdly, documents the development of successful designs. This company was chosen to demonstrate how development of a new model to analyse a business's level of sustainability can be applied to a company working in a very different way to Southern Clams, being service and chemically based.

Brief History of Preens: Social history

Preens started in the 1920s and was bought by the Wellington family in 1979. The company contact for Preens is Rick Wellington, Managing Director, Image Services, Preens Apparelmaster. Rick is passionate about sustainability and wants to make sustainable practices a more central part of the business. Rick has been instrumental in creating opportunities for staff to become involved with sustainability with the formation of a sustainability committee.

Rick's grandfather started Newtowne Dry Cleaners Ltd in 1951, and the business then passed on to Rick's father. Rick, after graduating, is the third generation of his family working in the dry cleaning business.

71



Economic developments

The company structure is as follows: Image Services is the parent company, and under them they have Preens, Apparelmaster (uniform lauder and repair service), Newtowne, Mike's Cars (used car dealership), and Just Cabins. Currently they have 55 staff in their dry cleaning business, which includes branches in Dunedin, Gore and Oamaru. Preens' head office is at 1, Kitchener Street, Dunedin. They are a locally owned and operated enterprise.

In addition to the dry cleaning business, the company operated photo-processing (Kodak Express) stores throughout New Zealand including 6 stores in Auckland. The life cycle of the stores was between 1986 and 2011. With the advent of the digital camera and people printing their photographs at home, those shops were closed down or sold. Preens consider themselves an adaptive company: they have responded intelligently to changes in consumer behaviour (R. Wellington, personal communication, May 15, 2014).

Environmental concerns

Adapting Kumar's modes in the development of a new model, potential ideas of sustainable innovation were identified.

- Contracting of a wood chipper, to help reduce carbon emissions and costs of supplying electricity to the steamers for ironing. A wood chipper may seem unusual but it is a way to reduce carbon emissions and electricity consumption by using it for the furnace to supply steam to the presses.

- Developing a sustainability committee to reduce waste and encourage recycling in the factory.

- Reducing the use of plastic bags for returning overalls to customers.

- The adoption of a Global Positioning System GPS system, to cut down the use of vehicle fuel and wear and tear of delivery vehicles.

- Moving away from petro-chemical based dry cleaning into more environmentally friendly dry cleaning machines.

Sustainability Practices

From observations it is apparent that Preens management has been open to developing operations to become more sustainable and have researched and then implemented change. Although changes are slow in coming, small steps are being taken to achieve more sustainable goals. Preens have been part of the carbon and sustainability programme, 'In-Step', for the last two years; they have managed to reduce some of their emissions by up to seven percent (In-step report, 2014)

Narratives for Preens

The storytelling for Preens follows a different journey from Southern Clams, although they share the common theme of wanting to create 'guidance for living'. Guidance for living, in this context is to increase the consumer's choices to become more sustainable. By telling stories about sustainability, research suggests people will choose those companies that have sustainable practices over ones that do not. For Preens the stories follow the tradition of the fairy tales and moral fables such as those by the Grimm brothers, with doing good for your community and being a good person, woven into the narrative.

Ethnographic interviews

Kumar's mode of Know People was applied in asking questions, observing people, and asking 'why' often. One concept developed was to enable customers to return their hangers to a stand. Staff were questioned to gain an understanding of how they would be affected by this change in customer

behaviour. Questions were asked about how they assist customers, and how counter staff would like the hangers to be returned. A staff member advised that there are up to five different types of hanger and she would rather the customers give her their returned hangers. The concern was that sorting the hangers would be extra work, and if collected, it made sorting simpler. The question was asked which customers currently brought their hangers back and it was explained that the regular customers did, whereas people that came in less often rarely brought them back. Another staff member advised that she would prefer hangers to be returned to her. After explaining these concerns to Rick, it was decided that the return hanger stand would not be used but an image designed for the LCD screen in the shop front would be used to communicate the message to return hangers. This is refining of ideas is part of the design process..

To gain an understanding of the company processes, nine staff members were conversations were had with a range of employees, one who was there on work experience to a male who has been working there for over 40 years. The most experienced staff member currently works at the Preens factory two days a week and three days a week is the manager of their Newtown store in central Dunedin.

General open-ended questions were asked to encourage people to chat, such as, 'What are the best and worst aspects of your job?', 'What would make your job easier?', and 'What areas could be more sustainable?'. Notes were taken as the staff spoke. The goal of talking to the staff on the factory floor was to look at the operations from a strategic design perspective and see where processes could possibly be improved. These conversations also enabled the researcher to gain an understanding of the community in the factory and help identify possible stories to develop.

In talking with staff an incident was recounted by one of the staff who had told one of the other employees about cigarette butts. The other employee

had thrown their butt on the ground and was told that birds eat the cigarette butts, causing death. Once the employees heard this story, not only did they pick up their own butts but all the others that were on the ground. This is an excellent example of effective storytelling; by explaining to someone the effects of their behaviour they changed it. This story follows the ancient storytelling traditions, of 'guidance for living' and asking for help.

Design concepts

Through the research undertaken some outcomes have been in refining the design process; one of the examples is the development of a return hanger policy, helping customers feel good about their actions by returning their used hangers. In addition a more direct campaign was developed to promote the 'GreenEarth' dry cleaning machine that uses silicone based cleaning as opposed to the petrol chemical PERC. It was decided to communicate to customers that whilst PERC is a non-sustainable product, the process by which it is disposed of takes the highest degree of care. Very little waste is involved in the dry cleaning process, but what PERC is left over is shipped to Christchurch where it is cleaned and resold to the dry cleaning industry. This demonstrates that Preens staff and management are trying to become more sustainable including keeping customers informed of what processes are involved in dry cleaning by being transparent in their business operations.

Design Process

The initial discussions with Rick Wellington were on their sustainability stories and how to convey those to the public. The problem was that many customers do not know what good practices Preens are using in their effort to be more environmentally friendly. Rick was keen to use design/ storytelling solutions to communicate how Preens are committed to becoming as sustainable as possible. After three meetings where ideas were brainstormed, a document was created to develop ideas for telling Preen's sustainability stories.

Design experiments with Preens were conducted to see how using strategic design thinking in sustainable marketing communication could increase a brand's 'green credentials' to the consumers and in the long-term possibly increase market share. While this project is graphic design based, strategic design thinking models, based on Kumar's seven modes (Kumar, 2013), are the basis of the design experiment framework.

In a meeting with Rick in early May 2014 refining ideas developed previously created a list of items for the design experiments. It was agreed that the first work would be with their industrial business, Apparel Master. A sticker was produced that would be placed on the front of Continuous Cloth Towel dispensers. This would explain why using a Continuous Towel is more environmentally friendly than paper towels and more hygienic than hot air drying.

