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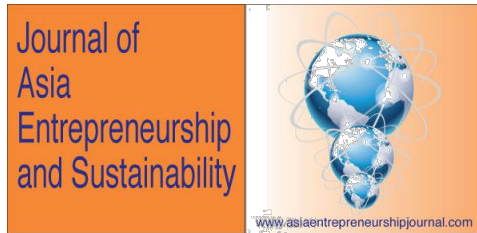
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Stakeolder Engagement in the Creation of an Entrepreneurial Ecosystem

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Abstract

Entrepreneurship is the most important and scarcest input factor of modern highly developed economies (Audretsch & Thurik, 2004). In 2011, the Bay of Plenty region in New Zealand suffered two disastrous events, at the same time as the global economic crisis impacted. These had a negative economic impact on the region. As a result, research was undertaken with a range of stakeholders to see what was required to develop an entrepreneurial ecosystem in the area. An online survey to establish their needs for future business ventures was completed by a total of 552 students, employees, business owners, entrepreneurs and investors. The results indicated that there are various disconnections in the ecosystem including access to business support and services, investor funding and skilled labour, use of social media, idea generation, innovation development and support of investors. A model to address the disconnect was developed and the outcomes of creating an entrepreneurial ecosystem to date, are noted.

Introduction

New Zealand is one of the easiest and least corrupt places in the world to do business (Fortune, 2015; Transparency Index, 2015). While the bulk of business takes place in the three main regions: Auckland, Wellington and Canterbury, the Bay of Plenty (BOP) region with a population of 257 379 (www.stats.govt.nz, 2015) is very attractive and welcoming to business. The main city in the BOP region, Tauranga with a population of 114,789, is a seaside city with a warm temperate climate supporting tourism, horticulture, aquaculture and fishing industries. The port has grown to become the largest in New Zealand. Key industry sectors include transportation, logging and logistics (Priority One, 2013). By 2021 the region is expected to grow to 300,000 in population.

During 2011 Tauranga was affected by a number of disasters: the ship the MV Rena ran aground and then broke into two just outside the port, polluting many of the beaches with oil and other toxic chemicals. For a year the pollution damaged not only sea-life but other industries, such as fishing and tourism. It was declared New Zealand's worst maritime disaster. In addition the PSA disease impacted significantly on kiwifruit orchards. The global financial crisis had an effect on the logging trade via the port.

These three disastrous events triggered the need to consider other business opportunities to grow the city. The region needed a new and additional economic resource. Essentially the region needed to transform itself into a young vibrant

entrepreneurial ecosystem. In December 2012 a small group of entrepreneurs and community-minded people came together to consider how to build connections, collaborate and create value together. The group's view was that the way to sustainable growth was to promote it from the roots of the community – its people. Since one of the key values of entrepreneurship is inclusiveness, they wanted to involve the community in the process of building an entrepreneurial ecosystem.

At the time of the disasters, investors were not aligned with opportunities, the educational pathways were unclear, there was insufficient interaction between key stakeholders in value creation, techniques for community engagement were not being used and out of date models for economic development were being used. As Hwang points out, to create innovation and entrepreneurship it is not enough to "build more research institutions, construct more infrastructure, create more tax breaks or throw more investment dollars at problems", instead cities need to take what it already has to make more people connected, build collaboration and be more supportive of new ideas (Hwang in Feitner, 2014, p. 13).

A research study into stakeholder views of Tauranga as a future entrepreneurial ecosystem was undertaken. This paper reports on the outcomes of stakeholder views, presents a model for creating an entrepreneurial ecosystem and considers the subsequent outcomes of the research.

The Concept of Entrepreneurial Ecosystem

Definition of an entrepreneur

Feld (2012) notes that entrepreneurs co-found companies, with the difference between high growth entrepreneurial companies and small businesses being the fast and high growth potential of entrepreneurial companies, while small businesses tend to be slow in growth, local and profitable. Entrepreneurs are seldom involved in the business community because they focus on building their companies. Entrepreneurs demonstrate the following behaviours: proactiveness, competitiveness, innovativeness, risk-taking and independence (Moruku, 2013). Entrepreneurship is learned by action – "entrepreneurs get beaten up every day and have to face doubters and sceptics regularly (Hwang in Feitner, 2014, 13) – it is like jumping off a cliff and building a plan on the way down" . They see opportunities others may not, believe that they can use the opportunity to create new business or radically change an existing one and can do this through hard work, personal investment and engaging others in the vision (Martin, 2010).

Definition of an ecosystem

Ecosystems

The Merriam-Webster Dictionary (2014) defines an ecosystem fully as:

"the complex of a community of organisms and its environment functioning as an ecological unit" but it has come to be known as "everything that exists in a particular environment". While entrepreneurial ecosystems are not a community

of organisms they do fit the more colloquial definition of everything related to that particular environment. The individual components do not survive on their own, but as a system they all link together and are viable.

Definition of an entrepreneurial ecosystem

Moore (1993) coined the term entrepreneurial ecosystem noting that businesses do not emerge in a vacuum and how the relationships of interactions with other stakeholders is embedded in growth of the enterprise. A number of definitions incorporate the 5 elements of interdependence with a range of factors and entities.

The first element refers to the interdependency of the entities: an entrepreneurial ecosystem "refers to the interdependent set of physical, legal, cultural, financial, human and organizational elements within a community that has the potential to support or thwart an entrepreneur's activity" (Kline, Hao, Alderman, Kleckley and Gray, 2014, p. 305). Mason and Brown (2013) define it as "a set of interconnected entrepreneurial actors (both potential and existing, entrepreneurial organizations (eg firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial bodies) and entrepreneurial processes (eg the business birth rate, number of high growth firms, levels of 'blockbuster entrepreneurship', number of serial entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition), which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment". Cain (2012, p.6) sees it as the "coordination of

like-minded entities, individuals or institutions to form a network to help create, grow and sustain business development."

Other definitions focus on the second element: the encouraging aspect of the ecosystem. For example, an entrepreneurial ecosystem is a term used to describe an "environment in which entrepreneurship (and the economic development and the jobs that ensure) is encouraged and given an opportunity to thrive" (O'Brien, 2013, p. 13) – in which everything that exists in that environment creates linkages between stakeholders that enable entrepreneurship. The ecosystem needs to encourage" innovative venturing as a career option" (Hechavarria & Ingram, 2014, p.1).

The third element of the definition is the evolutionary nature of the ecosystem. Entrepreneurial ecosystems are not static, they are innovation-driven and evolve and grow to fit the circumstances.

The fourth element of the definition is the geographic environment in which the ecosystem evolves. Kline et al (2014) have discovered that rurality has a significant negative relationship to entrepreneurial activities and it is likely to be more difficult to create an entrepreneurial ecosystem in a rural area than in a city. This suggests the social embeddedness of entrepreneurship- economic activities take place within a social context (Moruku, 2013). The environment can impact on culture, cognition, social structure and political institutions and their perceptions.

The fifth element of entrepreneurial ecosystems is the domains that make up an ecosystem. Isenberg (2011) identifies six: policy, finance, culture, supports, human capital and markets. He emphasises that one cannot simply copy an entrepreneurial ecosystem – each one is unique to the region and its culture, needs and economy.

For the purposes of this research, entrepreneurial ecosystems are unique, geographically specific environments with an active community that provides entrepreneurs and /or business owners with the necessary systems to learn, grow and thrive (Jennen, Rigby & Allum, 2014).

Regional entrepreneurial ecosystems

There are four frameworks for describing why regions might be advantageous in becoming an entrepreneurial ecosystem according to Feld(2012, pp 22-25): Firstly they may become a desirable locale because of external or agglomeration economies, with economies of scale through being in a geographic area of concentrated start-ups. By sharing infrastructure, knowledge, suppliers and labour pools with specific industry knowledge, organisations can benefit from sharing of ideas and reduced costs.

Secondly the network effect operates, so that the more people there are in the network, the more best practice, inspiration and talent can be shared and make co-location more valuable. But it takes more than co-location to create the horizontal

networks that breed a culture of openness and horizontal information exchange across and between companies and industries according to Saxenian (1994).

Thirdly, creative class individuals, like entrepreneurs, engineers, professors and artists who create meaningful new forms and want to live in nice places, like to be around others with a creative bent in a "virtuous cycle" which means that the location then attracts creative types to the area. This then makes the area more attractive to others.

Fourthly, is what Feld (2012) calls the Boulder Thesis: entrepreneurs must lead the start-up community; the leaders need a long-term commitment; it must be inclusive of anyone who wants to participate in it and there must be regular activities that engage all layers of the entrepreneurial community. The community of entrepreneurs needs to be highly inclusive of anyone with an interest in start-ups, rather than playing a competitive zero-sum game. As a result, activities should include a broad range of people, including investors, current and aspirational entrepreneurs, mentors, employees of start-up and anyone else who wants to be involved. Mason & Brown (2013) support this saying that members of the start-up community need to embrace others who want to be involved and that bridging assets or connectors play a key role in linking all these people and organisations. People who see others succeed in start-ups are less likely to fear failure and more likely to set up their own start-up, so these connections are crucial (De Clerq &

Arenius, 2006). Seeing failure as part of entrepreneurship and having resilience to deal with it, is one of the characteristics that entrepreneurs role model.

Start-up regions need to take a very long view, so that even through downturns they continue to develop and grow. Feld (ibid) notes that if entrepreneurs do not lead the development of regional start-ups then other leaders are likely to be supportive post-recession, but less supportive once the next economic downturn occurs. It is important to recognise that like start-ups, community activities might last for a short time and then fade away. Simultaneously the entrepreneur leaders of the start-up community may be experiencing the rollercoaster of their own organisations succeeding and failing, but their long-term commitment to the community and region needs to be maintained. In general the leadership is like an organism with a core gene of inclusiveness but is not too formalised, emerges as needed and evolves across networks of people. Everyone else in the community is a feeder and is likely to have shorter time frames (eg governments which can change every three years) or may be motivated by other factors (increasing revenue from clients). There is a synergistic relationship between entrepreneurs and feeders. But it is not possible for feeders to set up an entrepreneurial ecosystem.

Entrepreneurial ecosystems in other regions

Wood (2012) describes how in Northwest Florida, in a similar way to the Western Bay of Plenty region, an entrepreneurial ecosystem emerged after disaster, when

BP's Deep Water Horizon oil spill impacted significantly on the tourism business that had been the mainstay of the region's economic income. The other major industry in the region was manufacturing and due to automation, there were declining numbers of employees in industry. These issues highlighted the need for diversification and a long-term plan to develop the region's innovation and entrepreneurial growth began. This included the development of an education and marketing network (branded 1TEN standing for innovation, technology and entrepreneurs), summits which bring together entrepreneurs, researchers, investors, business and political leaders), a technology incubator (started by the local college and the Chamber of Commerce), educational strategies (delivered via the University, boot camps, open forums and CEO roundtables) and creating an innovation technology park close to downtown for those entrepreneurial companies in the second and third phases of development. In addition, a process of economic gardening is applied to companies that need specific technical consultant assistance to grow their customer base and access to angel investing has been developed through connective events.

With the development of the entrepreneurial ecosystem in Northwest Florida, the following outcomes have been achieved: there is far greater awareness of entrepreneurs and their organisations and the effect has filtered to other states; more partnerships between previously competing organisations have developed; resources and space for new ventures has been created by local government, the

private sector and local government and new companies have emerged and more people have been employed (ibid).

Seattle and Detroit are examples of other cities where manufacturing was the major industry for many years and both went through a downturn. But Seattle is today a vibrant city, mainly because of local entrepreneurs like Bill Gates and then others who were attracted to the city. In Seattle, large businesses create the ecosystem for smaller innovative organisations to set up shop. The role model set by an organisation like Microsoft creates a spill-over effect, so that others want to work in that city or region. Microsoft created 148 local spin-offs in Seattle growing employment in the technology sector more than 5 times its original size. Detroit on the other hand has not adapted to the downturn and invests in things rather than people. In addition, an anti-competition approach has limited other motor manufacturers from setting up business in Detroit.

New Orleans has gone from being a declining urban economy to a vibrant ecosystem in which place-based development, public/private partnerships and access to capital are enabled. "The city connected all the dots under the banner of entrepreneurship" (Cain, 2012, p. 6). Cleveland, Boulder, St Louis and Philadelphia are other examples of communities that have built an ecosystem (Ibid).

Outside of the USA, Puerto Rico has attempted to build an entrepreneurial ecosystem but here has been little action (Soto-Roriguez, 2014). The author attributes this to the centrally planned economy which has resulted in stagflation, government's intervention in entrepreneurial activity hampers the necessary interaction between key players and the ecosystem has never developed the connectivity required. In Ireland on the other hand, government agencies such as Enterprise Ireland have highlighted the success of the start-up culture that has been created, due to networking, higher education, availability of talent and tax incentives. As a result, in 2013 Ireland was ranked by Forbes as the best country to do business and the most entrepreneurial country in the world by the Wall Street Journal (Pharma Business Week, 2014).

Method

Using an action research methodology the questionnaire BOP-IN was developed collaboratively in consultation with the initial small group which was representative of all aspects of the potential ecosystem. This group had initially come together to discuss the misalignment between investors and entrepreneurs and business owners. In the initial discussions they noted the outdated modes of interacting, the misalignment between the various components of the ecosystem and the silos that had developed. The group represented all aspects of the proposed sample, namely students, employees, business owners, entrepreneurs and investors. The questionnaire was developed through an iterative approach of checking with the various stakeholders. Once finalised it was distributed online through snowball

sampling. The key questions related to optimism about the region in general, jobs in the region, the business support and services available to assist people to set up businesses, opportunities to share ideas, sustainability as a priority and the impact and use of social media as a tool for connection.

To ensure that a range of stakeholders were engaged in the research, the total research sample of 552 people lived and worked in the region.

Participants

Table 1 Participants

Participants	N	Percentage of total
Students	48	8.7%
Employees	186	33.7%
Business Owners	196	35.51%
Entrepreneurs	80	14.49%
Investors	28	5.07%
Unspecified	14	2.54%
Total	552	

81% had lived in the Bay of Plenty region more than 3 years, with more than half having lived there for 10 years of more. Almost 70% worked in Tauranga.

Results

Students

Students agreed or strongly agreed as follows:

42% are optimistic about the opportunities in the region

51% have someone they can talk to about navigating the future in the world of work

52% have someone who can help them understand specific employment opportunities

49% see launching their own business venture as part of their future

47% are optimistic about their ability to learn how to launch a business

49% know who they can talk to about their ideas for a business venture

40% know what business support programs are available to them in the region

84% want their businesses to be environmentally, socially and financially sustainable for personal future success

77% see social media as being important to their future in the world of work and business

79% visit social media sites daily

Students are not fully optimistic that they will have work opportunities in the region and only about half of them have a mentor or guide who can assist them in finding employment opportunities. Almost half want to launch their own business and feel optimistic that they can do so, but less than half know who they can talk

to about their ideas or from whom they can seek business support. They are however keen to participate in sustainable businesses and see the social media as being important for the future. The most visited social media sites by this group are: Facebook, YouTube, and Google+.