Swing Tag designs for use in Preens retail dry-cleaning were created to encourage customers to return their hangers. Another tag informs customers about Green Earth, which is a pure liquid-silicone based dry cleaning product. Brochures, posters, rack cards and screen shots created for the LCD screens in their stores were developed.

Work began on this first phase of the contract on May 12, 2014 with development of ideas and concepts for the swing tags return hanger stand and continuous towel dispenser sticker. On May 15, 2014 a site visit was conducted at Preens head office, where staff were observed and asked questions. Photographs of the dry cleaning operations were also taken to document visually the factory and people.

Work on the design experiments with Preens is ongoing through the duration of this research. An excellent business relationship has been established between the researcher and Preens, with the researcher offering guidance and assistance in developing further ideas for sustainable practices.

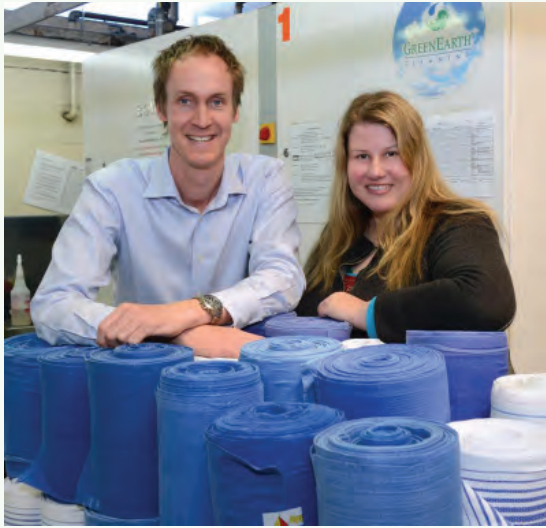
Reflective practice of the case studies

Using Kumar's framework looking at all considerations within a business to refine possible solutions to become more sustainable. The researcher realised that there is a general need for a sustainable framework more inclusive of the triple bottom line with social sustainability being at the forefront. Both case studies were able to generate insights for the need of a new sustainability model. Undertaking an HCD approach to Southern Clams and Preens, a new model to enable people to tell sustainable stories more effectively was created by the researcher.

fig 37 Preens worker using the ironing board at the factory on Kitchener st, Dunedin, December 2014



Greener dry-cleaner a winner



When it comes to continuous cotton towels, Otago Polytechnic student Emmellee Rose has become a convert. Miss Rose, who is completing a master of design enterprise course, has been working with both Preens Dry Cleaners and Southern Clams for her thesis on tailored communication strategies for companies' best sustainability practices.

At Preens, she was liaising with business manager and director Rick Wellington and looking at ways to increase levels of sustainability.

Coming from the point of view of an independent observer, she said it had been a learning experience, as she gave the example of continuous towels.

Article in *The Otago Daily Times*, 'Greener dry-cleaner a winner'
By Sally Rae on Wed, 3 Dec 2014

Before her involvement with Preens, she had always used air driers but, after reading research, she realised continuous cotton towels were "far more hygienic" than air driers and used less energy overall than paper towels.

Miss Rose prepared the company's entry in the Westpac Otago Chamber of Commerce Business Awards, where it won the sustainability award.

Preens Dry Cleaners was established in the 1920s and has been owned and operated by the Wellington family since 1979. The company expanded into workwear rental in the 1980s under the New Zealand-wide Apparelmaster franchise, supplying and cleaning overalls, mats and towels. About 55 staff were employed at premises in Dunedin, Gore and Oamaru.

Preens monitored all its energy and was in its second year of being involved with the Instep carbon and sustainability programme.

The latest report showed the company had dropped usage of lpg by 11% and lowered its carbon emissions by 6% in the February quarter.

It had one of two GreenEarth dry-cleaning machines in New Zealand, which used a silicon-based process. The water used to cool the dry-cleaning machines was reused as heated water for the washing machines.

Hanger recycling was promoted, biodegradable bags were used for the return of customers' garments and there was a recycling programme.

The company encouraged the reuse of textiles and the likes of tea towels and bar wipes, which were used by cafes and restaurants, were then sold as rags at the end of their life.

An employee-led sustainability subcommittee had been established, looking at ways to improve sustainable practices in the factory and stores and oversee the company's recycling programme.

The company was constantly reinvesting in new equipment, including driers that reused 70% of the air. Lasers detected when the textiles were dry, as opposed to timers, Mr Wellington said.

It had been a very enjoyable project for Miss Rose and she enjoyed working with Mr Wellington who was "so enthusiastic" about trying to become more sustainable.

She was also keen to spread the word as to what businesses were doing in the sustainability space.

As part of her thesis, she was developing a model measuring sustainability in small to medium-sized businesses and she hoped to offer that service to businesses in Dunedin and its wider area.

Mr Wellington said winning the sustainability award was "fantastic" and a chance to reflect on what the business was doing, while also looking at what else it could do.

"We're only just getting started. If it makes economic sense and staff want it and it's good for the environment, it's a triple benefit," he said.

Successful outcomes of storytelling from the case studies
Southern Clams Storytelling examples

International organisations, such as Apple, World Wildlife Fund, and Save the Children, use stories to inform the public about their values and focus. The same approach used by global brands works at a local level. Working with companies like Southern Clams the researcher has used storytelling to personalise their economic growth, presenting an Iliad-style narrative of hard work, and inventive problem solving to overcome challenges. The story transforms an economic report into something inspirational with a local hero, Roger, being central to the narrative.

Why is it important for Southern Clams and other companies to tell their sustainable story? Sustainable stories developed from the new model, to be discussed in a later section, provide informed ways to connect businesses with their consumers/clients/stakeholders at an emotional and community level. Shelton (2013) highlights that telling the narrative of a business's sustainable journey is part of a good marketing strategy and is becoming more important as consumers are increasingly interested in companies having 'green credentials'.

Telling the narrative of Southern Clams with their proven careful management of the clam beds since 1982 and their commitment to becoming carbon neutral, adds value to the company. Communicating how Southern Clams developed a sustainable management plan of clam beds, in conjunction with University of Otago Masters and PhD research completed over the past thirty years, is a story that can be developed and told to the public to demonstrate Southern Clams' commitment to taking care of the clam beds in the present, for future generations. This has led to Southern Clams using the brochure as part of their submission to gain a permit from the Dunedin Council to farm Oysters in Otago Harbour.

Preens example of effective storytelling

One of the successful outcomes so far with Preens was completing the written submission on their behalf for the Westpac Otago Chamber of Commerce Business Awards (OBIZ Award) 2014 for Sustainability, which Preens won. The design experiments at the time of writing have been accepted and are to be printed and distributed in the next six months. Preens is a larger structured company, compared to Southern Clams, and therefore needs more time for development and outcomes take longer to achieve.

From the case studies undertaken with both Southern Clams and Preens it became clear that a new approach to analyse SME's was needed. The Business Endurance Toolkit (BET) enables the analyses of a business's sustainability practices, makes recommendations to improve those practices, and then translates that information into narratives for the public to become aware of the company's stories.



*The Business
Endurance Toolkit*

Design



Developing
engaging
stories



Storyboards for design
development



The Business Endurance Toolkit

Sustainability story generator

Economic sustainability
Environmental sustainability
Social sustainability



© footprint media

Sustainable idea generation

Insights



Improved
networks



Efficient distribution



Introduction to The Business Endurance Toolkit

This section outlines BET as a research and design system for small to medium sized enterprises (SME). BET was developed and refined as part of the case studies. Following on from the case studies BET is formally presented as a new approach to demonstrating application, outcomes and evaluation.

Development of BET

In response to the problems and criticisms of the reviewed models and information gathered from the case studies, a more intuitive, holistic approach to reduce waste and non-sustainable practices is proposed: BET. BET from a design perspective uses a human centred design approach to analyse a company. BET was developed using Kumar's framework, thus enabling a wide scope to analyse a business from all angles. This model was created specifically to both build on the strengths and address the shortcomings of the reviewed models, using what was learned in the case studies, to enable examination of small to medium sized business best sustainability practices, and to suggest how those practices can be improved.

Criteria are used to identify the least wasteful and destructive processes in a business to determine what is actually needed, and identify what can be reduced or discarded. BET takes an umbrella approach; it is not just one model, but tailors its analyses to each individual company. This enables the development of not just effective story-telling, but is a systematic way to analyse each aspect of the business. This broad approach is a check list of improvements that could be made to future-proof a business.

Social Sustainability is the main focus of BET

BET places social/cultural concerns at the forefront of its method. The reason for this is that the underling knowledge gained from the case studies and other research has a very simple premise: without people there cannot be change. Without engagement with the employees and management, sustainability will not happen within a business. From this perceptive a sustainability toolkit card set (BET) was developed and tested with Preens dry-cleaning Limited.

Business endurance toolkit cards (BET)

BET is a new innovation that offers a systematic way of researching and analysing a business's sustainability performance profile. A quadrant process, offers an integrated approach to 'measuring' and understanding sustainability performance (see map on next page fig 33). The business endurance toolkit card set (BET) is in the first section of the quadrant and has a two-fold purpose; firstly the cards serve as a catalyst for change in understanding sustainability. Secondly the toolkit card set is a device for the facilitator to spark insights, generate and record valuable stories for the business.

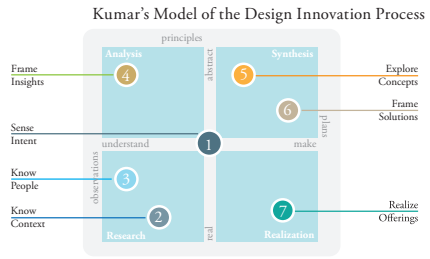
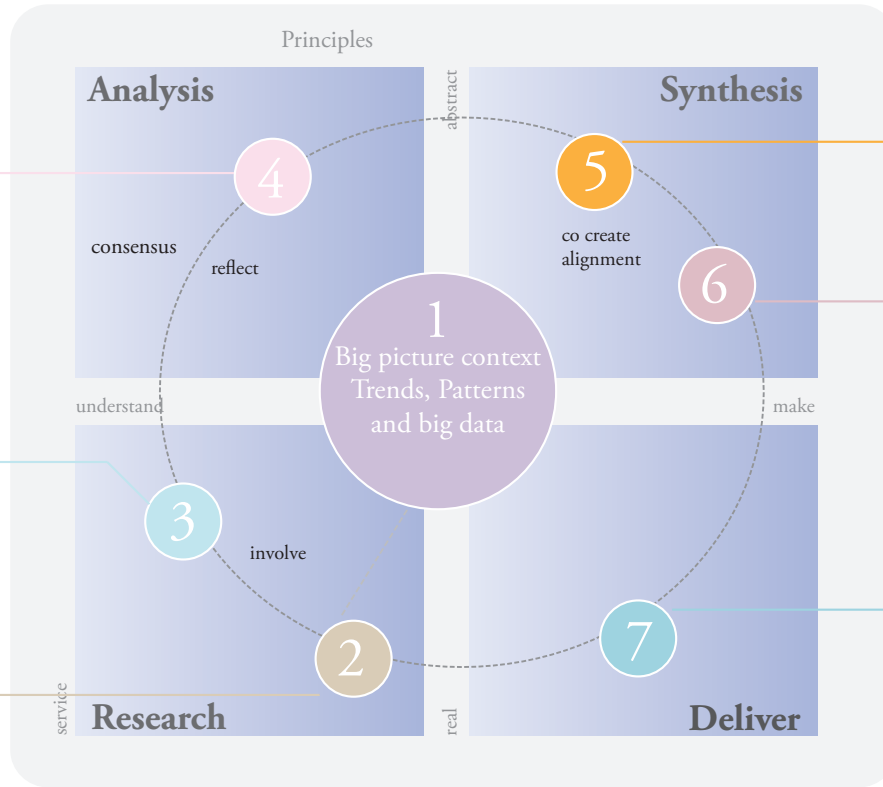


fig 38 Analysis

Business Endurance Toolkit Development Process Map

Adapted from Kumar's seven mode innovation process map which is central to his design thinking framework for innovation



Exploring concepts

Creative responses to the sustainability audit.
Behavioural change co creating stories and aligning changes to strategic plans.
Co-create stories of sustainability.

Framing solutions

Construct narrative around key points of corporate storytelling.
Story boards align with the communication strategy and business plan.

Realize offerings

Identifying the most effective channels to deliver message of sustainability.
Channels in combination.
Expert translation service.
Facilitation of co-creations.

- Print
- Integrate • Web
- Media Channels • Social Media
- TV

Insights

Sustainability internal performance audit
Consideration & understanding of user experiences within the total systems of industry context.

Our People

Sustainability toolkit
Company management and operational staff and wider community.
Stakeholders awareness and perceptions of sustainability
Cultural context

Industry Context

Current best practice.
Industry activities in NZ.

Kumar's innovation process applied within two case studies of business narrative generation

Southern Clams Limited

- 1 Global trends in seafood harvesting and sustainability
- 2 New Zealand seafood harvesting industry - cultural context, market intelligence and sustainability performance
- 3 Interviews with and observations of stakeholders in seafood harvest operations especially shellfish
- 4 Insights to and analysis of the activities, environments, interactions, objects, and users (AEIOU framework) of Southern Clams
- 5 Exploring concepts, co creation narratives of sustainability
- 6 Aligning narratives with wider plans and communications strategy, interal and external reputations
- 7 Translation, design and delivery of, 'The Story of Southern Clams' booklet and integrated mobile website.