Employees

Employees agreed of strongly agreed as follows:

73% are optimistic about the opportunities in the region

78% are optimistic about the future of the business they work for

52% see working a new business venture for the current employer as part of their future

73% know who they can talk to about their ideas for a business venture at their current employer

41% consider launching their own business venture will be part of the future

47% know who to talk to about ideas for own business venture

47% are optimistic about ability to learn how to launch own business venture

82% want their employers' businesses to be environmentally, socially and financially sustainable for personal future success

80% want their own business to be environmentally, socially and financially sustainable for personal future success

72% see social media as being important to their employers' business and to their own business ventures

61% visit social media sites daily

About three quarters of employees are optimistic about the region and the business for which they work. More than half see themselves contributing to new ventures in their employees' business with 43% wanting to set up their own business venture. Many more know who to talk to within the organisation for which they work about new venture ideas than do if they want to launch their own business. Optimism about succeeding in a new business venture of their own is much lower than optimism about the region or their employers' business. They do want their employer and their own businesses to be sustainable. While they see social media as important to their own and their employer's business, only 61% visit social media sites daily , with the most popular being FaceBook, Linkedin, YouTube and Google+.

Business Owners

Business owners agreed or strongly agreed as follows:

77% are optimistic about the opportunities in the region

74% are optimistic about the future growth of their business

90% intended to execute a plan to grow their own business within the next 12 months

55% had mentors and specialists who could help them take the business to the next level

49% knew what business support programs are available to them in the region

78% are optimistic about ability to learn how to grow their own business

78% believe encouraging employees to have innovative ideas is important to the
business

56% know that employees come to them with innovative ideas

66% see social media as being important to their business

50% visit social media sites daily

Three quarters of business owners are optimistic about the potential in the region
and for the future growth of their businesses, with most intending to grow the
business in the year ahead. Only about half have advisers who could assist them in
such growth and despite identifying lack of skilled people and finance as key
barriers, more than half of them have little knowledge of the business support
programs available to them. They feel they can grow their businesses themselves.
While they would like employees to be bringing innovation into the company
almost half feel employees do not come to them with new ideas. Most business
owners see the potential for their business to grow regionally and nationally. The
main factors hindering their business growth are the lack of skilled people and
finance. Predominantly they want their business to be sustainable. About two thirds
see social media as being important to the growth of their business, but only half of
business owners visit social media sites daily with the most popular sites being
Facebook, Linkedin, Youtube and Google+.

Entrepreneurs

Entrepreneurs agreed or strongly agreed as follows:

75% are optimistic about the opportunities the region can provide

90% are optimistic about the future of their business

95% have ideas to grow their business

84% intend to execute a plan to grow the business in the next 12 months

Results

57% have mentors and specialists they can consult to help them take the business to the next level

41% know what business support programs are available to them in the region

79% are optimistic about ability to launch a new business

85% are optimistic about ability to learn how to grow a business

90%% want their businesses to be environmentally, socially and financially sustainable for personal future success

81% see social media as important to the business

65% visit social media sites daily

Entrepreneurs are optimistic about the region, but even more so about the future of their business, with most having ideas to grow their businesses and feeling confident about capability for launching or growing a business. Less than half have social support in how they might undertake that growth or about whom they might consult for business support and services. Most want their businesses to be sustainable. The main factors hindering the business are a lack of skilled people

and finance. The entrepreneurs saw the potential to grow their business regionally, nationally, Trans-Tasman and in Asia Pacific. Despite four fifths seeing social media sites as important to the business only two thirds visit social media sites daily with the most popular being: FaceBook, Twitter, LinkedIn, YouTube and Google+.

Investors

In thinking about opportunities to grow their financial investment portfolio, investors responded agree or strongly agree as follows:

75% are optimistic about the number of opportunities for investment in the region

54% know where to look for opportunities in the region

66% had invested in at least one company other than their own in the last 2 years

50% prefer to invest as an individual angel investor

60% prefer the new venture to be at prototype or pre-revenue stage before investing

88% are willing to make time to work with start-up businesses

21% are willing and available to take up an operational role within start-ups

71% are willing to be on the board of a start-up

71% are likely to be a series investor (interested in follow-on investments)

50% had had successful exits

50% actively use social media

29% check social media sites daily

The investors while optimistic about opportunities for investment were unsure where to find such opportunities, yet two thirds had invested in companies other than their own in the past two years. Most preferred investments in agriculture, technology, science, horticulture and forestry and they preferred the investment to have advanced beyond the innovative idea stage to prototype or pre-revenue stage. Most were willing to help start-ups with almost three quarters willing to be on the board and to be a series investor, but few willing to take on an operational role. The five most important elements of a start-up identified by investors were: capital requirements, revenue, valuation, traction and the marketing/distribution plan. Only half used social media actively with FaceBook, Twitter, LinkedIn, YouTube, Google+ as the most popular. Yet only 29% checked social media sites daily. Not only do investors want to enter business ventures, but they may also need exit strategies.

Discussion

At one level this project shows connection - the group that came together to develop the survey is atypical of entrepreneurs not focusing on the broader system because they are too involved in setting up and running their own business (Feld, 2012). However, the main theme emerging from the data is mainly that of disconnection. The various parties at this stage are not connecting so that they can learn grow and thrive (Jennen, Rigby & Allum, 2014). Yet in all categories people are keen to develop new and sustainable business ventures, but the information is not necessarily being shared across the horizontal networks (Saxenian, 1994) nor

inclusive as described in the Boulder Thesis (Feld, 2012), as a result the necessary co-location was not occurring where ideas could be shared and investors linked to entrepreneurs. In addition, only a small group of ecosystem warriors was engaged at this point and so best practice, inspiration and talent were not being shared (Saxenian, 1994).

The results show overall general optimism about the region's future and a focus on businesses that are sustainable environmentally, socially and economically. However, students as the young people of the region are not as optimistic about the opportunities for them. This may be counter to the long term view required by entrepreneurial ecosystems (Feld 2012). Students want to set up their own businesses, but are not linked to the business support and services that could help them to do so. They are also highly active on social media, whereas investors and business owners are not as engaged in social media – so again there is a disconnect in the system.

Employees want to contribute ideas, but business owners who would like to hear these innovative ideas, feel they may not be listening effectively to these ideas. Business owners and entrepreneurs identify some of their key barriers as being the lack of skilled workers and the lack of finance, but they want to grow their businesses. They are not connected to the investors, the social media or the business support and services structures as much as they could be, and where they could access skilled workers and finance.

Almost half of the employees see themselves as setting up new ventures outside the organisation, which may add to the lack of skilled employees. These employees are less optimistic about their own new venture succeeding than they are about a new venture in their employers' organisation, which suggests that they also feel disconnected from business support and services.

Entrepreneurs are highly optimistic about the region and the potential for growth in their own business, but are disconnected from the investors who want their project to have advanced to the stage of prototype or pre-revenue stage before they are willing to invest. Investors were focused on business categories that already exist in the region, rather than on new alternative options.

Investors want to invest, but are unsure where to find the business ventures in which they could invest. They are the group which is also most disconnected from social media. Few were prepared to take on operational roles in start-ups, but many were willing to engage in other ways as mentors or directors.

While all parties see the need for social media, it is only the younger groups like the students, who are using it to maximum advantage. There are four sites in particular which could be used to link the various parties: FaceBook, LinkedIn, Google+ and Youtube.

What is needed is a model for connecting the key parties. This model needs to take into account processes for collaboration and networking, people and culture, the government and its potential contribution, infrastructure, education , support for entrepreneurs and education.
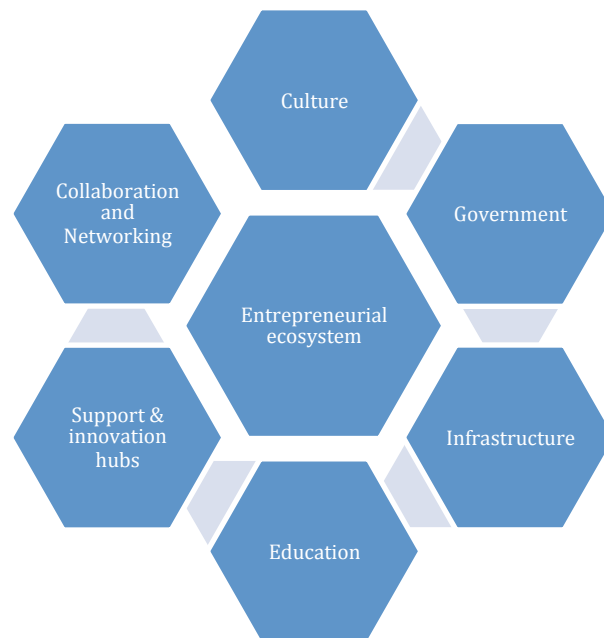
Processes for collaboration include a formal networking structure, use of social media, networks with other neighbouring regions and simple access to information. To network effectively with other regions better rail, air and port links will be required.

The culture of the region is focused on marine life, technology and horticulture. By collaborating, economies of scale could be achieved. Within this culture niche technology-based markets with coordinated technologies create potential opportunities. To build the culture of entrepreneurship, it is important to celebrate the diversity of local enterprises and promote the success of entrepreneurs locally and globally. There was a strong suggestion in the research outcomes that the region needs younger and more dynamic leaders at local government level and leading the entrepreneurial focus. Government need to be involved in having a consistent vision locally and nationally on topics such as job creation, tax breaks, programs for expatriates, simple processes for establishing businesses, having a regional investment fund and being more aligned to local business and its needs.

The demand for better infrastructure includes the drive for faster and more widely available broadband and greater support for technology based entrepreneurs and businesses.

The opportunity is there for more significant links between education and business, especially with a new tertiary campus to be built in the next 5 years. This will contribute to retention of youth in the region and there also needs to be a move to retain Maori students at school for longer.

Innovation hubs can provide incubation opportunities, with experienced mentors, technology services and advice. In addition coordinated cluster division needs to be encouraged.

Recommendations

The recommendations emerging from this research are to:

• Bring the key players together in various fora where investors and potential entrepreneurs can interact.

• Build a climate of innovation in the region though innovation competitions and speakers

• Communicate the various business support systems available to the key players

• Develop and encourage the use of social media and software that connects the various parties

• Begin to build co-location of people working in key industries and start-up businesses

• Create a funding stream through the development of a private equity fund

• Engage people across the age and culture spectrum in the process

• Build international connections for BOP region businesses

Conclusion: Outcomes in the Ecosystem

To date, there is significant progress in the last two years towards an entrepreneurial ecosystem.

According to the data released by Statistics New Zealand, the unemployment rate in the BOP region has dropped to 5.7 per cent from 6.6 per cent the previous quarter. The employment rate also increased by 4 per cent on the previous quarter to 64.2 per cent (Bay of Plenty times, Feb 2015).

In addition, the following entrepreneurial ecosystem developments have been established:

Collaboration

-Startup Weekends now run regularly

    - Funding for a region wide strategy to connect and leverage work happening throughout the eco-system, cross-pollinate people, ideas, organisations and innovations is underway

    - A range of speakers have been invited to address potential entrepreneurs and investors. These have included entrepreneurial gurus such as: Claudia Batten and Derek Handy

Government

-       The Minister of Business, Innovation and Enterprise is working on a Regional Economic Development Plan for the region

Innovation

-       Innovation events such as the Young Innovators' Forum, angelatmytable, funding faces, entrepeneurs everywhere and Mashup weekend workshops all take place regularly

-       TED-X Tauranga is now attracting over 1000 participants to events

Education

-       The University of Waikato is building a new campus in Tauranga which will represent three tertiary institutions. The focal points of education will include business, ICT and aquaculture.

Business Support and Service Systems

-       4 start-ups from a Tauranga Start-up weekend in 2014 are still growing

-       14 start-ups are in residence at the BaseStation

-       4 more companies have completed a Startup Kit: New Business Ideas and 39 are on the waiting list

-       7 companies are in facilitated discussions with Angels Investors

-       3 tertiary providers engaged in development of programmes for commercialisation of student intellectual property

Co-location

-       A Venture Centre to enable start-ups to have shared space to work is in operation

- Centres of Excellence have been set up for Horticulture and Food

- Innovation parks have developed such as Newnham Park

- More are in development (Comvita)

Funding Stream

- The creation of a private equity fund called Zap Cap Investments is in place

- Companies have put aside competition to collaboratively and successfully seek major funding such as Callaghan Innovation Funds for joint ventures

Across the spectrum

- Multiple Maori capability building programmes and investments have taken place

- 200 people have learned to code (across the age spectrum)

International Connections

- Wharf42 has launched . In the US a Plug&Play Incubator has begun linking NZ start-ups with Agtech incubation and investment opportunities in Silicon Valley

Social Media and Software

- 140 people have been exposed to collaboration and innovation system data and research by Professor Shaun Hendy

- Open Source Open Society Conference – Open Space Presentation: Creating an open innovation network has occurred

- Open source software was developed to facilitate collaborative activity

Conclusion

Significant momentum towards an entrepreneurial ecosystem can be made in short time, particularly if the Boulder Thesis is followed and the ecosystem is led by entrepreneurs and others keen to see their businesses and investments grow. This requires a small group of leaders to put aside their competitiveness and come together to discover what the region needs. The model for this entrepreneurial ecosystem should not be seen as a cookie cutter recipe for other entrepreneurial ecosystems, but it does provide a process which can be followed to understand the needs of a region and how these might be met.

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The Impact Of Sustainability Reporting On Company Performance: The Philippine Perspective

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Abstract

The study focused on determining the effect of overall sustainability reporting and the individual performance indicators including economic, social and environmental disclosures to the performance of companies who submit sustainability reports as per GRI Index. The results showed that overall sustainability disclosure affects the companies' performance in terms of ROA but not in terms of ROE. However, when treated individually, economic, environmental, and social disclosures do not affect the company performance both in terms of ROE and ROA.   Furthermore, the study showed that control variables like company age and size when considered together with the sustainability reporting impacts the company's performance. Regardless of varying results, it was gleaned that there is a relationship between companies' submitting sustainability reports and their performance specifically through return on assets. However, the study also found factors which may explain the inadequacy to capture the effect of sustainability reporting on company performance. It was

found out that sustainability reporting is still in nascent stage in the Philippines; hence, a need to strengthen mechanisms to ensure its continued growth especially through the initiatives and linkages of the government and private sector; and increase the stakeholders' involvement in the said thrust.

Introduction

The concept of sustainability introduced from the 1987 Bruntland Report at the World Commission on Environment and Development, which defines sustainability as "development which meets the needs of current generations without compromising the ability of future generation's to meet their own needs" (Bruntland, 1987) has come a long way since the report came about. One of the thrusts of sustainable development is involving the corporate entities as they are considered one of the key drivers of economy; hence, corporate sustainability is brought about as an integral aspect. Corporate Sustainability, defined as "the commitment of business to contribute to sustainable economic development, and to work with employees, their families, the local community and society at large to improve their quality of life" (World Business Council for Sustainable Development, 2002) is becoming a key issue today. In fact, the number of companies undertaking sustainability practices is increasing (Waworuntu, Wantah, & Rusmanto, 2014; Burhan & Rahmanti, 2012) and together with corporate social responsibility, is an important part of any country (Burhan & Rahmanti, 2012;

Porter & Kramer, 2006).   The interest of investors in socially responsible investment has grown substantially as it has the potential to influence company performance (Aggarwal, 2013). Specifically, it is widely believed and suggested by researchers that corporate sustainability can likely influence a company's profitability (Aggarwal, 2013), increase its long-term shareholder value (Berns, et al., 2009); brought about by improved image and brand (Berns, et al., 2009), gained competitive advantage (Blaga, 2013; Pitelis & Boulouta, 2011), and employee satisfaction (Waworuntu, Wantah, & Rusmanto, 2014; Tse, 2011; Thorne, 2009). Generally, it is assumed that companies that reflect higher sustainability perform better than companies that do not (Adams, Thornton, & Sepehri; Burhan & Rahmanti, 2012; Ameer & Othman, 2012); this is asserted by the idea of companies who "do well by doing good" (Blaga, 2013; Porter & Kramer, 2011) as meeting the needs of their stakeholders would also mean creating value for their shareholders (Porter & Kramer, 2011).