Preens Dry Cleaning Limited

- 1 Global trends in Dry Cleaning and sustainability .
- 2 Local industry, current practices, and competition, around sustainable issues.
- 3 Interviews with stakeholders about industry operations, sustainability and working conditions.
- 4 Insights gathered on sustainable stories for development AEIOU
- 5 Exploring concepts for effective sustainable storytelling
- 6 Aligning narratives with wider plans and communications strategy, interal and external reputations.
- 7 Translation design and delivery of promotional material focused on Sustainability. Copy-writing for website. Co - create winning narrative for submission for OBIZ sustainability award.

83

BET toolkit card set aims

The BET card set was developed as a way to prompt and engage people in small groups to develop and share ideas around sustainability. For a facilitator the card set enables finding and development of stories that can be adapted for different uses to inform employees/shareholders/customers/clients and the public. The BET cards is a system that people using it respond to, based on needs identified after reviewing the relative strengths of existing sustainability models.

The toolkit cards offer an innovative approach, fostering consideration of social sustainability. Most of the previously reviewed models did not consider social sustainability in similar depth to that of economic and environmental sustainability. The toolkit cards essentially focus on how to balance the triple bottom line.

The cards can be used in two ways, as an education tool, and as a catalyst for generating insights, collecting information and to generate valuable stories.

Business Endurance Toolkit card set (BET) prototyping

The cards were developed following extensive research into six areas. (1) Two case studies [Southern Clams and Preens]; (2) applying Kumar's design thinking framework for innovation, in a bid to systematically understand a business's activities and possibly identify and support directions of development; (3) Human Centred Design approach; (4) analysing IDEO method cards (see www.ideo.com); (5) SILK Method Deck cards (see socialinnovation.typepad.com/silk/silk-method-deck.html); and (6) searching contemporary resources for currently available sustainability cards. The new toolkit card system is unique, contemporary responsive and adaptive. The toolkit responds to a need to facilitate discussion and exploration.

The toolkit cards focus on important areas of sustainability, currently covering four themes:

1. Systems - Broad discussions, educational links, starting point to define what knowledge people have about sustainability.
2. Engagement - Capturing company experiences of: workers, management, the community, the industry, focusing on specific problems, gathering experiences.
3. Insights- translation channels, techniques used, methods to engage, factors to co-create, insights gained from staff, and embedding a culture of insights.
4. Design - stories, recommendations for a culture of sustainability; embedding a culture of sustainability; new possible pathways for product/service, storyboards, narratives, outcomes and suggestions, policy levels; ways to convert insights and inspiration into ideas and prototype practical solutions.

Business endurance toolkit goals and delivery method

The toolkit cards encourage exploration of sustainability in a way that wider audiences, including customers and stakeholders, understand and respond well to. The toolkit is a system that promotes improvement in understanding sustainability issues in a business. Further, the stories can be interwoven within a business's strategic development and planning, and in some real sense can lead these activities. The process and tools for this toolkit are geared primarily to the telling of effective stories and compelling narratives which underpin a business's vision, values and desire to be seen and heard to be acting in the best interests of its own people, wider communities and the planet.

The BET cards are designed both for hard copy and digital, for use in small and large groups. The printed set of toolkit cards, are on heavy card stock, sourced from renewable forests. The toolkit cards will also be in digital format available on a range of devices: smart phones, tablets, laptops and desktop apps (Mobil, Android, Windows, Apple) with clickable navigation links. Graphics instead of photos maintain a contemporary look longer, as demonstrated in the IDEO card set. Digital format allows adaptation to enable the toolkit cards to remain contemporary, adaptable to business, and responsive to change.

Target audience for BET cards

Management and employees of a business are the target audience of the cards. Knowledge gained from the stories the cards reveal lends itself to inventing and embedding a storytelling culture in a business and is a way to create and preserve its identity and operation, much like the role of older oral traditions. The stories shared are a joint responsibility and the cards encourage co-creation, which is positive because it enables the facilitator to translate those stories for a wider audience. This is created via the targeted discussions from the cards which help enable employees to explore issues that they may not have thought about before.

Co-creation with business

Informed Values Toolkit affords this co-creation at the outset through the use of cards and collaborative effort to produce a collective voice. This is achieved through the workshops, with the cards facilitating open dialogue and engaging people in small groups or individually to share ideas. It is designed to suit SMEs well because it echoes the ways extended families retain histories and institutional wisdom and reflects the ancient tradition of storytelling.

Testing the prototype toolkit card set

Conducting a workshop with the sustainability cards was a way to gain feedback from the employees and management ideas on what sustainability means to them.

Prototype cards were evaluated in January 2015. Evaluation involved people that represent typical employees. User trials of toolkit cards from three areas of sustainability were conducted: stories, connecting community with sustainability, and education. The prototype cards were taken to the Preens factory and initially shown to three employees. Firstly the participants were introduced to the BET development process map, ensuring the participants could consider aspects of sustainability within a global, wider work and community role. The BET card set is designed to be used in the first section of the quadrant, to develop understandings and generate stories.



The three participants were chosen because they were in the Preen sustainability group which represents typical workers.

The participants were:

Harley, 28, a factory assistant and avid surfer, who is concerned about the amount of rubbish on local beaches.

Rees, 34, the retail production supervisor interested in sustainability issues because of previous experience of working with companies that were committed to being more environmentally aware, and is keen to bring that knowledge to Preens. Also he mentioned watching the news about the missing Malaysian airplane and being shocked at the amount of rubbish in the oceans.

Lorraine, 55, who works on the shop counter in customer service and is concerned about the environment because of her grandchildren, and what their lives will be like in the future.

The user trial involved staff in customer service and in processing who represent the internal business community, but also the wider community. From viewing the six cards they all shared a common concern for the environment.

Participants responses to the cards

The participants were open and told stories about their experiences of work and their understanding of sustainability and were keen to learn more about the topic.

The participants were invited to view six cards, from the 'Systems' category. (fig 40) Discussion was also conducted regarding the other categories of: insights, engagement and design.

Evaluation of testing cards

The cards were a success because the participants responded to them in a positive manner and the cards were able to generate stories and a deeper understanding around sustainable concerns. All participants liked them and thought they were a 'good idea' and 'good starting point, to talk about sustainability'. They did not know what social sustainability was, but were able to use the cards to develop an understanding, and the same outcome was seen with the rest of the cards. The facilitator showed one side of the cards to the participants and asked them what they thought it was; they were not sure, for all cards, but once they turned over the card and saw a definition and the 'further information' section they understood and a discussion would begin about what it meant for them. They really liked the further information section on the back of the cards, so they could find out more. One participant suggested another website to include about reducing electricity usage (www.eeca.govt.nz) and another participant thought it would be good to show the cards on a projector, especially the first card shown to each, which was. 'What is sustainability?'.
87

Toolkit cards fulfilled role of generating community involved stories, sharing ideas, and education. The participants 'liked' the design of the cards. Each gave good insights into their ideas on sustainability and wanted to engage in more sustainable practices at work. The prototype cards performed well; the testing was a successful interaction with the users of the cards. The BET cards inform and educate by asking questions about sustainability.