Although sustainability has no formal and final definition, a number of measures have been developed, specifically on corporate sustainability; one of the most widely used is the sustainability reporting. A sustainability report is a "report published by a company or organization about the economic, environmental and social impacts caused by its everyday activities" (Global Reporting Initiative, 2011). Sustainability reports serve as platforms for companies in measuring, understanding, and communicating their economic, social and environmental performance and its impacts (Burhan & Rahmanti, 2012; Global Reporting

Initiative, 2011).   Sustainability Indices serve as standard guidelines for companies in their sustainability disclosures like the "Calvert Social Index", "Dow Jones Sustainability Index", "Ethibel Sustainability Index", "FTSE4Good", "Domini 400 Social Index", and "Advanced Sustainability Performance Indices". From among the list, the Calvert Social Index and the Domini 400 employed the negative screening criteria; that is, those companies with bad environmental records are automatically excluded from their list of companies. The Dow Jones Sustainability Index, Ethibel and Advanced Sustainability Index employ the positive screening criterion which considers the top companies; while the FTSE4Good employs mixed screening criteria (Fowler & Hope, 2007). Fostering sustainable development depends on suitable assessment approaches. Ratings, on one hand, can be a practice-relevant approach in the assessment. Although, main challenges have also been identified from these popular indices like lack of standardization, credibility, bias, tradeoffs, lack of transparency and the likes (Windolph, 2011).

Meanwhile, Global Reporting Initiative (GRI) founded in 1997, is considered as a pioneer in sustainability reporting through its developed framework widely used by many organizations. Sustainability reports based on the GRI framework can be used to benchmark organizational performance with respect to laws, norms, codes, performance standards and voluntary initiatives; demonstrate organizational commitment to sustainable development; and compare organizational performance. GRI promotes and develops this standardized approach to fulfill demand for

sustainability information (Burhan & Rahmanti, 2012). The Global Reporting Initiative focuses on three areas, namely: social, economic and environmental. The said framework presented that the sustainability should be based on the said categories and that it should be presented in hierarchies so that it would be easy to assess what will be the indicators and aspects. Its mission is to make sustainability reporting standard practice for all companies and organizations (Global Reporting Initiative, 2011).

Corporate sustainability and its impact on financial performance has emerged as important area for research in recent years (Aggarwal, 2013); a significant number of studies on the link between the two are continuously conducted (Lu, Chau, Wang, & Pan, 2014; Burhan & Rahmanti, 2012; Aggarwal, 2013) . Amidst these evolving studies, it is widely believed that in today's dynamic and complex business environment, corporate sustainability has likely an influence over a company's performance. In addition, it is highlighted that there is a need to establish a link between the two (Burhan & Rahmanti, 2012; Wang, Sewon, & Claiborne, 2008), not just to determine its benefit but to justify the cost associated with it (Waworuntu, Wantah, & Rusmanto, 2014).   However, there have been varying and inconclusive reports in relation to this claim (Lu, Chau, Wang, & Pan, 2014; Aggarwal, 2013; Burhan & Rahmanti, 2012), hence, a need for further probing on the said claim. Some studies have proven significant associations and relations between the two (Burhan & Rahmanti, 2012; Ameer & Othman, 2012; Eccles, Ioannou, & Serafeim, 2012; Mrammer & Millington, 2008; Labuschagne,

Brent , & van Erck, 2007; Fowler & Hope, 2007; Orth & Kohl) while other studies showed to be not significant (Adams, Thornton, & Sepehri; Aggarwal, 2013; Moneva & Ortas, 2008). Meanwhile, other studies found weak relations (Kusuma & Koesrindartoto, 2014) and moderate to strong (Waworuntu, Wantah, & Rusmanto, 2014). Some studies found varying results when sustainability is measured as to specific aspects (Waworuntu, Wantah, & Rusmanto, 2014; Aggarwal, 2013) while other studies found slightly positive but not significant (Buys, Oberholzer, & Andrikopoulos) and some significant but with negative direction (Brammer, Brooks, & Pavelin) and positive bidirectional results (Ameer & Othman, 2012).

In an Asian context, recent global issues led to sustainability concerns of ASEAN corporations (CSR Asia, 2011). However, as it is just emerging, there is still no clear evidence on the relation of sustainability to company performance. Adding to that, Ameer & Othman (2012) also emphasized that much of the studies are done in the context of developed countries and proposed that such studies should also be considered in developing economies.

In the Philippines, corporate sustainability has also been growing steadily as evidenced by the increasing number of companies now aligning corporate social responsibility (CSR) particularly sustainability in its strategic components. There has also been an increase in terms of companies submitting to sustainability disclosures. Considering the emerging interest on corporate sustainability

however, there is still inadequate evidence as to the benefits of sustainability practice, specifically to the companies who prepare sustainability reports, especially in terms of corporate financial performance. A few literature relating CSR and corporate performance also showed inconclusive evidence. In view of the emerging importance of sustainability and the need to establish the effects of such to corporate performance, this study was conceptualized. This study is significant as it provided the gap in the literature on the corporate performance impact of sustainability, especially in the Philippine perspective, where there is an identified inadequacy of an empirical proof of such benefit to the companies. Specifically, the study aimed to:

1.   Analyze the impact of overall sustainability report of a company on its financial performance; and

2.   Analyze separately the impact of each sustainability report component (economic, social, and environmental) on the financial performance of the firm.

Scope & Limitation of the Study

The scope of the study includes only companies with sustainability reports submitted in the Global Reporting Initiative and financial statements submitted for year 2013. The present study also comes with limitations; one is on the limited sample used which is due to the limited number of companies submitting sustainability reports as well. The study also failed to address the longitudinal

factors and only focused on cross-sectional analysis, and only considered the age and size of the companies as control variables; hence, only the correlation was established and not the causality between variables.

Method

Research Framework and Hypotheses. Corporate sustainability and sustainability reporting follows three theoretical frameworks, which are the Legitimacy Theory, Stakeholder Theory and Agency Theory. These theoretical frameworks maintain that companies should include sustainability in their core strategic goals and disclose such performance through sustainability reports. These theories also suggest positive relationship between corporate sustainability and financial performance (Aggarwal, 2013).

The Legitimacy Theory explains that a social contract exists between organization and social system and asserts organizational compliance with societal norms and expectations. Hence, it is assumed that corporate sustainability reduces the risk of regulatory actions and strengthens a firm's license to operate (Lindblom, 1993). Meanwhile, the Stakeholder Theory asserts that organizations have accountability towards a broad range of stakeholders and that all stakeholders have the right to be treated fairly by organizations (Freeman, 1984). It is therefore assumed that corporate sustainability helps in strengthening stakeholder relations.   The Agency Theory is based on principal (shareholders) - agent (managers) relationships and

avers that generally, information asymmetry exists between management and stakeholders. It is assumed that corporate sustainability report reduces information asymmetry, reduces risk and uncertainty perceived by investors, improves decision making, increases market performance and enhances financial performance (Aggarwal, 2013).

Based on the above theoretical frameworks, the study mainly follows Burhan and Rahmanti (2012) which presented two frameworks to be used. The first framework relates overall sustainability disclosure of the company to the financial performance of the firm in terms of ROE and ROA, considering the age and size of the firm as the moderating variables The second framework relates each sustainability index disclosure which includes economic, environmental, and social disclosures to the company performance in terms of ROE and ROA, considering the firm's age and size. These ratios are used since these accounting-based measurements are said to be fundamental and are widely used to provide a good basis for financial performance (Bahhouth, Maysami, & & Gonzalez, 2014). Specifically, ROE is often considered as the most important indicator for shareholders since it measures their returns, while ROA reflects how a company utilizes its assets showing its resource efficiency, and is a good indicator with regard to how much profit a company obtains with the money coming from the shareholders and creditors as well (Dumitrescu & Simionescu, 2015). It is assumed in this study that companies' accomplishment and submission of overall sustainability disclosures has an effect to the companies' financial performance;

and further, considering the company's age and size will have an effect to it as well. Similarly, it is also assumed through the second framework that independently, economic, environmental, and social disclosures will have an effect to the companies' performance, and further, when considered with the company's profile, will have an effect as well. The said frameworks are illustrated as follows:

INDEPENDENT VARIABLE   DEPENDENT VARIABLE

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┌─────────────────────┐                    ┌─────────────────────────┐
│      OVERALL        │                    │  COMPANY PERFORMANCE    │
│   SUSTAINABILITY    │ ────────────────>  │      (ROE, ROA)         │
│    DISCLOSURES      │                    │                         │
└─────────────────────┘                    └─────────────────────────┘

                              ↑

                  ┌─────────────────────┐
                  │   COMPANY PROFILE   │
                  │     (Age, Size)     │
                  └─────────────────────┘
```
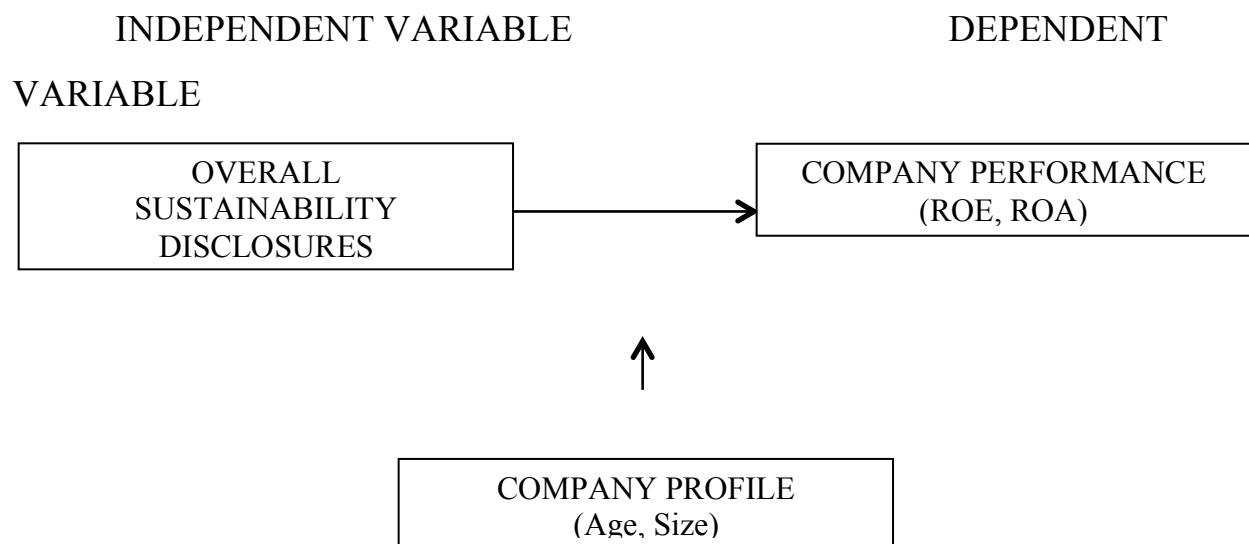
MODERATING VARIABLES

Figure 1

INDEPENDENT VARIABLE   DEPENDENT VARIABLE

Figure 2

From the above framework, the following hypotheses are drawn out:

H_1:The number of overall sustainability disclosures in the GRI Index that companies submit is related with the company's performance.

H_2:The number of economic performance indicator disclosures in the GRI index that companies submit is related with the company's performance.

H_3:The number of environmental performance indicator disclosures in the GRI index that companies submit is related with the company's performance.

H_4: The number of social performance indicator disclosures in the GRI index that companies submit is related with the company's performance.

Variables. The independent variables of the study included over-all sustainability disclosures, for the first model; and economic disclosures, environmental disclosures, and social disclosures for the second model. The four independent variables were measured by scoring index based on performance indicators provided in Global Reporting Initiative Guidelines (GRI guidelines). The formula to calculate the index score was patterned from Burhan & Rahmanti (2012) which is as follows:

$$Index = \frac{n}{k}$$

Notes:

n = number of index which is fulfilled by the company,

k = the maximum index which should be fulfilled by the company.

Company Performance which is the dependent variable was measured in terms of the return on equity (ROE) and return on assets (ROA) as the accounting-based measures of performance. These measures capture financial performance because the ROE is computed based from the financial statements as one of the

final outputs of the rigorous accounting and auditing process, and so is the ROA. Cited in most literature, these variables are considered to be the most likely indicators of the firm's ability to create shareholder value for its investors" (Ferrer & Banderlipe , 2012).   The moderating variables included age which refers to the number of years of a company's incorporation; and size which was measured in terms of the natural log of total assets.

Data. The study utilized secondary data. The data on the financial performance was taken from Osiris and the sustainability disclosures from the Global Reporting Initiative site.   Purposive sampling was employed and companies were selected using the following criteria:

1.   Has submitted Sustainability Disclosures in accordance with the GRI guidelines in 2013
2.   Has available financial reports for the year 2013

A total of 17 companies were determined to have submitted GRI sustainability reports from year 2013; however, only 13 companies were included in the sample, considering the second sampling criterion. The study utilized cross-sectional analysis and multiple linear regressions to test the data. The data was also tested for normality and variables found to be not normal were transformed using log including the ROE, ROA and size.   A residual analysis was also conducted to see

if there are residuals or outliers in the data, of which the test showed no residuals in the data.

Model. A linear regression model was used based on the study of Burhan and Rahmanti (2012) which is shown as follows:

Model 1

$ROE = a + b1OSD + b2AGE + b3SIZE + e$
$ROA = a + b1OSD + b2AGE + b3SIZE + e$

Model 2

$ROE = a + b1ECON + b2ENV + b3SOC + b4AGE + b5SIZE + e$
$ROA = a + b1ECON + b2ENV + b3SOC + b4AGE + b5SIZE + e$

Results and Discussion

Model 1

Table 1 presents the result of the regression for ROE and overall sustainability disclosures while controlled by age and size variables of the firm for both the main and the interaction effects. The results showed that for the main effects, only the age is significant to the companies' ROE with the p-value of below .01 while both the overall sustainability and size are not significant. However, when the overall

sustainability has an interaction with the control variables, the result shows that OSD when interacted with age is significant with .01 p –value; and with a positive coefficient, which implies a positive correlation between the overall disclosures of the firm, with a corresponding .11 increase in the company's ROE, when age is considered. The interaction between OSD and size showed no significant results however.

Table 1: Summary of Linear Regression Results between ROE and Overall Sustainability

Independent Variables	Coefficients	P Value
Overall Sustainability Disclosure	4.52	.627
Age	-.075	.00**
Size	.21	.33
Ineraction Effects		
OSD x Age	.11	.01*
OSDxSize	-.42	.40

*Note: *<.05, **<01*

In terms of the ROA, the main effects for the regression showed that both the overall sustainability disclosure and the size are significant to the companies' ROA, with p-values of .03 and .05 respectively. Both with positive coefficients, the data shows that the ROA increases by 47.37 as the overall sustainability disclosure increases; and .95 for every increase in the size of the company. The age did not appear to be significant to ROA.

For the interaction effects, the data showed that when OSD is considered with the age and the size of the firm, the overall sustainability disclosure is significant both at .03 p-value. The OSD when interacted with age showed positive correlation which increases ROA by 0.31, while the OSD when interacted with size tends to decrease the ROA by 2.51.

Table 2: Summary of Linear Regression Results between ROA and Overall Sustainability

Independent Variables	Coefficients	P Value
Overall Sustainability Disclosure	47.37	0.03*
Age	-.03	0.44
Size	.95	0.05*
Ineraction Effects		
OSD x Age	.031	.03*
OSDxSize	-2.51	.03*

*Note: *<.05*

Model 2

The second model considered the specific performance indicators of the GRI Index in relation to the companies' performance in terms of ROE. Table 3 presents the results of the main and interaction effects of the regression. It shows that individually, the economic, environmental, and social indicators, together with the age and size of the company are not significant to the companies' ROE with all p-values higher than .05 for both the main and interaction effects. This can be

inferred that even when the specific sustainability disclosures are considered together with its age and size, submission and adherence to sustainability reports has no effect on the company's performance. Furthermore, when submitted or adhered to individually, the specific performance indicators do not have effects on the company's ROE. Furthermore, since there are no significant variables which showed, we look into the over F-statistics of the model to find if it corroborates with the results. The data showed that the F-statistics is .29; hence, it is not significant as well.

Table 3: Summary of Linear Regression Results between ROE and Independent Variables

Independent Variables	Coefficients	P Value
Economic Disclosure	-74.03	.27
Environmental Disclosure	-26.76	.73
Social Disclosure	54.75	.59
Age	-.16	.28
Size	-1.30	.30
Interaction Effects		
EconxAge	.15	.25
EconxSize	3.69	.27
EnvxAge	-.047	.49
EnvxSize	1.28	.74
SocxAge	.11	.43
SocxSize	-2.89	.59

*Note: *<.05*

Table 4 presents the result for the main and interaction effects between the companies' ROA and the specific sustainability indicators together with the control variables age and size. The data shows that all the indicators when treated individually is not significant to the companies' ROA, as well as the firm's age and size, which all showed p-values higher than .05. Meanwhile, the interaction effects also showed that when economic, environmental and social disclosures are considered together with the age and size of the firm, the specific indicators has no significance to the company's ROA. It can be inferred that submission and adherence to specific performance indicators would not have an effect on the company's ROA. Similarly, there is also a need to look into the F-statistics since all the independent and interaction variables are not significant. The F-statistic value showed .22 which is also not significant which validates the result of the model.

Table 4: Summary of Linear Regression Results between ROA and Independent Variables

Independent Variables	Coefficients	P Value
Economic Disclosure	-20.12	.69
Environmental Disclosure	3.21	.97
Social Disclosure	54.06	.64
Age	-.09	.47
Size	.75	.50
Interaction Effects		
EconxAge	.08	.47
EconxSize	.84	.74
EnvxAge	-.05	.52
EnvxSize	-.06	.74
SocxAge	.10	.49
SocxSize	-3.03	.62

*Note: *<.05*

Generally, the study found that overall sustainability disclosures of the companies do not affect the companies' ROE but does affect its ROA. This result goes against the studies of Adams, Thornton and Sepehri; Aggarwal (2013) and Moneva and Ortas (2008), which proved that there is no significant relationship between sustainability and performance of the company. This, however, conforms to the results of the studies of (Burhan & Rahmanti, 2012; Ameer & Othman, 2012; Eccles, Ioannou, & Serafeim, 2012; Mrammer & Millington, 2008; Labuschagne, Brent , & van Erck, 2007; Orth & Kohl) which all showed a relationship between sustainability and financial performance. With this result, it can be inferred that accomplishing overall sustainability considering all its indicators would have an effect on the performance of the firm. Although the results only showed significant for ROA, it is still implied that a company performance through one of its measures can be affected by a company's submission of the sustainability reports.

The study also showed that if sustainability disclosures are treated separately according to the GRI Index performance indicators even with or without considering the control variables, they do not individually affect the company's performance both in terms of ROE and ROA. The results appear to be both in accordance with some of the related studies. The results is in contrast with the claim of Aggarwal (2013) that when treated as a whole, sustainability disclosure has no significant influence to the companies' performance but may appear to have variety results when treated separately; as in this study, the results showed that

overall sustainability disclosure affects performance through its ROA but individually, does not affect the company performance either through ROE and ROA. Further, this study confirms that of Burhan and Rahmanti (2012) which showed significant association between overall sustainability and performance; since it also proved significant relationship for over-all sustainability disclosure and company performance through ROA.

Based on the results presented; first, it is clear that the Philippines is still in its nascent stage when it comes to sustainability reporting which is evident on the number of companies submitting sustainability reports particularly using the GRI Index. This can be attributed to a number of factors; one is on the voluntary nature of sustainability reporting. As noted by James (2015), the nature of voluntariness can be one aspect attributed to the small percentage of companies submitting sustainability reports. Another possible reason is on the absence of a concrete standard or measure on sustainability performance (Windolph, 2011); as discussed, even though global sustainability reporting guidelines such as those issued by the Global Reporting Initiative (GRI) exist, and new guidelines such as those currently being developed by the U.S.-based Sustainability Accounting Standards Board (SASB) are emerging; the scope, detail, and format of the information presented in formal sustainability reports vary considerably among companies (James, 2015). Meanwhile, it is also concluded that "this type of information is primarily oriented to satisfy formality, and not to be really involved in the process of achieving the

goals of sustainable development presented in National Sustainable Development Strategy" (Persic, Jankovic, & Vlasic).

The GRI develops the sustainability reporting guidelines through a multi-stakeholder process that incorporates the active participation of business, accountancy, investment, environmental, human rights, and research and labor organizations from around the world. It offers a GRI certified training which involves standard 16-hour training. The training is offered in various countries; however, the list does not include the Philippines. The training also requires an investment on the part of the companies through a training fee and a rigorous process before they are certified to be GRI compliant (National Center for Sustainability Reporting, n.d.). The rigorous process and cost factors may also be another factor of the number of companies involved in GRI reporting in the country.

Another factor to consider is that, other companies are multinational entities which might be affected by their country of origin. Like in the case of Japanese MNEs in the Philippines, they are more prone to sustainability reporting since Japan has been standardized in its sustainability reporting taking into consideration their business environment, legal framework and cultural values; whereas, in the Philippines, there has been no standardized reporting guidelines yet on sustainability reporting, notwithstanding the current greening of global economies (Cortez, 2012). For this reason, MNEs in the Philippines might not be submitting

based on GRI framework, instead, according to the standard prescribed in their country of origin.

Meanwhile, The Philippines has not been exposed to the GRI reporting framework until 2012 when the Philippine Business for the Environment spearheaded training on GRI sustainability reporting. The said initiative is claimed by (PBE) to have gained traction for the country's participation in sustainability reporting. However, only 18 companies were represented in the said training, although 85% of the total attendees signified to the companies' submission of GRI reports (Philippine Business for the Environment, 2012). The PBE has not held similar training until recently, when they invited participants for the GRI certified training on G4 which is GRIs new sustainability report framework. The said training also came with specific costs for the companies participating (Philippine Business for the Environment, 2015). Other group of factors may also be attributed to the differences of the companies' decision to submit sustainability report and the framework that it will adopt (Jensen & Berg, 2012). Factors such as country-level determinants, specifically the investment and protection laws, intensity of market coordination and ownership concentration, the level of economic, social and environmental development and value systems were identified by Jensen & Berg (2012). Company specific characteristics may also have an effect on the company's decision to submit, like the industry they belong to, their board characteristic, and even the performance of the firm itself (Feijoo, Romero, & Ruiz, 2014).

The study also gleaned the varying effects of practicing sustainability on the performance of companies. Although the sample is limited, the study was able to capture that adhering to sustainability compliance, which were manifested through the reports that the companies have submitted, may have positive effect to the company's performance. This infers that sustainability report compliance has an effect on the company's performance. However, when treated independently, the submission of individual performance indicators showed no effect on the companies' performance. This implies that complying with specific measures only, would not have an effect on a company's performance; thus, if companies would want to really capture the benefits of complying sustainability reports, they should be able to consider all the performance indicator disclosures. One factor which could be considered is on the content of sustainability reports which tend to appear in "forms and units that are not readily convertible into financial terms". However, rapid advances in areas such as environmental management accounting, human resource and social accounting, valuation of intangible assets and value based reporting, promise to make sustainability information useful to the financial community (Jain, 2014).

The measure of "output and outcome effectiveness" which might be a key as to why variations of results appear when measuring the impact of GRI reporting can be another factor. Barkemeyer et. al. (2015) argued that the "GRI has been successful in terms of output effectiveness by promoting the increased

dissemination and standardization of sustainability reporting". However, they also found that its "outcome effectiveness is limited as it does not appear to allow internal and external stakeholders to meaningfully interact with the respective companies on the basis of the information provided in the reports". Furthermore, if it did, the report content would not show the uniform patterns identified, but instead reflect context-specific materiality considerations which result to the limited impact effectiveness of GRI reporting.

Shahi et. al. (2014) also pointed out that the current manual process of analyzing sustainability reports is becoming tedious and obsolete. With this, an ideal solution which can be done is the development of intelligent software which can be used to perform the said analysis, as recommended in the study of Shahi et. al. as well.

Philippines Sustainable Development in their Rio +20 Report (n.d.) also addresses the inadequacy of lack of a governance framework, an agency to vitiate the needed institutional and organizational networks, and a mechanism to make the thrust going, which should serve as key sustainability criteria that should be equally pursued together with the other criteria. They emphasized that mechanisms for public participation and partnership among government, civil society and private sector groups should be promoted through the formation of "strategic alliances and action networks".

There is also a need to consider that the independent and dependent variables are endogeneous.   Engagement in sustainability disclosures requires resources and is costly in nature; hence there is a possibility that those who engage in sustainability disclosures are the companies that are already profitable in the first place. In this case higher ROE and ROA might have been achieved by the companies in the absence of sustainability reports. The cross-sectional linear regression analysis will not resolve this endogeneity and the beta estimates might be biased upwards.

The present study adds evidence on the effect of adhering and submitting to corporate sustainability especially on the company's financial performance. Amidst the varying claims on its effect, the study shows that although the sustainability reporting submission alone cannot fully explain the company's performance, adherence to such would still have an effect on the companies. Although overall sustainability reporting was only significant to ROA and not on ROE, the results still establish the effect of companies submitting sustainability report to their performance as previous studies have found that the return on assets is the most value relevant accounting measure. It is speculated that investors value return on assets the most because this measure is the only measure, among most of the accounting performance measures, that includes both uses (revenues and expenses) and sources of assets (Aliabadi, Dorestani, & Balsara, 2013). Looking into the effect of company's characteristics like the firm size would also likely have an effect to the sustainability reporting of companies. The link between firm size, board size and sustainability reporting found in other study like that of Shamil