Review of user trial of prototype cards

The cards successfully promoted discussions about sustainability. They enabled the participants to develop increased understanding of sustainability in the workplace by informing and educating. For the facilitator they enabled connections and sharing of stories.



fig 40 Business Endurance Toolkit - Systems section and examples from other sections

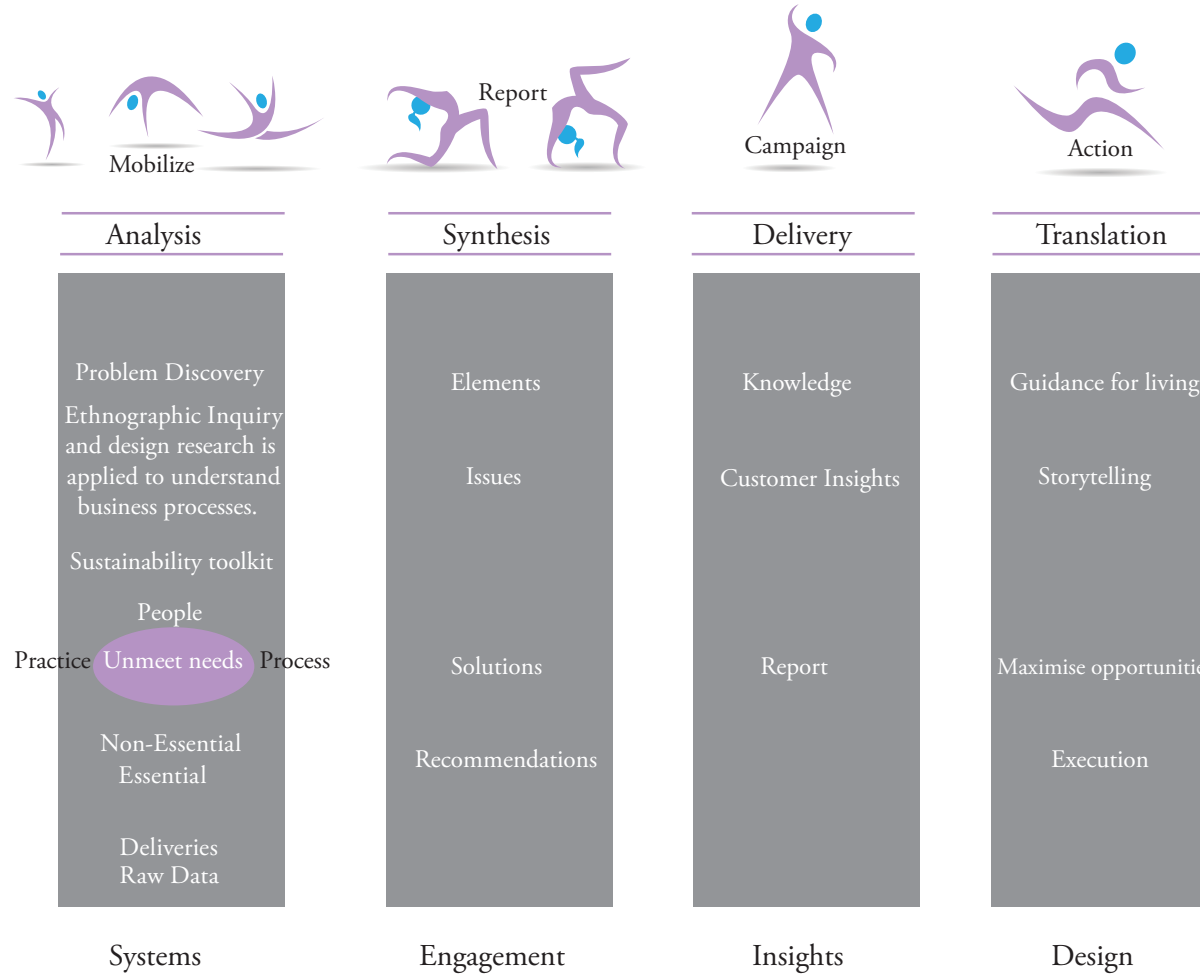


fig 41 - Delivery BET engagement map

Using the toolkit cards

The toolkit cards are used for sharing information and stories, focused discussions, investigating sustainable ideas and collaborations. The delivery system of the BET cards is flexible to the business, it could be at the beach with ideas written in the sand, or using puppets to explain ideas, fluffy dice, perhaps using a product from the business.

The workshops are part of an integrated programme with options of two hours workshops over two days rotating through staff, depending on the needs of the business. Or an intensive 2 day programme.

The BET cards can be used on a one on one basis or in workshops. In workshops participants can be divided into small groups of 3 to 5. Cards from the 'System' category are given to each group and they can have a time limit to come up with answers to the question or idea that is on the front of the card; on the back of the card there is assistance with a definition and a further information section.

Summary of BET

The toolkit card set is flexible in its approach, and easy to use with groups or individually. A digital version of the cards enables more information to be on the card without clutter. The toolkit enables engagement in holistic projections of sustainable practices by engaging peoples perceptions through storytelling.

Example of how BET changed behaviour

The BET cards are a useful targeted innovation. In creating an environment where frank discussions can be undertaken about sustainability has lead to changes in behaviour. Once people are aware of their behaviour they may

change it. For example the cigarette butt story, upon being informed that cigarette butts kill birds, the person's behaviour changed immediately and no longer drop butts on the ground.

The card set is a valuable tool for the facilitator, actively listening to the stories of employees and management. This enables the turning of stories into objects of value, leading to the next phase on the Informed Values matrix: mirroring insights and gaining analysis, to be able to reflect back to the business their sustainability stories. Once the stage is finalised between the facilitator and business, the next stage commences: to synthesise all complex information gathered and translate stories about the business into storyboards for strategic planning and defining who the target users will be, for example employees/ shareholders/clients/consumers.

Fieldwork

By conducting fieldwork and talking to employees an understanding of the internal company's culture is developed and consideration is taken of the wider cultural context of the company. Using the toolkit card set, insights are made into people's understanding of sustainability and what areas they identity need improvement.. The cards are used as 'conversation starters' as a way to help people think about complex ideas in more simple terms. The facilitator uses the cards to facilitate discussion then to listen carefully to employees and management to inform the development of stories for a wider audience. Examples from these discussions and workshops could include whether there are ways to implement a company carpool scheme, the use of an employee bus, or incentive to cycle, or walk to work.

The overall aim of the investigation and research is to increase visible and actual levels of sustainability a business is engaged in. Therefore it can become more environmentally aware of the consequences of business decisions made.

Implementation of BET

BET involves an analysis of practices/choices/processes using criteria of Kumar's design process and is itself adaptive as new knowledge and processes become available. The analysis can consider a single or a range of practices, choices or processes. BET thereby provides a measure of how sustainable a company or practice is. BET focuses on assessing how sustainable a business or action is, not only how sustainable each choice is, but how efficient, resilient, or adaptive a business is. BET goes beyond a fixed report of the sustainability and provides a summary of the most sustainable options and their 'costs' allowing best practice decisions to be made.