et. al (2014) suggest that large firms are likely to have large boards and these factors are most likely to predict whether firms are likely to adopt sustainability reporting. From an agency theory perspective, large firms need to be effectively monitored and requires a relatively large board to support corporate disclosures and reduce agency costs.

The study also addresses the inadequate literature of the country regarding corporate sustainability. Most likely attributed to being at its nascent stage in the corporate sustainability reporting, there is a lack in the literature looking into the country's perspective on sustainability reporting. With this study, it can be gleaned that there is a need to strengthen the efforts of the country in terms of emphasizing corporate sustainability, specifically on its reporting aspect.

Conclusion, Policy Implication and Recommendations

The study focused on determining the effect of overall sustainability reporting and the individual performance indicators including economic, social and environmental disclosures to the performance of companies who submit sustainability reports as per GRI Index. The results showed that overall sustainability disclosure affects the companies' performance in terms of ROA but not in terms of ROE. However, when treated individually; economic, environmental, and social disclosures do not affect the company performance both in terms of ROE and ROA. Furthermore, the study showed that control variables

like company age and size when considered together with the sustainability reporting impacts the company's performance in varying manner.

The above results imply that sustainability reporting is still on its nascent stage in the Philippines, which can be attributed to the number of companies submitting such reports. As such, it is recommended to the Philippine Council for Sustainable Development that this particular area be included among the thrusts in the Sustainable Development Agenda of the country to strengthen and emphasize the idea of companies submitting sustainability reports. The following mechanisms for good governance should be in place, particularly state agencies, civil society groups, and the various stakeholders in the private sector must have consensus on the strategic vision or societal goals for the common good, and are bound together in effective partnership. The partnership of multi-sector stakeholders and local government leadership is also critical (Barkemeyer, Preuss, & Lee, 2015; Philippine Council for Sustainable Development, Summary of Philippines Rio + 20 report, n.d.). The study agrees with the country's recommended backbone for the global sustainable agenda, which include "setting out from the local level, strengthening the organizations, and keeping track of one another".

 In line with the sustainability reporting, which is implied to be inadequate in the country, the PCSD should strengthen the inclusion of corporate entities in the country's sustainable agenda. The Philippines Business for Environment, as the one spearheading the campaign for sustainability reporting, particularly in the

Global Reporting Initiative should also broaden the avenue for tapping companies in training for sustainability reporting, to address the implication on the rigorous and inadequate training. The results of the study also implied that even when sustainability reporting is found to have an effect to company performance, sustainability reporting indices and frameworks like that of Global Reporting Initiative alone cannot fully claim its benefits to companies adhering in terms of reports submission, as the results remain varied and inconclusive. Considering the identified factor on the nature of manual analysis of company sustainability reports, it is also recommended to the Global Reporting Initiative and other sustainability reporting frameworks to consider the design of software for the said analysis which was presented in the study of Shamhi (2014). In a similar context, the GRI organization should also address the "context-specific materiality" pointed out in the study of Barkemeyer et. al (2015); with this it is suggested that GRI and other sustainability frameworks should step up in coming up with a mechanism which would actively involve all stakeholders and not just the companies submitting the report to appreciate the value of sustainability reporting.

The present study also comes with limitations; one is on the limited sample used which is due to the limited number of companies submitting sustainability reports as well. To this, it is recommended that future studies should consider a larger sample size in order to fully capture the effect of sustainability reporting on the companies' performance. Aside from the GRI Reporting Index, future studies may also include other reporting frameworks used by Philippine companies including

the firm specific reports used especially by the MNEs as discussed by Cortez (2012) The study also failed to address the longitudinal factors and only focused on cross-sectional analysis, and only considered the age and size of the companies as control variables. Thus, the study was only able to capture the correlations (in the case of ROA) but not the causality. Future studies could also look into other control variables which might have an effect on the sustainability reporting and performance like the companies' macro determinants in selecting what kind of reporting strategy to employ as discussed in the study of Jensen & Berg (2012). Other company specific variables like the board structure (Shamil, Shaikh, Ho, & Krishnan, 2014); industry type, ownership (Feijoo, Romero, & Ruiz, 2014); value systems and even the financial performance of the firm may also be considered for future studies.

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Strategies to Prepare and Plan for Market Shocks: A Study from New Zealand Businesses

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Introduction

Whether it is the Global or Asian Financial Crisis, significant market slowdowns, disruptive innovation or massive loss of trust in brand, market shocks have happened in the past and will happen again.

For many businesses, longevity of success is inextricably linked to the ability to plan for, and endure or even prosper during these shocks. While not all businesses bear the full brunt of a shock or subsequent shockwave in a major market or segment, many do, and preparation and planning can enable swift and confident response.

With the global nature of business many companies are exposed to markets forces which they have little or no control or influence, subjecting them to enormous risk. Through exposures to international and export markets New Zealand businesses are susceptible to this and survival rates of New Zealand businesses has been the

subject of many discussion papers and statistics support this business mortality issue.

Figure 1 - Survival rate of New Zealand businesses
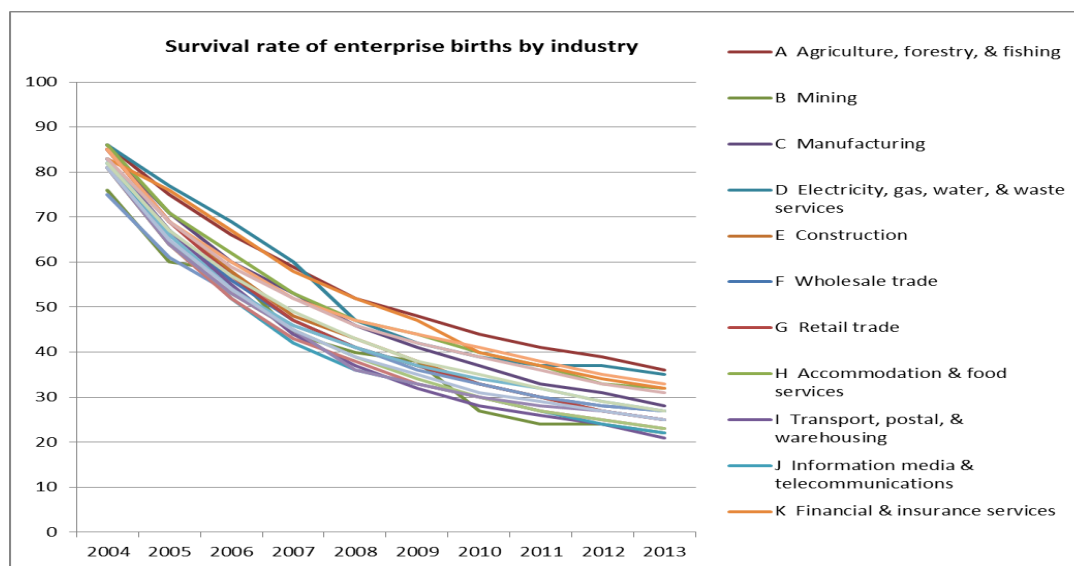
(New Zealand Department of Statistics, 2013)

In order to explore this issue we assessed the business strategies used by New Zealand companies to prepare and plan for market shocks. To achieve the objective the following research questions are addressed:

1. What market shocks affect New Zealand businesses?
2. What are the strategies that New Zealand businesses report using to prepare and plan for market shocks?

3. Of the methods employed to prepare for market shocks, what has worked? Strategic processes employed by four highly respected companies with operations which span diverse markets were examined. This report uses a semi-structured interviews with company owner and/or executives.

This report will build on literature prior research into organisational strategy making within New Zealand businesses and how this pertains to market shocks, to improve resilience or maximise opportunities presented by these situations.

Literature Review

MARKET SHOCKS

Market shocks have been defined as shocks against a continuum timeline of relative stability interrupted by discontinuities or outliers (Amer, Daim, & Jetter, 2013; Burt, Wright, Bradfield, Cairns, & van der Heijden, 2006; Chan & Liu, 2002; Christensen, 1997, 2006; Christensen, Verlinden, & Westerman, 2002; Ganegoda & Evans, 2014; Gordon, Stewart, Luker, & Sweo, 2000; Hamilton, 2003; Maillet & Michel, 2003; Mintzberg, 1994; Wack, 1985a, 1985b). Shocks happen in various ways, some unfold slowly and others occur suddenly (Burt et al., 2006; Christensen, Craig, & Hart, 2001; Chrystall & Cleland, 2014; Jefferson, 2012; Jefferson & Voudouris, 2011; Maillet & Michel, 2003; Postma & Liebl, 2005; Schoemaker, Day, & Snyder, 2013; Schwarting, Dutzler, Bauer, & Tenge, 2012; Wack, 1985a, 1985b; Wessel & Christensen, 2012). Consensus amongst researchers on the clear definitions of market shocks have yet to be adopted (Chan

& Liu, 2002; Christensen, 2006; Maillet & Michel, 2003; Meissner & Wulf, 2013) however literature can be broadly broken into 3 fields; (1) Correction of major market imbalances (2) the impact of externalities and (3) industry disruption (Burt, 2010; Kilian & Park, 2009; Maillet & Michel, 2003; Schwarting et al., 2012). There are clearly overlaps and relationships between these causative themes of market shocks which most discussions encompass however the specific discipline of the respective researcher or author largely determines the underlying focus of analysis.

Correction of market imbalances, causes and subsequent reactions often use economic application of supply, demand, equilibrium and disequilibrium to illustrate market conditions. Coupling these with behavioral tendencies (mood or sentiment), amplify subsequent corrections or crashes (Chan & Liu, 2002; Fisher, 1932, 1933; Ganegoda & Evans, 2014; Ismail, Poolton, & Sharifi, 2011; Jefferson & Voudouris, 2011; Kilian, 2006; Meissner & Wulf, 2013; Merrouche & Nier, 2010; Reinhart & Rogoff, 2008; Rudd, 2009; Shiller, 2008; Wack, 1985a, 1985b). The Great Depression of the late 1920's saw the development of literature on the combined debt-deflationary theory outlining the impact when over-investment and over-speculation coincides with over-indebtedness (Fisher, 1933). Fisher built on an his description of negatively reinforcing cycles, when markets lose confidence and mild pessimism leads to increased selling, lowering prices, further diminishing confidence and so on (Fisher, 1932). This pattern has repeated during the Asian Financial Crisis (AFC) and Global Financial Crisis (GFC).

During the AFC the Thai economy was over speculated with foreign investment attracted by artificially high interest rates (Chan & Liu, 2002). As global investors became aware of the issues they began liquidating investments in much the same way as Fisher described in 1932. The Thai stock-exchange lost more than 42% of its value in 2006 and more than 65% of the remaining value in 20071 and the effects were felt widely across the other ASEAN-5 countries of the Philippines, Singapore, Indonesia and Malaysia as well as many of their trading partners, including New Zealand (Chan & Liu, 2002). In the case of the GFC, much has been written on the topic and although there are many perspectives, consensus on the causes appear to be centered on 3 factors; credit to deposit ratio imbalances globally, monetary policy which was too loose and inadequate regulation or supervision of market activities (Bernanke, 2009; Merrouche & Nier, 2010; T. Porter, 2009) followed by the contagion of falling confidence (Merrouche & Nier, 2010; Reinhart & Rogoff, 2008; Rudd, 2009; Shiller, 2008). Like the Great Depression three quarters of a century earlier the conditions included an over speculated market and over indebtedness. In this case it included the property market, which at the time had experienced a decade long run of prices increasing ahead of real demand through population increase, and the availability of credit fueling the rise (Bernanke, 2009; Merrouche & Nier, 2010; Reinhart & Rogoff, 2008; Rudd, 2009; Shiller, 2008). Each shock resulted in volatility beyond the capacity of the markets to handle. While the shock events were sudden and resulted in trouble for many organisations, the factors preceding the imbalances grew over time and to skilled observers this time was used to consider the options.

EXTERNALITIES

Externalities or exogenous factors can exert influence on a system to produce outliers (Burt et al., 2006; Chan & Liu, 2002; Dyer, Boucher, & Taylor, 2006; Merrouche & Nier, 2010). Depending on the nature, externalities have potential to shift the supply or demand curve of this system, resulting in a new equilibrium (Dyer et al., 2006; Fisher, 1933; Green, 2009). Examples include natural disasters, political events or unrest, wars and terror events (Amer et al., 2013; Burt et al., 2006; Chan & Liu, 2002; Chrystall & Cleland, 2014, 2014; Deep & Dani, 2009; Hamilton, 2003; Jefferson, 2012; Kilian, 2006; Kilian & Park, 2009; Rudd, 2009; Wack, 1985a, 1985b). Researchers have linked these externalities directly to market shocks and have asserted that endogenous factors, supply and demand inside the system, had little influence on market volatility and only exogenous factors created material movements (Chan & Liu, 2002; Hamilton, 2003; Kilian & Park, 2009). Oil markets have been studied extensively and present researchers with a market of regulated supply to meet demand and maintain equilibrium2. Hamilton (2003) illustrated the unambiguous connection of significant price movements with military conflicts and political events. Kilian and Park (2009) further asserted that uncertainty about future oil supply shortfalls create precautionary demand pressures which impact markets far more than production issues. In addition Kilian and Park (2009) highlight that because demand is driven by supply uncertainty, not increased consumption, the impact can be instantaneous in response to a political disturbance. Chan and Liu's (2002) analysis of stock

markets in South East Asia in the 1990's also argued that the highest levels of volatility could be linked with social, economic or political events.

DISRUPTION

A specific externality known as "disruption" has been identified and discussed in literature since Clayton Christensen described it in his book, The Innovator's Dilemma (1997). Originally coined "disruptive technologies", distinguishing between technologies that sustain an industry and technologies that disrupt (Christensen, 1997, 2006; Christensen, Anthony, & Roth, 2004; Christensen et al., 2001, 2002; Overdorf & Barragree, 2001). Disruptive innovation is where industry's leading firm(s) overshoot customer expectations creating an opening for new entrants, and with the new entrant, a new performance trajectory for that market (Christensen, 1997, 2006; Christensen et al., 2004, 2001, 2002; K. B. Clark, 1985; Wessel & Christensen, 2012). Once a market has been penetrated, disruptive technologies create new growth and advantage which can cause trouble for incumbent firms and markets (Christensen, 2006; Christensen et al., 2001). Interestingly, disruption has been described as a process unfolding over a period of time, rather than a single event (Christensen, 2006; Christensen et al., 2001; Wessel & Christensen, 2012). The proposition that disruption happens over a period of time can present opportunity for the diligent observer if skilled to interpret signals, formulate alternative strategies, and with the will to implement them.

Changes to the photographic and publishing industries tracked a similar paths with technology enabling development changes in customer preferences with Kodak and Borders high profile casualties of disruption. Kodak recognized a shift was occurring in their industry in the early 1990's and sought new ways to integrate with their customers (Prahalad & Hamel, 1990) and in 1999 realised they needed to innovate, doing so with low priced digital cameras and two years later lead the US market (Christensen, 2006). However instead of positioning the firm for the inevitability of digital photography replacing film it chose to invested in ways for digital to improve photographic film quality. With the proliferation of high definition capable smartphone cameras Kodak failed, filing for bankruptcy protection in 2012 (Mui, 2012). Just as dramatic was the arrival of AMAZON enabling customer's access to a limitless library of books. AMAZON's advantage was not only their unfettered range of books and products but also the fact that customers pay in advance, drastically reducing working capital requirements (Overdorf & Barragree, 2001; Wessel & Christensen, 2012). Borders Bookstore continued focus on physical inventory processes as their competitive advantage and failed to adapt to online retailing and in 2011 the company filed for chapter 11 bankruptcy (Hooper & Rawls, 2014). Overdorf and Barragree anticipated the industry changes in 2001, the same year Borders decided to close it's Borders.com channel to market, outsourcing e-commerce operations to Amazon.com, only collecting referral fees (Hooper & Rawls, 2014). The business' leaders had failed to see consumer and market trends, and therefore failed to prepare appropriately.

STRATEGY AND STRATEGIC PROCESSES

The strategy making process considers information from internal and external sources, hard and soft data3, then generate options for an organisation to pursue (Almeida & Fernando, 2008; Ansoff, 1980; Burt et al., 2006; Frost, 2003; Ismail et al., 2011; Meissner & Wulf, 2013; Mintzberg, 1994; Mintzberg & Lampel, 1999; M. Porter, 1996; Prahalad & Hamel, 1990; Rigby & Bilodeau, 2007; Schoemaker et al., 2013; Schwarting et al., 2012; Stiles, Herhalt, & Maxwell, 2012; Verreynne, 2005; Wack, 1985a, 1985b). Strategy making can happen in two ways, either through the intentional act of research and analysis to discover customer needs or through testing the market and monitoring feedback loops to determine what works and what doesn't (Burt et al., 2006; Christensen et al., 2004; Jefferson & Voudouris, 2011; Mintzberg, 1994; Mintzberg & Lampel, 1999; Verreynne, 2005). Christensen (2004) defines these processes as deliberate and emergent, respectively. Research does not imply that one is better than the other, more that there are situations where one is advantageous relative to the other. While Christensen (2004) differentiates the situations by using the expected level of uncertainty, with deliberate useful in environments of greater certainty and emerging in relative uncertainty. Burt et, al. (2006) progress this view stating it is a mistake for managers to expect emergent strategies to transpire as planned. An emergent approach requires leaders to maintain flexibility and remain connected with the day to day of their organisations to enable agile response with changes in chaotic and complex markets (Amer et al., 2013; Christensen et al., 2004, 2002; Deep & Dani, 2009; Ganegoda & Evans, 2014; Helfat & Martin, 2014; Ismail et

al., 2011; Jefferson & Voudouris, 2011; Mintzberg, 1994; Overdorf & Barragree, 2001; M. Porter, 1996; Schoemaker et al., 2013; Simon, Houghton, & Aquino, 2000; Stiles et al., 2012; Verreynne, 2005). When looking for data to support deliberate and emergent processes, leaders face the dilemma of either hard data being less concrete than desirable or late (Mintzberg, 1994). Mintzberg (1994) suggests the remedy is that leaders "get their hands dirty" (p. 111) rather than remain abstracted from the organisation. The hands on approach helps limit delays in critical decision-making (Ganegoda & Evans, 2014; Helfat & Martin, 2014; Jefferson & Voudouris, 2011; Kilian & Park, 2009; Prahalad & Hamel, 1990; Simon et al., 2000). Mid-level management's understanding of business operation and the ability to use their experience strategically is limited by their social capital within an organisation and influence with senior management (Helfat & Martin, 2014; Mintzberg, 1994; Verreynne, 2005; Wack, 1985a, 1985b). When discussing his experience with Royal Dutch Shell during the 1970's oil crisis4, Pierre Wack (1985a, 1985b) described the challenges senior management had with uncertainty and their inability to make decisions and execute strategy unless the options presented were robustly prepared. Wack (1985b) states that "changing the image of reality in the heads of critical decision makers" (p. 84) was a fundamental requirement to ensure strategic plans were executed.

Whether it is top-level or mid-level management, leaders must be capable of understanding the detailed of an organisation, the environment they operate in and the forces driving that environment (Burt et al., 2006; Schoemaker et al., 2013;

Wack, 1985a, 1985b). Driving forces of social, political and economic forces underpinned the Royal Dutch/Shell's scenario planning process, which focussed on differentiating predetermined factors and uncertainty (Burt et al., 2006; Wack, 1985a, 1985b). Predetermined factors are elements which have already occurred but whose consequences have not yet unfolded, where uncertainty is just that (Wack, 1985a, 1985b). This process of generating potential models of future market conditions is known as scenario planning and is one of a range of strategic tools businesses report using.

Research indicates a positive correlation on the usage of strategic tools with organisational performance (D. N. Clark, 1997; Deep & Dani, 2009; Frost, 2003; Ismail et al., 2011; Meissner & Wulf, 2013; Verreynne, 2005). Deciding which tool to use and in which situation requires management to understand the detailed workings of an organisation, environmental driving forces and the organisation's capability to implement (D. N. Clark, 1997; Deep & Dani, 2009; Frost, 2003; Ismail et al., 2011; Meissner & Wulf, 2013; Mintzberg, 1994; Mintzberg & Lampel, 1999; Rigby & Bilodeau, 2007; Verreynne, 2005; Wack, 1985a). Rigby and Bilodeau (2007) liken the mismatch of strategic tool usage and organisational capability to "crowbars in the hands of children" (p. 21). Literature draws the distinction between strategic planning and implementation, however it highlighted that success is bent toward execution (Mintzberg, 1994; Mintzberg & Lampel, 1999; Rigby & Bilodeau, 2007). This is supported in field research on the usage of strategic management tools5 where separate studies from Clark (1997) and Frost

(2003) suggested the strategy process as having phases starting with a stocktake of the current status, analysis of the operating and macro environments, strategic planning and implementation6, with no phase being mutually exclusive or wholly independent.

Research reports SWOT7, PEST8, Porters-5-Forces9 and value chain analysis are the most commonly used strategic tools, underpinned by business processes such as benchmarking and forecasting (D. N. Clark, 1997; Corner, 2001; Frost, 2003). It is also strongly recognised that success is unambiguously predicated on decisive action over theory. Frost (2003) states, "strategy fails is not because the strategy was inherently flawed, but rather because it was poorly implemented" (p. 52). Wack (1985b) calls the relationship of vision with action as "existential effectiveness" (p. 84) which is necessary for success and absent in examples of failure (Burt, 2010; Wack, 1985a).

Further research has also identified that competitive strategy making and action oriented decision making can be improved with organisational learning processes (Santos-Vijande, López-Sánchez, & Trespalacios, 2012). Snowden and Boone (2007) describe environments as simple, complicated, complex and chaotic (see figure 1 below) and prescribe a routine of actions for each.

Figure 2 - Cynefin framework
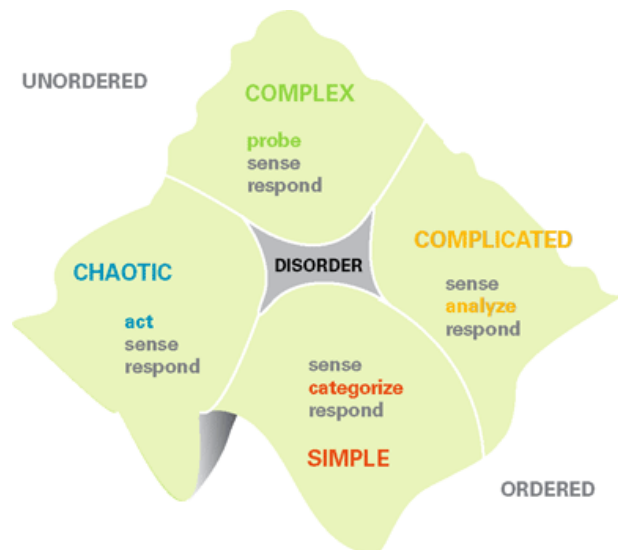
(Snowden & Boone, 2007)

As market environments move from complex to chaotic, high pressure decision making becomes more critical (Snowden & Boone, 2007) and it has been shown that organisational learning processes support strategic flexibility and being strategically agile improves a firm's performance (Santos-Vijande et al., 2012). Key arguments in the literature include:

1. Whether it is the traditional commodity markets or emerging markets, all are inherently volatile and by their very nature present high levels of uncertainty.;

2. Behavioural tendencies of actors amplify this volatility;

3. Customer preferences change constantly, creating opportunities for new entrants and threats to incumbents;

4. SWOT, PEST and Porters-5-forces are reportedly the most commonly used strategic tools and Scenario Planning is one of the most widely respected for considering predeterminations and uncertainty;

5. Success is dependent on the ability to implement strategies and the ability to adapt as market conditions change.

Literature highlights the need for further investigation to increase understanding of market shocks and conditions preceding them. In addition, the literature also highlights the need to develop understanding of business practices in a New Zealand context and how this relates to international case studies. There have been several high profile case studies presented including that of Kodak, where the company was aware of an environmental shift but the lack of adequate action ultimately resulted in company failure, and Royal Dutch Shell, where continuously improving strategic planning and action implementation allowed prosperity through crisis. Undoubtedly there are similar examples to these in the context of New Zealand business.

Research Method

A semi-structured interview format was employed to draw out the subject's respective strategies, their rational for taking the approach they have and their consideration of credibility or reality of these plans. Four prominent New Zealand business directors and/or owners participated in this research project.

The research question this report sets out to address is "what are the strategies used by New Zealand companies to prepare and plan for market shocks". To achieve the objective the following research questions are addressed:

1. What market shocks affect New Zealand businesses?

2. What are the strategies that New Zealand businesses report using to prepare and plan for market shocks?

3. Of the methods employed to prepare for market shocks, what has worked?

Interviews were conducted with senior business operators, owners and directors, and the transcripts were analysed thematically. Narrative research, in this case semi-structured interviews, is one of five qualitative methods set out by Creswell, Hanson, Plano Clark and Morales (2007). They recommend narrative research to suit an exploratory topic by building context for a problem and when comparing similar, but not the same, responses across several individuals as subjects (Creswell et al., 2007). This approach enabled a comparative process with three of the four research subjects having operated in the food sector, either currently or previously, however all were in very different sub-sectors and with very different business models, governance and operating structures. The interview guide was developed in five general areas, firstly to describe the business context, then some history on experience with market shocks, then to explore strategies used (if any), how these worked practically and finally to explore any current issue the business has been reviewing.

The sample range of four subjects were selected due their experience in leading businesses through market shocks as well as having either current or prior working relationships with the researcher and their availability. The nature of the interviews are such that the subjects provide insight to their experiences and therefore require an element of trust in the researcher.

Semi structured interviews provide an open forum for subjects and the researcher to engage in a comfortably and recount their experiences (Creswell et al., 2007; Daymon & Holloway, 2011; Zorn, 2011). The semi-structured interview process was supported with an open question guide (Appendix 8.1) that assisted the researcher to allow the subjects latitude to provide depth with their personal accounts and at the same time ensure similarity in scope. Interviews were all recorded digitally on an iPhone and recordings professionally transcribed10. A pilot study was conducted with a sample group of subjects to ensure interview flow and identify any ambiguity in questions. This pilot was critically reviewed with the assistance of Professor John Oetzel and some changes were made to the open question guide prior to the research proper.

Research participation was limited due to the confidential exploratory nature of the subject matter. Participants were chosen due to their seniority and having had either current or prior working or academic relationships with the researcher. This fact assisted with candour of research subjects, a critical component of this research design, however was a limiting factor for the number and range of

participants available. This research project was not intended to provide a comprehensive assessment of New Zealand business strategy making, but was intended to present an insight as to some of the actual business practices and experiences.

Thematic analysis provides a very flexible approach for analysis of research data gathered across a range of sources and non-identical but similar research questions (Braun & Clarke, 2006). Almeida and Fernando (2008) used a similar framework of semi-structured interviews and upon transcription grouped responses to review coherently. Transcriptions were uploaded to NVivo for coding and initial thematic grouping (nodes), which was tabulated for further analysis.

The thematic coding involved grouping the respondents into the markets in which they participate (manufacturing, service, retail and export), categorising the market changes they were exposed to (cycles, externalities, disruption and shocks), listing the strategic processes employed (SWOT, PEST-ELGM, Porters-5-forces or components of them) and grouping responses that subjects found effective (risk mitigation, strategic Planning, focus, people, organisational learning)

Company names (pseudonyms) are:

* Subject 1 (S1) - Piwakawaka Group

* Subject 2 (S2) - Weta Group

* Subject 3 (S3) - Mako Group

* Subject 4 (S4) - Kakapo Group

The coded thematic table has been appended (Appendix 8.2).

Findings

Key findings include the realsation that New Zealand businesses are exposed to all manner of market shocks, specifically those most relevant to the markets in which they participate. Strategic processes used are aligned with popular models such as SWOT, PEST(ELGM) and Porters-5-forces, with specific attention given to the criteria most relevant to their markets. Action orientation and decisive leadership is emphasised as critical traits in personnel.

Table 1 below is a consolidation of the research findings and illustrates the the commonality and comparison of information garnered from research participants across thematic groups. It then builds a picture linking the business context to the type of changes they experience in their respective markets, to the strategic processes used and to the aspects which worked.

Table 1 - Consolidated table of research findings

	Piwakawaka Group	Weta Group	Mako Group	Kakapo Group
Context	• Manufacturing • Retail • Service (food) • Export (Australia, Asia, Europe, United Kingdom)	• Retail	• Manufacturing • Export (Asia/China)	• Manufacturing • Retail • Service (food) • Export (Australia, Asia, United States of America, Europe)
Cycles & volitility	• Seasonal factors in domestic and export markets.	• Economic and macro-economic factos.	• Proliferation of competition for supply.	• Commodity cycles, • Economic and macro-economic factors.
Externalities	• Consumer and social trends.	• Macro-economic factors.	• Government regulations, • Competitor actions (loss in confidence from market)	• Consumer and social trends, • International markets, • Technology changes
Disruption	• Customer markets disrupted (low cost retailers)	• Disruptive innovation potential (technology)	• Disruptive competition (illegal trade)	• Disruptive innovation introduction (technology)
Shocks	• Seasonal factors in domestic and export markets.	• Global Financial Crisis	• Chinese infant formula market ("faux-botulism")	• Innovation shock (e-retail)
SWOT	• Formal SWOT process used to initiate strategic planning.	• Formal SWOT completed as part of academic program.	• Focus on opportunities and threats.	• Formal SWOT extensively used.
PEST(ELG M)	• Focus on political, social, globalisation and megatrend factors.	• Formal PEST completed as part of academic program.	• Focus on political, social, legal and globalisation factors.	• Focus on economic, social, technological, globalisation and megatrends.
s-5-	• Customer power,	• Competitor	• Competitor	• Competitor

	threat of substitution, threat of new entrant	power, customer power, threat of substitution	power, supplier power, threat of new entrant	power, customer power, supplier power, threat of new entrant, threat substitution, new entrant.
Risk mitigation	• Geographically diverse production and markets.	• Structured for down-cycles (low overheads) • Macro-economic observation.	• Decisive action (retreat or exit) with uncertain threats. • Relationships with key value chain stakeholders.	• Decisive action (retreat or exit) with uncertain threats. • Strategic market observation.
Strategic planning	• Formal and iteritive. • Implementation in due course.	• 2 – 10 year strategic planning horizon.	• Strategic actions ahead of strategic planning.	• Strategic actions ahead of strategic planning.
Focus			• Emphasis on implementation and execution.	• Emphasis on understanding business, implementation and execution
People	• Privately held family company active with management in executing strategy.	• Strong operational staff. • Action orientation.	• Action oriented management.	• Emphasis on understanding business and strong leadership.
Learnin	• Iteritive strategy process incorporating learning.	• Shared experiences and organisational learning.	• Reflective processes.	• Reflective processes.

MARKET SHOCKS AFFECTING NEW ZEALAND BUSINESSES

New Zealand businesses are affected by all manner of market shock with the nature of shock related to the nature of market in which the market participates. Companies with extensive exposure to export markets, such as Piwakawaka Group, Mako Group and Kakapo Group are therefore extensively exposed to market shocks where they participate.

For export or international businesses, their exposure to shocks is related directly to that markets they participate in, with developed markets of Europe, United Kingdom and United States being less volatile than developing markets of Asia however less volatile does not equate to more stable. Volatility in developing markets can be replaced with commodity cycles and competition in developed markets, which can in turn lead to conditions ripe for industry disruption. Examples of emerging market exposure includes the experience of Mako Group where a lucrative market for infant formula in China has been subjected to counterfeit products and a series of significant quality incidents and resulted in major government intervention. Examples of developed market disruption include the experience of Kakapo Group who witnessed the arrival of AMAZON to disrupt the long established publishing and printing industry and also Piwakawaka Group who have noted the decline in traditional supermarket and rise of cut-price supermarkets.

By international standards, New Zealand's domestic market is considered developed ("Dow Jones Global Indices," 2014) and with that brings conditions similar to those of other mature markets. With the local market being the sole focus for Weta Group, they are exposed to general economic conditions and any industry specific trends, although insulated to a certain extent by trading on the secondary market. It could be argued that Weta Group should be mindful of conditions similar to those prior to the Global Financial Crisis which may be unfolding now, with a potentially over valued property market, and the availability of credit with prolonged record low interest rates (Bernanke, 2009; Merrouche & Nier, 2010; Reinhart & Rogoff, 2008; Rudd, 2009; Shiller, 2008).

Interestingly, Piwakawaka Group are somewhat insulated from the full brunt of exposure to any market by developing geographic spread both with their production and also markets they trade in. This insulation provided to Weta Group and Piwakawaka Group enables time for them to respond before the full extent of a shock takes affect, so long as they are observant and react accordingly.

STRATEGIC TOOLS USED BY NEW ZEALAND BUSINESSES
The common use of SWOT, PEST, Porters-5-Forces aligns with prior studies on strategic tool use (D. N. Clark, 1997; Corner, 2001; Frost, 2003). Strategic tool use by participating businesses largely relates to the markets in which the organisation participates, and a combination of Christensen's (2004) deliberate and emergent. Although SWOT is widely used, outside of completing the model it

appears that the outward looking opportunities and threats are of more strategic importance than the inward looking strengths and weaknesses. It also appears that the components of the PEST and Porter-5-forces models reviewed are of considerable strategic value. Again, the component of the respective models analysed are largely related to the market and industry in which the organisation operates.

The organisations which operate in the developed markets of Europe, United Kingdom and United States (Piwakawaka and Kakapo Groups) are highly focussed on understanding customer power and increasing competition, and wary of new entrants and substitution, classic conditions for disruption, however are somewhat more accepting of cyclical market conditions. These conditions suitable for disruption have been described to occur when a company, usually a market leader, over achieves in the eyes of its customers and presents an opportunity for a new entrant or new product that still meets the customer's expectations but at a lower price point or different position on an innovation/adoption curve (Christensen, 1997, 2006; Christensen et al., 2004, 2001, 2002; K. B. Clark, 1985; Wessel & Christensen, 2012). This was the case as seen by Kakapo in the publishing industry, similarly by Piwakawaka the supermarket industry in the United Kingdom, and also a large extent that seen by Mako in the Chinese infant formula market. These conditions for disruptive innovation appear to be more prevalent in developed markets than emerging, with the understanding that the Chinese infant formula market is an established sector of the Chinese emerging market.

Being highly exposed to Asian markets, Mako Group's close understanding of political factors is understandable and aligned with Chan and Liu's (2002) analysis of markets in South East Asia in the 1990's which found that the highest levels of volatility could be linked to a social, economic or political events.

It was noted by Weta Group that the impending technological disruption of the motor vehicle industry from alternative energy vehicles is something they have been observing however because of the 'insulation' from the immediate affects they have decided to monitor but not act. If we apply the experience from Kakapo Group who acted shortly after e-publishing launched, this uncertain threat may warrant action. Components of the PEST and Porters-5-forces models may assist the business when deciding what, if any, actions are appropriate. After all, the substitute product (alternative energy vehicles) has already arrived and the disruption has happened. In Wack's (1985b) scenario planning model, this would be called a 'predetermined factor' and the organisation should consider potential market behavioural responses and position itself accordingly.

WHAT WORKED?