Implementation of BET

The application of BET enables an analysis of a company's resilience and adaptivity. The goal is to make the company more efficient, then communicate the outcome to the consumer/ stakeholders/ customers. BET uses a rapid ethnographic approach, to audit a business and analyse their sustainability practices. This enables the research into the company to be completed in a timely manner, reducing costs for the company. The researcher conducts site visits and workshops to the business talking to staff and managers, asking open-ended questions and listening carefully. Sometimes it can be the 'spur of the moment' comment that yields the best information. The researcher undertakes careful observation, of processes in the office and/or factory setting. The case study section discusses real-world examples of BET in practice.

Adding Value to businesses

Economically, BET has the potential of adding value to a business by increasing the public's awareness of the efforts it is making to be more

sustainable. This is the value proposition from the business model canvas (see appendix b) that is discussed in appendix a, which outlines how this will be achieved. BET can also be used to evaluate how the company affects its local economy.

BET is affordable and scalable for small and medium sized businesses and will reveal what equipment is essential and what is not required. Once the BET has been completed the company can then determine which practices to engage in, wherever possible using sustainable, non-toxic materials from renewable resources as the first and preferred option; secondly, using renewable and conventional resources when it is necessary; and thirdly, to avoid using toxic and non-renewable resources. Although it may not be possible for a company to avoid toxic and non-renewable resources at this time, investing in new and alternative methods to increase sustainability demonstrates a keen awareness and commitment to becoming more environmentally concerned and focused.

Four Stage Quadrant of BET

BET is broken down into four stages. The first is the information gathering stage using an ethnographic approach as a way to gather information, following Kumar's modes to gain insights into all aspects of the business. This includes workshops with the business endurance toolkit cards to gain an understanding of the level of sustainability awareness in the business, and leads to gathering information for storytelling. Stage two is the synthesis of the information collected and mirrored back to the business, leading to the development of recommendations for the future possible innovations for the business. Stage three is delivery of the knowledge collected into a report which leads to communication strategies of story-telling, by identifying conceptual possibilities.

Stage three is the translation of information gathered into storytelling for the wider community. 'Guidance for living' is a crucial part of the storytelling

process. In this context the guidance is for consumers to become more sustainable, by telling stories about sustainability in a subtle way to give them, 'a feel good factor', without making them feel guilty about their choices. The fourth stage is choosing what type of different media to share the company's narratives with. Maximizing opportunities to get the right message of sustainability across.

BET is a comprehensive survey, using a human-centred approach to a business's sustainability practices, and is very careful not to result in any green-washing.

Overall the model takes into account all the criteria originally set out: environmental, economic and social concerns. Its main focus is on social sustainability, because without people there cannot be any change to economic or environmental issues.

Conclusion

Over the course of the project, which included a literature review of relevant areas and two human centered design case studies, a need was identified to more effectively inform people about sustainability. Perceptions and understandings of sustainability generally are partial and inaccurate. Current models of sustainability for instance don't cover equally all three aspects of the triple bottom line. This central need demands the means to generate coherent and compelling narratives about sustainability.

The project at the highest level proposes a new innovative response - BET, which focuses and amplifies the key component of social sustainability. Social sustainability is key because without holistically informed people there can be no effective change in economic and environmental behaviours.

The innovation is a toolkit - The Business Endurance Toolkit - which enables users to understand and articulate unique narratives of sustainability within business and wider communities.

While the toolkit raises awareness about sustainability for individuals and groups it is more strategically applied through facilitated workshops. The integrated services provides facilitation resulting in media ready narratives forms the basis of the enterprise framework in the newly formed company, *Footprint Media Limited*.



Appendices

Appendix a

Enterprise Framework

This section examines the development of the business enterprise the researcher is engaged in. Each section applies to developing the company and describes the transition from a student to running a company. Starting a company is complex and risky; advice was sought from three experienced professionals. Roman Yeoman is start-up (Lean) specialist; Henk Roodt is a business coach with Audacious, which helps students to start up their own businesses and Anthony Deaker a mentor and business advisor. This group of advisors covers important aspects of the enterprise. Consultation with each is briefly reported with a summary of the main points discussed.

96

Meeting with Rowan Yeoman, Venture Manager with Akina Foundation July 28th 2014.

The discussion was about process of a lean start up. We discussed the idea of a 'tailored communication strategy based on a company's best sustainability practices' as a framework for the company.

Role of Business

Also discussed were different ways businesses tell stories, sharing what they are doing about sustainability with consumers. There could be different aspects to the business: consulting, workshops and the creation of Intelligent Property (IP) that can be scalable to a business. Consultancy has successfully worked with both Southern Clams and Preens, working in the consultant role for the first 6 months to a year of the business as establishes its reputation. Workshops can be incorporated into the first year of the company. The workshops can serve as a way to prototype ideas and designs for the templates. IP is way to add value to the company by creating templates of a program those businesses can use to create their own communication strategy for sustainability.

Best practices for working with clients

Once a contact has been made with a new business an agreement can be proposed and agreed to by both parties. Detailing the work involved including such things as having a weekly meeting as a requirement helps if any issues develop. For example if the client does not like the work and there were no weekly meetings, one can say 'according to the agreement we were supposed to have weekly meetings'. These meetings are an important part of the strategic design process so that the business is kept involved with the development, so there are no surprises or issues.

Costing and pricing

In the agreement the fee is confirmed; at the start of the business it willingness be the cost plus approach, in which the consultant's time is valued at \$100 per hour base rate plus margins and contingency. As confidence grows with the business a rate of X amount can be offered to the clients, giving them the option of a full package or a discount package option.

Design thinking and lean start-ups can complement each other well, as design thinking is a deep process to figure out an idea and lean start up is about having an idea of a product or service.

Preliminary research and potential clients to identify and approach As important priorities at the start-up phase of a company, Rowan advised that you must analyse your customer segment in detail, to determine who the existing customers are, and who the early adopters are. There is a need to seek out potential clients, and what their problems are. Along with the customer segments the value proposition is critically important. Analysis of the value proposition can be done by running the strategic communication process through with different businesses to scope out the work.

Fine-tuning to ensure success

Once there is a deep understanding of the customer segments and value proposition then you can proceed to the rest of the business model canvas. However, figuring out your client is an ongoing process, therefore the business model changes and adapts as the company moves forward. If the company is not attracting the right customer segments, then it is necessary to go back and analyse it again, to figure out what is not working and change the approach. “Stay true to a scientific model, look at ways to prove it wrong to confirm value” (R.Yeoman, personal communication, July 28, 2014)

Price vs cost vs value vs market

A strategic plan at the start of the business could be to make agreements with early adopters providing the service for reduced fees. However, if the consultant has to under charge for other clients, then it suggests that the value proposition is wrong and so is the customer segment. Therefore the business model needs to be flexible and be a work in progress so these issues can be worked through at the start of the business so it does not become an ongoing problem.