The application of the relevant components of SWOT, PEST(ELGM) & Porters-5-forces models has been a very effective method of strategy making and staying focussed. Strategy has been accused of being heavy on theoretical analysis and light on execution, so the approach of applying the most relevant components of the models ensures strategic processes add maximum value (Mintzberg, 1994).

The use of SWOT as a starting point for strategic observation of threats and opportunities has been adopted with relative success. The nature of market in which the organisation trades has a direct relationship to the strategies and methods employed, with more volatile emerging markets requiring more action oriented management and stable markets with more systematic strategic planning.

Mako Group director's perspective is aligned with literature to action orientation and limiting delays in critical decision-making (Ganegoda & Evans, 2014; Helfat & Martin, 2014; Jefferson & Voudouris, 2011; Kilian & Park, 2009; Prahalad & Hamel, 1990; Simon et al., 2000). This perspective is consistent with Snowden and Boone's (2007) Cynefin Framework (figure 1) which describes situations as simple, complicated, complex or chaotic and prescribes a routine for each. In the example of the Chinese infant formula market, one line of though might be that preceding the faux-botulism episode from 2013-14, where the growing middle class's demand for high quality products moved from complicated, then to complex with the introduction of counterfeit suppliers in a grey trade, and then to chaotic with Fonterra's faux-botulism announcement, it is clear to see why Mako Group director emphasised action orientation.

The organisation with the largest portfolio of markets and industries was Kakapo Group. With that scope, it is not surprising that emphasis is placed on leadership. With this span the risks are also widespread, hence the Kakapo Group directors perspective that they "like earnings that are predictable" (S4 03:29, p.29), however

in the absence of that predictability acknowledge the necessity of decisive leadership. Kakapo Group's observation of an uncertain risk created with AMAZON's arrival, and decision to exit that business two years after the arrival, contrasts with that of Borders Bookstore who failed to react accordingly and failed, filing for chapter 11 bankruptcy in 2011 (Hooper & Rawls, 2014). This decision demonstrated leadership aligned with Cynefin framework with AMAZON making the market complex, and the decision process being probe, sense, then respond(Snowden & Boone, 2007).

Piwakawaka Group's iterative strategic process supported by organisational learning processes appears to also have been successful and aligned with research (Santos-Vijande et al., 2012). Piwakawaka's process being formal and iterative maximises this opportunity and is closely aligned to that recommended in literature of monitoring feedback loops to determine what works and what doesn't (Burt et al., 2006; Christensen et al., 2004; Jefferson & Voudouris, 2011; Mintzberg, 1994; Mintzberg & Lampel, 1999; Verreynne, 2005). The result is that systematic risk for this organisation has been well managed with potential shocks mitigated due to diversity with produce supply and also trading destinations. In addition, their vertically integrated processing arm provides avenue into the food service sector if the currently observed social trend of 'dining out' ensues.

Conclusion

It is evident that because of the export focus of New Zealand businesses, they are exposed to the relentless suite of market shocks from destination markets, and that a firms strategies should be suited to that environment.

Market shock events are not a new phenomenon but in recent years the frequency and magnitude of such events has increased and wrecked havoc on unprepared businesses. Examples include market crisis, such as the Global Financial Crisis, industry disruption such as that felt by the publishing industry, the sudden rationalisation of the Chinese infant formula market, as well as industry disruption currently unfolding, including the introduction of alternative energy vehicles and the rise of the anti-sugar movement.

The most commonly used strategic tools by these subjects are SWOT, PEST(ELGM) and Porters-5-forces with specific attention given to the criteria most relevant to their markets. It is also commonly agreed that success relies on the ability to implement strategies and the ability to adapt as conditions change therefore importance of action orientation and decisive leadership is emphasised. Further research opportunities exist to understanding the strategic decision making preferences of executives and how these may be suited to the markets in which they operate. Specifically to understand if stable markets are suited to executives with a preference to "simple" decision routines, and equally if volatile markets are

suited to executives with "complex" or "complicated" routines, using Snowden and Boone's (2007) Cynefn framework.

There is also an opportunity to build on Verreynne's (2005) study of strategy making in firms with less than 100 employees with a qualitative study, overlaying leadership styles with strategy making and firm performance. Additionally, a longitudinal study of specific businesses exposed to predetermined or imminent market shocks may improve understanding of the phenomenon and in turn improve strategy making.

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Footnotes:

1 In 1996 Thailand's stock exchange dropped from 1364 to 787 points, then in 1997 it dropped from 787 to 207 points (Chan & Liu, 2002).
2 Consortium groups regulating oil markets include the Texas Railroad Commission (TRC) from the late 1800's through to 1973 then the Organisation of Petroleum Exporting Countries (OPEC) from 1973 onward.
3 Mintzberg (1994, p. 107) describes soft data as "soft insights from his or her personal experiences and the experiences of others throughout the organization"
4 Pierre Wack was head of the business environment division of the Royal Dutch/Shell Group planning department from 1971-81, then went on to become a senior lecturer at Harvard Business School.   Royal Dutch/Shell Group set the gold standard for scenario planning during the oil crisis of the 1970's (Burt, 2010; Jefferson, 2012).
5 Correct and full titles are; Strategic Management Tool Usage: A Comparative Study (D. N. Clark, 1997) and The Use of Strategic Tools by Small and Medium-sized Enterprises: An Australasian Study (Frost, 2003)
6 Clark (1997) proposes the following phases; situational assessment, strategic analysis and implementation. Frost (2003) proposes the following stages; current direction, strategic audit, environmental analysis, macro analysis, strategic analysis and implementation.
7 SWOT: Strength, Weakness, Opportunities and Threats analysis.
8 PEST: Political, Economic, Social and Technological (often added to with Environmental, Legal, Globalisation and Megatrends) trend analysis.
9 Porters-5-Forces describe power of an organisation relative to that of customers, competitors, suppliers, new entrants or substitutions.
10 Transcription completed by TranscribeMe (http://www.transcribeme.com).

Intentions and Behaviors of Adolescents in Purchasing Green Products

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Abstract:

The research study is focused on the contextual factors affecting young consumer's intentions and behaviors towards purchasing green products. It aims to understand deeply the adolescent's green purchase intentions through the Theory of Planned Behavior. In this study 150 young people from Pasig City were surveyed. Results show that parental influence and media exposure are the top predictor among the contextual factors. As for the Planned Behavior Factors, it was seen that all three has a perfect relationship with Green Purchase Intention. From this study it can be said that parents, peer, media exposure, education and knowledge have a critical role in influencing young consumer's purchase intentions of buying green products.

INTRODUCTION

Green Marketing is becoming the latest and most popular trend in the world. However in Asian countries, it is seen to have been growing just recently. With the ASEAN Integration unfolding, businesses are now becoming competitive as

they strategize and practice "green". They have also modified their marketing strategy and included environment friendly steps in their marketing channel. Companies have started to choose different media (paper, electronics) to send the information about their product or service to consumers who are interested to use environment friendly products. (Rhaman, 2013) Advertisements' message encourages and explains how the green or environment friendly product can be beneficial for the consumer as well as for the environment. Those messages are expected to motivate consumers to buy more green products (Wahid, Rahbar & Tan, 2011). Hence, companies are now clearly more concerned about the consumers' green product perception and want to take advantage of consumers' green loyalty for their products or services. (Rahman, 2013) The businesses and consumers have started to challenge eco-friendly products as they become more concerned on the environment, health and wealth in order to protect the earth's resources and the environment. In addition, the firms have slowly applied green marketing practices in their projects as a part of social conscience and they are demanding to reach the consumers with their green messages (Nagaraju & Thejaswini, 2014). Nowadays, Asian countries become the primary target market by international marketers due to the increase of environmental awareness and the purchasing power of Asian consumers (Lasuin & Ching, 2014; Noor & Muhammad, 2012;). However, the local and international marketers are facing difficulties in developing adequate and effective marketing strategies caused by lacking of information related to the green purchase intention of the consumers in that particular country (Lasuin & Ching, 2014; Aman et al., 2012).

In the Philippines, marketers are gradually shifting to green marketing as consumers are now being aware of the benefits of green products as a result to their exposure to these practices in other countries. There are several non-profit organizations and industry associations who are doing projects that support this initiative. There is one called "Go Green Philippines", which is a sustainable environmental program to revitalize the Philippine ecosystem and sustain the Philippine fashion accessories industry. It is an initiative of the Fashion Accessories Manufacturers And Exporters Foundation Philippines, Inc. (FAME Foundation) in partnership with the Department Of Environment And Natural Resources Region VII (DENR-VII).

Due to fast-growing economy in Asia, the purchasing power of Asians is increasing compared to the previous generations. A study by Li and Su, (2007) shows many countries have raised the environment awareness and they are willing to purchase the green product which has less harmful effect product against environment. Since this is becoming an important trend in society, there were a handful of researchers who focused more on profiling the green consumers by different demographic factors such as age, gender and income. In a study by Lee (2011), on the green purchase intention of the consumers of Hong Kong, it was seen that they are motivated by two different factors. These are (1) Individual factors which is the composition of awareness for environment, environmental involvement and knowledge on environmental issue and (2) Contextual factors which consist of media exposure, influence of parents in home and influence of

peer outside of home regarding environment issue. Among these two factors, there were already a handful of researches made that study the demographic and individual factors. Majority of the literature available do not provide enough contextual environments. The main limitation of the other literature and studies failed to address how these contextual factors are significant for understanding the behavior of young Filipino consumers. These contextual factors, then, are tested using the Theory of Planned Behavior.

In this study, the researcher focused on the Adolescents or the young consumers and the Contextual factors affecting their intentions and behaviors of purchasing green products. Aside from the Contextual Factors, the Theory of Planned Behavior will also be used to understand more the intentions of the youth. Youth is best understood as a period of transition from dependence of childhood to adulthood's independence. As a category, youth is more fluid than other fixed age-groups.   For statistical purposes, the United Nations, defined "youth", as those persons between the ages of 15-24 years, without prejudice to other definitions by Member States. The Secretary General first referred to the current definition of youth in 1981 in his report to the General Assembly on International Youth Year and endorsed it in ensuing reports.

Literature Review

Green Marketing. The American Marketing Association (AMA) defines green marketing as marketing of products that are believed to be environment-friendly, which organizes into various activities such as product adjustment, modification of production processes, packaging, labeling, advertising strategies as well as increases awareness on compliance marketing amongst industries (Yazdanifard, 2011) Green marketing is the marketing strategies where marketers aim to discover environmental responsive consumers. Displaying and positioning eco-friendly products in front of the consumers, is consider as consumer products marketing (Rahman, 2013)

Green Product. "Green products" and "environmental products" describe products which protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, pollution, and waste. The characteristics of green products which consist of original grown, recyclable and reusable, contain natural ingredients, contain recycled content, do not pollute environment, contain approved chemical and not test on animals. Thus, Green product is interchangeable with the term "eco-friendly product", "environmental-friendly product" and "ecological product" (Chen & Chai, 2010). It is the product which has minimum impact on environment and it incorporates the strategies with recycled materials, reduced packaging and using less harmful substances (Chen and Chai ,2010).

Green Consumers. The present researches focus on the generational cohort of the young consumers. This segment is chosen due to the fact that young consumers are the consumers of the future (Vermeir & Verbeke, 2006). They are the ones who could and should be capable of making the difference in green purchases in the future. Furthermore, the young consumers are considered to be 'the driving power' behind the increased attention to green products (Heaney, 2007). Also, they are known for contradicting themselves when it comes to their behavior and their thoughts about certain topics, which makes this cohort especially interesting to research. However, the young consumers' green buying behavior is never researched extensively (Kolkailah et al., 2012). In size, Generation Y outnumbers all previous generations (Rainer & Rainer, 2011). Generation Y is known to work together very well, not to break the rules and to accept authority. At this moment Generation Y is in higher education or in their first jobs. The generation is known for being more narcissistic and sceptical than previous generations and has the tendency to look after its own needs before thinking about the needs of others (Schmeltz, 2012). While the approach to life of this group may be very narcissistic, Generation Y has a well-developed social awareness being concerned with topics like ethical activities and environment protection (Ellis, 2010). The generation thinks it is a company's obligation to invest in a better environment and society and produce products in a sustainable way (Schweitzer & Lyons, 2010). In the US 85% of young adults (18-30 year old) even identify themselves as an environmentalist (Grimmer & Woolley, 2012). Next to that, Schmeltz (2012) shows Generation Y holds a very positive attitude towards green products.

Green Purchase Intention. Green purchasing is defined as buying the environmental-friendly products or so-called green products. It is the purchase or buying of products that can reduce the environmental impact. (Lasuin & Ching, 2014) However for other researchers, green purchase intention can be defined as the willingness of an individual to consider and prefer the green product rather than conventional or traditional product in the decision making process (Aman et al.*,* 2012; Rashid, 2009; Ali & Ahmad, 2012). Green purchasing intention is also examined as an indicator of a subsequent behavior in response to the purchase of green products (Park & Ha, 2012). In general, when people have the stronger intention to engage in a behavior, the more likely should be its performance. Thus, when customer has show the strong intention toward the green product, they more likely transcend to performance which perform the actual purchase.

CONCEPTUAL FRAMEWORK

In the above conceptual framework, it can be seen that the Contextual Factors such as media exposure, parental influence and peer influence together with the use of the Theory of Planned Behavior which includes attitude, subjective norms and perceived behavioral control will affect the green purchase intention and behaviors of young consumers. Both are considered to be the independent variables while the green purchase intention and behavior are the dependent variables. These variables put together, will determine the extent and the level of agreement whether these factors has a great effect on the green purchase intention. The Demographic Factors on the other hand are moderating variables that could also affect the purchase of green products.

Contextual Factors that affect Purchase Intention

Media Exposure. A number of studies have found that young peoples' purchase decisions are also influenced by mass media. Young adolescents possess positive attitudes than older adolescents, and they are normally become more interested to gather information from a variety of communication sources (Promotosh & Sajedul, 2011)

Parent Influence. Family members specifically, the parents play an important role in shaping and molding consumer's learning. Communication has a huge effect on influencing choices made by consumers. This communication effect can either be direct or indirect. Direct influences of family can stem from an individual's consumer behavior, beliefs and practices seen in other members of the family.

Indirect influences on the other hand, can also come from other information sources such as mass media and peers. (Promotosh & Sejedul, 2011) The influence of parents is seen as a socialization factor that can affect adolescence. Parents' consumption habits, attitudes and their intentions to buy products can strongly affect and influence the consumption and purchase intention patterns of young consumers. The parents also hold strong desire to consume material goods, their children also value material goods in a similar way like their parents do. (Chaplin & Josh, 2010) Parental supports affect the children's behavior and their voluntary activities in a society. (Promotosh and Sajedul, 2011)

Peer Influence. Peer relationship is a dominant factor for adolescents' decision making. Relationship among adolescents that formed in early childhood considered as weak. The relationships in adolescent stage become more influential, intimate, and strong. An individual's environmental friendly behavior also depends on his or her social context. A study made by Tikka et al., (2000) pointed out that the social context as well as social groups influence our thoughts and acts. As we belong to different social groups and our social context is also different from one another, so our attitude toward the ecological behavior will be significantly different from one another. In one study it was also pointed out that social influence plays an important role in consumers' purchase decision on buying green product (Ohman, 2011). Ohman (2011) supported that social pressure has an influence toward the consumers with green purchase intention in performing the actual buying behavior. Ooi et al (2012) also figured out that peer pressure as a part of social influence will