In the business model canvas who the customer segments are and what the value proposition is that the business can offer them. The clients are the businesses that have over one million dollar turn over per annum and have at least 10 employees. Also possible targets are tier one businesses such as Air New Zealand, Hertz, Hilton etc

The value proposition is that the business can articulate other people’s stories and explicitly communicate those stories to the client’s customers. The business will increase value of a company by telling stories, building the brand, developing business trust and analysing any future business growth areas.

From a meeting with Henk Roodt at the Audacious Start Up space, University of Otago, 5 September 2014, the three main points to emerge were as follows:-

-Key to the company value proposition is to identify what the problem is for businesses, and how the company can add value to a business, One possible answer is by developing the public’s perception of a brand as a sustainable one.

-Protecting the brand by telling stories of a business level of sustainability, building levels of trust with the public. Clearly identify the issues so there is no ‘greenwashing’ and being as transparent as possible.

-What the company can offer compared to its competition The unique value proposition is that the consultant has a masters degree which takes a scientific approach, which is peer, reviewed, this greatly adds to the company’s credibility.

In a meeting with Antony Deaker from the Artist Development Agency, a consulting and mentoring business, on Friday, October 2, 2014, the main topic discussed was the development of the business plan and how Antony could mentor the business over a period of 16 weeks. Which was unable to go ahead because of lack of government funding.

Naming the business

Choosing a name for the business was a challenge, the first choice was *Pivotal*, but when checking on ‘OneCheck’ on the *business.govt.nz* website for Company names, domains and trademarks, the company and domain names pivotal.com and pivotal.co.nz were taken. This led to some brain storming, whether it be my name, or something unrelated to the business, a Maori name, all different ideas were thought of and many people asked for their opinion on the subject. After discussing it with a close friend the name for the business is

'*footprint media*'. The name was chosen because it represents part of what the business does; 'footprint' is used in sustainability language to describe the use of resources, such as carbon footprint and eco footprint. The domain name *footprintmedia.nz* was purchased on 2nd October 2014. The company was registered on Jan 22nd 2015.

Business plan for footprint media

Date: 2 October 2014

Executive Summary

Innovative stories to co-create brands. *Footprint Media Limited* tailors a designed communication strategy based on a company's best sustainability practices. Many businesses are becoming more sustainable but are not communicating to their customers or the public about the changes they are making. This company tailors communication strategies to the business's needs and informs clients/public/stakeholders about the positive things the company is doing. 'Sustainable' is a buzzword and consumers are choosing products and companies that are perceived to be more 'green' than their competitors. It is timely for companies to share their 'green' messages.

Using the unique Business Endurance Toolkit (BET), specifically for small and medium sized businesses in New Zealand. footprint media audits business, inspires ideas for making even more sustainable choices and then communicates those ideas to a chosen audience using effective stories. Stories are gathered via BET, with in addition informs people about sustainability. Stories can be distributed through print, web, speech, social media, anything to proclaim what great things a company is doing.

Business plan template adapted from the business.govt.nz website

Strategic Profile

Vision -Footprint media limited intends to provide clients with the best innovative stories to co-create brands as possible.

Mission - Our reason for being: creating the best services to get clients' sustainability stories out into the world.

Core Values - Sustainable, creative, reliable, honest, innovative, committed, loyal, inspiring, respectful, passionate, effective, open-minded, no green-washing.

Organisational Culture - Transparent, sustainable, doing the right thing, value creativity and difference, celebrate success and learn from failure.

Goal and Objectives - The main goal is for the company to be sustainable. Objectives are to be resilient and responsive to client needs.

Business Description - Tailored communication strategy based on a client's best sustainability practices.

Business Profile

footprint media is a limited liability company

Established: Jan 2015

Date registered: 22nd January 2015

Registration #: 5569825

The Business Model Canvas

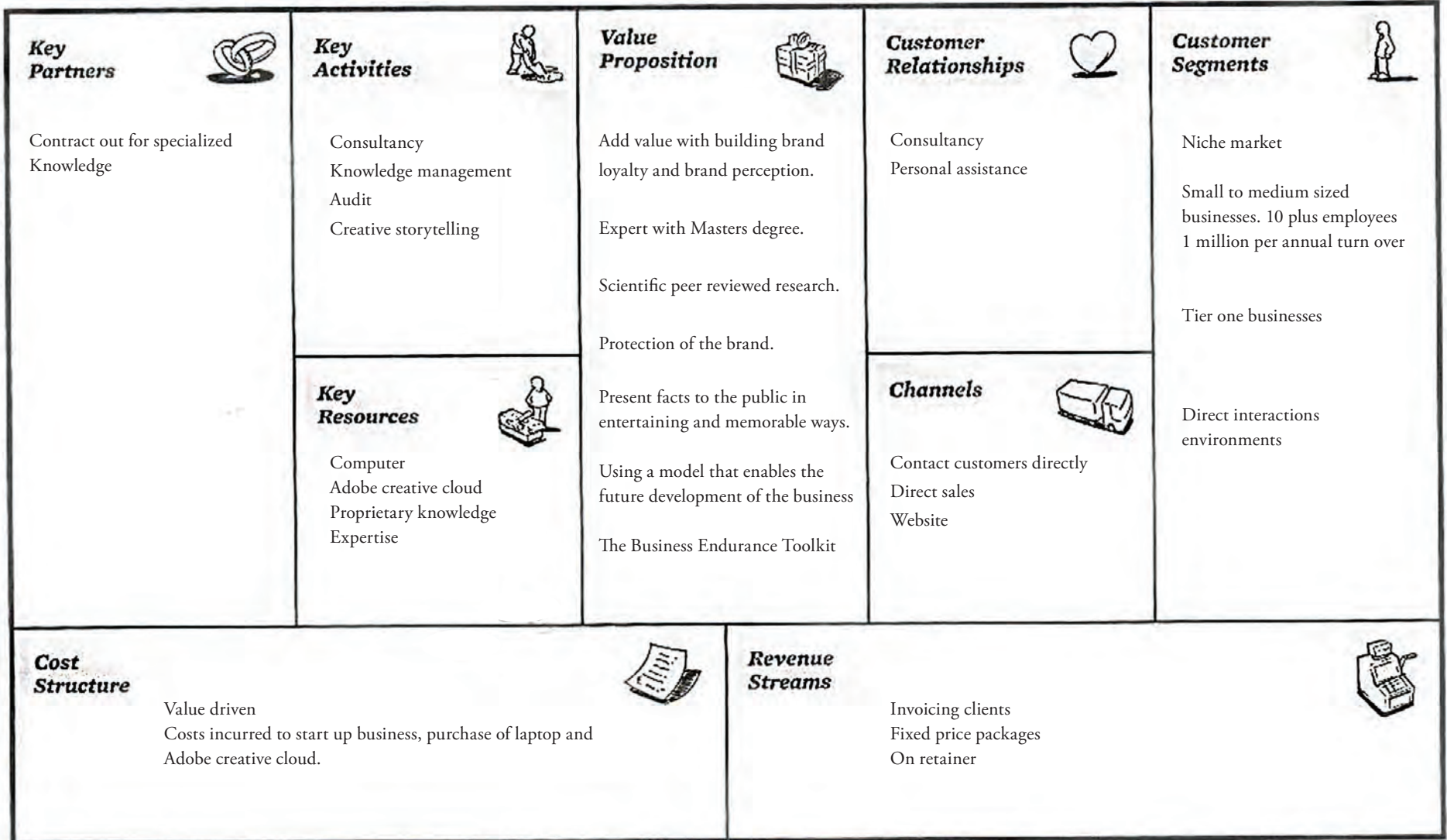


fig 42 Business model canvas for Footprint media limited

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Emmellee Rose
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Wanaka
9035
0220953181
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Online/Social media
Website: footprintmedia.nz

100

Competitive advantage - The service that *footprint media limited* offers is different because the company is focused on sustainable issues. It has developed a unique sustainability model with which to audit a business's sustainable best practices, which then becomes the basis of creating stories to tell to the wider community. The new Business Endurance Toolkit, which has been created especially for small to medium sized businesses in New Zealand.

The researcher uses the knowledge and skills demonstrated in the Master of Design Enterprise (2015). The report focused on the development of a new sustainability model for SME's, story telling, and communicating those stories via design innovations. The development of Intellectual Property is a future goal.

Growth Plan - In three stages. 1. The initial objective for the consultant to be economically sustainable and not have to rely on WINZ to assist with living costs. 2. If successful in being sustainable for myself then there is the opportunity to develop IP of the sustainable models, for companies to do the sustainable audit themselves. 3. Additionally workshops can be developed to assist businesses to achieve their own sustainable objectives.

Business Background: History

The business has been developed as part of the Master of Design Enterprise degree undertaken at Otago Polytechnic. A requirement of the thesis is the development of a unique product or service. Two companies have been engaged with to conduct design experiments to test out prototypes for the new business. From these experiments the outcome has been the start of *footprint media limited* as a company and the development of BET a new model to measure sustainability in small to medium sized business in New Zealand.

Goals - Over the next five years one of the main objectives is to increase the number of clients. The first year the business will be a consultancy, but the plan is to expand over the next five years to develop starter kits for businesses to be able to audit their own business. With the development of Intellectual Property, this will allow users to audit their businesses, the goal is to is to have the starter kits available in the second and third year of company. In years four and five the aim is to be less hands-on and take on a more managerial role, taking on more contract workers to conduct fieldwork, design and storytelling. The idea would be to have a collective, of contract workers so there is no need to have a centralised place of work.

Offerings - *Footprint media limited* is a service offered to small and medium sized businesses in New Zealand to develop their brand perception, build brand loyalty, marketing sustainability for good brand citizenship.

Intellectual Property - In development at this stage.

Location - Based at home at present.

SWOT summary

Strengths

Unique offerings
Contemporary Zeitgeist
Sustainability is very timely
Knowledge of sustainable issues and solutions
Successful case studies demonstrate that there is a market for the company
Master of Design Enterprise
BA in Anthropology
AS in Graphic Design
5 years graphic design experience, 10 + years customer service experience

Weakness

Lack of funds
Inexperience in business

Opportunities - Consumers want to become more sustainable as environmental concerns are now a mainstream issues. Companies that can demonstrate they are more sustainable than their competitors should gain a larger share of the market. *Footprint media limited* tells the sustainable stories to the public enabling them to choose that company's products over one that is not sustainable.

Threats - Not gaining enough clients.

Who your competitors are and how they might affect your business?

There are a number of advertising, branding and marketing agencies in Dunedin. However the service that footprint media offers is different is so far as the company is mainly concerned with sustainability issues and has developed a sustainability model which can be used to audit company's

sustainable best practices which then becomes the basis of stories to tell to the wider community. Established relationship with two businesses. *footprint media limited* offers a alternative service to current competitors.

What else could affect your business – like the weather or seasonal trends?

Economic downturn could affect the business. It is not subject to weather or seasonal trends. Sustainability is a contemporary issue in business and more people are becoming aware of environmental issues that are going on. Consumers, we know, from the research that has been conducted are more likely to purchase products when they know the story of a company and what efforts they are making to be more sustainable.

Financial details - Forecast income and expenditure for the next year, including wages, taxes and stock costs are unknown at present.

Meet running costs (break-even analysis).

The business will require advise on financial matters. Personally, I am applying for the flexi wage from Work and Income which is a grant that lasts the first year of the business with the total payment of an annual maximum limit of \$22,230 (GST inclusive).

What loans you have (or will need) and what for.

For the business no loans at present. I do have a student loan and a 2 thousand dollar interest free student overdraft.

What assets you own and their value.

Laptop computer, which was purchased for \$1891 in June 2014 from a ANZ 2 thousand dollar interest free student overdraft.
No other assets.

How much money you'll put into the business yourself:

Zero at present. There is no additional start up costs after the purchase of a laptop and Adobe creative cloud the business is ready to go.

Transition into business

Transitional from Work and Income WINZ to self-sufficiency

Contact made with WINZ for application to apply for Flexi-wage, a transitional one year payment plan that helps with the start-up costs of the business and helps with the adjustment of moving from being on benefit to being self-sufficient in business.

Talking to banks

In the transition from research to starting up the business meetings were conducted on September 29, 2004 with the banks ANZ and Westpac. After visiting both banks it was decided that ANZ was a better fit for the business. To set up a business account at ANZ requires the choosing of a company name and registering it, on the Business.govt.nz website.

Once this is completed the accounts are set up as follows:

Call account

Current account

Business visa \$5K limit

Internet banking

Go money

Mandate (to be signed by myself and the banks representative)

Insurance

Kiwisaver

ANZ also supplied a start up business pack with information for starting up a business.

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106

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fig 43 Emmellee Rose

Designer, photographer, loves nature and animals. Emmellee has been working with people for over 15 years, which she enjoys most of the time. Her passion is informing people about sustainability and finding sustainable solutions for business. Attempting to save the planet one business at a time.

Education

Otago Polytechnic, Dunedin, New Zealand,
Master of Design Enterprise 2015

The Art Institute of California, San Francisco,
A.S, Graphic Design 2008

University of Otago, Dunedin, New Zealand,
B.A, Anthropology 1996

Skills

Adobe InDesign, Illustrator, Muse, Photoshop.
Copywriting. Flair for photography and design. Creative thinker with a great eye.
Design thinking. Storytelling.

10+ years Customer Service and Administrative Experience. Ability to meet deadlines, methodical, organized and capable of managing multiple projects.