influence the consumers on green purchasing among Malaysian consumers. Informal sources, such as friends, neighbors, relatives and others that consumers meet on social network sites can have a strong influence on a person's behavior. Soonthonsmai (2001) in a study on Thai consumers' purchase intention for green products found that the subjective norm (family, friends, peers and relevant others) plays a major role in the intention to purchase green products.

Below is the basis for the conceptual framework. This research study only focused on the contextual factors and how it influences adolescent's Green Purchase Behavior.

Figure 1: Adapted from "Young Consumer's Purchase Intentions of Buying Green Products", (Promotosh & Sajedul, 2011 as cited by Lee, 2011

Figure 2: Adapted from "The Theory of Planned Behavior", Ajzen & Fishbein, 1980

While the Contextual Factors may lead to the green purchase behavior, the theory of planned behavior which is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) is necessary in dealing with intentions which will lead to behaviors over which people have incomplete volitional control based on the original model's limitations. Based on Azjen research studies of TPB back in 1991 explained that high accuracy from attitudes toward the behavior, subjective norms, and perceived behavioral control able to predict the intentions to perform behaviors of different kinds; and these intentions, together with perceptions of behavioral control, account for considerable variance in actual behavior. In some cases, these three are sufficient to understand people's attitudes on an action. However, complete understanding of one's action is possible when these three factors are broken into their foundations (Azjen, 2005 as cited by Rahman, 2013)

Attitudes Towards Behavior (Behavioral Beliefs).

Behavioral beliefs are the immediate determinants of a person's attitude. An individual may hold a large number of beliefs about a given object, but he or she can only attend a relatively small number of beliefs. These small numbers of beliefs he or she can attend are called behavioral beliefs. Indeed, these Behavioral beliefs are used to understand why a person holds a certain attitude toward an object (Ajzen & Fishbein, 1980 as cited by Rahman, 2013)

Subjective Norms.

A subjective norm is an individual's belief about others, if an individual should (or should not) perform the behavior in question. When an individual's attitude toward a behavior is driven by his or her own beliefs about performing the behavior, these beliefs are behavioral beliefs. By comparison, an individual's subjective norm is a function of normative beliefs. They are not behavioral beliefs. In this case, individuals want to get feedback from specific individuals and groups to perform (or not perform) a behavior. (Ajzen & Fishbein, 1980 as cited by Rahman, 2013) Wahid et al. (2012) also stated that "social influence is a proxy of subjective norm". In other words, social influence has the same meaning with subjective norm. In addition, DeLamater and Myers (2010) stated that social influence is the changes of a person's attitude and behavior which influenced by another person's action such as persuading and threatening.

Perceived Behavioral Control.

Perceived behavioral control refers to people's perception of the ease or difficulty of performing the behavior of interest. Perceived behavioral control can vary depending on situations and actions. For instance, a person may believe that he can achieve this task easily, so his perceived behavioral control will be determined by his set of control beliefs. Several studies reported that "people's behavior is strongly influenced by their confidence in their ability to perform it (i.e., by perceived behavioral control)" perceived behavioral control may be unrealistic when people have little information about their behavior. (Ajzen & Fishbein, 1980 as cited by Rahman, 2013)

Scope and Delimitation

In this study, the researcher considers the following limitations: This study covers literatures, research questions and structure, a designed research method, and a questionnaire created and distributed to young consumers in Pasig City. After which, answers for the research question were tallied through which conclusions were formulated and implications will be drawn.

The study only focused on contextual factors and not the individual factors that affect young consumer's green purchase intention. The factors under the Theory of Planned Behavior were also used to determine green purchase intention. The study also intends to explore young consumers' purchase intention of buying green products in general. This study is not based on young consumers' intention of

buying a particular green product. Thirdly, the student sample is taken from a particular location. Lastly, scale items used to measure contextual factors are limited in this study.

RESEARCH PROBLEM/OBJECTIVES/HYPOTHESIS

Given that there is an increasing need and concern to take care of the environment, local companies are slowly practicing green marketing and converting their processes and products to be eco-friendly. But that is only one side of the coin, there is also a strong need to educate the young consumers about green marketing and study on how specifically these young Filipino consumers would accept this new trend. What would be the factors that could highly influence them on purchasing green products. The key to the success of Green Marketing would really be dependent on the hands of these young consumers.

Research Question: How can the contextual factors and the factors of theory of planned behavior affect the green purchase intentions and behaviors of young consumers?

Ho (Null): Contextual factors and the factors of Theory of Planned Behavior do not affect the green purchase intention and behavior of young consumers.

Ha (Alternative): Contextual factors and the factors of Theory of Planned Behavior affect the green purchase intention and behavior of young consumers.

Green products could possibly be successful in the Philippines if the potential

contextual factors such as media exposure to environmental messages, parental influence and peer influence are fully researched and understood within the country. As such, to therefore instigate green marketing to develop within the young consumers of the country, this study is aimed at determining the purchasing intentions and behaviors of the youth segment in the Philippines with reference to purchasing green products, to fully understand the green market potential of the country.

The main objective of this study is to identify factors influencing youths' intention and behavior towards purchasing green products. It seeks to examine and understand whether contextual factors such as media exposure, parental influence and peer influence affect youth's intention to purchase green products and whether the factors under the Theory of Planned Behavior such as attitude towards behavior , subjective norms and perceived behavioral control also has an effect to the intention and behavior to purchase green products. This study is significant and beneficial to business in terms of knowing the green market capabilities, especially the market targeted to green consumers. The current study contributes to the following parts:

a. To determine the level of green purchase intention and behavior in terms of demographics.

b. To determine the level of contextual factors and theory of planned behavior factors in relation to green purchase intention and behavior.

c. To determine the difference in the perception of youth in terms of demographics.

d. To determine the relationship between green purchase intention and behavior in terms of contextual factors and theory of planned behavior factors.

e. To support the businesses to better understand the potential of the green market.

f. To assist businesses to better understand the buying behavior of young green consumers.

g. To help marketers promote and increase awareness for youth consumers toward green products.

METHODS

Research Design. This study is a descriptive, exploratory and explanatory type of research, where the researcher used a 4-point likert type survey questionnaire to gather information. It is descriptive since the means and frequencies will be presented. As for being exploratory, the study will identify contextual factors affecting young consumers' attitudes and their intentions of green purchase behavior. Being explanatory will explain the factors greatly affecting the green purchase intention and the possible reason behind it. This strategy allows us to collect quantitative data, and these will be used analyze descriptive and inferential statistics. This Likert scale helps to indicate to what extent respondents either agree or disagree with a series of belief statements about intention of purchasing green products. The verbal interpretation used is from 1 to 4 where 4 is strongly agree and 1 is strongly disagree. The norms of interpretation on the other hand would be agree to a great extent, agree to a large extent, agree to a moderate extent and agree

to a little extent. The researcher also used Ajzen's (2006) 'Constructing a theory of planned behavior questionnaire' to address the research problem within the framework of TPB. Ajzen's questionnaire reflects the different contextual factors and theory of planned behavior factors as it is related to green purchase intention. The researcher exactly lifted the said questionnaire in the study.

Sampling Procedure. The researcher used the student sample to collect quantitative data from questionnaires. In this study, the sample for questionnaires was based on non- probability sampling technique, convenience sampling. This sampling technique was used since the researcher is currently connected to UA&P and the respondents are very accessible.. The criteria used were simply to get young college student consumers studying bachelor or masteral's program at the School of Management, University of Asia and the Pacific. These students are within the ages of 16 - 24. The total number is young consumers used in this study is 150. The study had 43% males and 57% females that are aligned to the ratio of young male population as compared to the female youth. For the age groups, majority of the respondents were represented by the 19-21-year olds at 83%, followed by the 22-22 year olds with 8% and the 16-18-year old group at 5%. For the program type, 69% are said to be taking the bachelors program and 31% are masteral program. Fifty nine percent (59%) of the respondents came from Classes AB which has a monthly household income of Php250,000 and over, followed by Class lower B and Upper C with 24% with a monthly household income of Php100,000 – Php240,000.

Statistical Treatment. The researcher used a descriptive and inferential type of statistics. For the descriptive statistics, weighted mean, standard deviation and frequency will be computed. This will be used for the demographic profile of the respondents as well as the analysis of consumers on the average perceptions pertaining to each question on the questionnaire. Descriptive statistics can also be used to look into the purchase intentions. As for the inferential statistics, ANOVA (Analysis of Variance) was used to see the impact of demographic variables, Theory of Planned Behavior variables and the contextual factors on intention to purchase green products. Respondents were classified into three groups according to their age (Group 1: 16 to 18; Group 2: 19-21; Group 3: 22-24). The T-test was also used for group statistics. To measure the strength of the relationships between two variables, the researcher used Spearman Rank Correlation and Pearson Correlation. To see the relationships among variables, Multiple Regression was done. The researcher used SPSS (Statistical Package for Social Sciences) to run all statistical data seen in the results.

RESULTS ADND DISCUSSION

For the reliability of the questionnaire, the overall cronbach alpha was computed based on a reliability score of $\alpha = .75$ considered as high.

Analyzing Young Consumers

This descriptive statistics table implies some important issues among young consumers' overall evaluations of green products. The average perception about the usefulness of green products for health is considered highest level of priority (Mean Value=3.65) in 4 point Likert scale. The second highest priority goes to education is considered to be a favorable factor toward buying green products (Mean Value=3.44) Next is the intention to buy green products which is (mean Value – 3.41). Knowledge of environmental issues comes it at fourth in purchasing green products. (Mean Value = 3.29) This tells us that respondents agree to a large extent in terms of usefulness of green products, education is considered to buy green products, intention to buy green products and knowledge of environmental issues are considered in buying green products.

On contrary to these factors, media exposures like radio is not considered too much influential to young consumers' buying intentions. It can be seen that radio programs are considered to be less important (Mean Value=2.34). Discussing it with friends also got a low mean score. (Mean Value = 2.53) This means that the respondents only agree to a moderate extent to this. In addition, moderate priority was given toward the role of parents for green buying behavior (Mean Value=2.82 & 2.85). TV programs are considered be little bit higher (Mean Value=2.86) in position to create intentions for buying green products among young consumers.

From here we can say that in terms of peer and parental influence, young consumers agree to a great extent that these contextual factors affect their green purchasing intention and behaviors.

Descriptive Information	N	Mean	Std. Deviation
I think green products are useful for health.	150	3.65	0.49
I often buy green products.	150	2.76	0.56
I have learned about environmentally related topics and issues from my parents.	150	2.82	0.67
My parents think I should buy green products.	150	2.85	0.67
My friends often discuss environmental-related topics / issues.	150	2.53	0.72
I have learned a lot about environmental topics / issues from my friends.	150	2.72	0.66
I watch TV programs that are devoted to environmental topics / issues.	150	2.86	0.74
I pay attention to environmental messages in advertisements.	150	3.05	0.65
I listen to radio programs that are related to environmental topic / issues.	150	2.34	0.74
Education is important for purchasing environmental friendly products.	150	3.44	0.63
My knowledge of environmental issues influences my purchase decisions.	150	3.29	0.63
I intend to purchase green products in the future.	150	3.41	0.56

Descriptive Statistics Per Variable

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
parents	150	1.50	4.00	2.8367	.55713
peers	150	1.00	4.00	2.6267	.63770
media	150	1.00	4.00	2.7489	.55150
attitude	150	2.00	4.00	3.2033	.44907
subjective	150	1.50	4.00	2.7317	.44599
perceived	150	2.00	4.00	3.3633	.49459
Valid N (listwise)	150				

Summarizing and comparing the six independent variables above, it can be said that the one with the highest influence on the intention and behavior towards purchasing green products is the Perceived Behavioral control. With a mean of

3.36, we can say that respondents agree to a large extent that education and knowledge on environmental issues has an influence on their purchase intention and behavior. Attitude Toward Behavior with a mean of *3.21* comes in at second. This means that respondents agree to a great extent that this is true. After which, this is followed by the parental influence with a mean of *2.84* which also tells us that the respondents agree to a great extent that parents really have a big influence on them regarding green purchasing intention and behavior. Next is media with a mean of *2.75*. This also means that respondents agree to a great extent that media has the power to influence them. Subjective norms are at the middle of parental and peer influence with a mean of *2.73*. The last among the six variables is that of peer influence with *2.62*, which still means that respondents agree to a great extent.

In terms of Test of Difference by Gender, Females have a higher intention rate to buy green products than male with a mean of *3.43* and *3.36* respectively. Female youth are found to be more inclined to parental and peer influence, while male youth are more influenced by media exposure. Perceived behavioral control and attitude towards behavior is consistent being the top most influencers to young consumers regarding green purchase intentions and behaviors. In a previous study, Lee (2011) suggested that female consumers have higher potential to become green consumers. In terms of level of education, well-educated people tend to have a moderately higher level of environmental concern than their counterparts (Mertig & Dunlap, 2001). Hockett, McClafferty, and McMullin (2004) also reported that

the more highly educated individuals and those with higher incomes were more likely to behave pro-environmentally.

The research finding on green purchasing behavior might have different outcomes in different demographic contexts due to the complexity in green purchasing behavior of consumers (Ali & Ahmad, 2012). In other words, green purchasing behavior might be influenced by the demographic factors such as gender, ethnic group and other demographic factors. However, the study of Shahnaei (2012) and Chen and Chai (2010) indicated that there was no gender difference in green purchasing behavior among Malaysian consumers.

Contextual Factors: For media exposure it can be seen that 77 respondents or 51% of the respondents agree that they watch TV programs that are devoted to environmental topics or issues. A high 62% or 93 respondents also agree that they pay attention to environmental messages in advertisements. However, a big 48% or 72 respondents disagree to the statement that they listen to the radio programs related to environmental topics or issues. This last result for media exposure is understandable as not much radio programs are into discussing or promoting environmental issues. For Peer Influence, it can be seen that 67 respondents or 45% of which agree that they often discuss environmental-related topics or issues. However, what is surprising is that there is also a big chunk of the respondents, 63 of them or 42% disagree with the above said statement. It can be seen here that discussing about environmental issues are done but it is possible that it is not often.

This can be a reason why there is a close result between those who agree and those who do not agree with the statement. It could be possible that those in the upper age bracket are those which discusses environmental issues For Parental Influence, it was seen that 88 respondents or 59% of which agree that they have learned about environmentally related topics and issues from their parents. Aside from this 86 respondents or 57% also agree that their parents think they should buy green products. We can see here the usual Filipino close-knit family. Parents have a high influence over their children. Among the three contextual factors, it can be seen that it is consistent that parental influence got a high frequency rate. With the exception of the influence of TV programs with 62% in the previous analysis. Again, this mirrors our society today that children or the young / adolescents are greatly influenced by media specifically what they watch or see on television.

Planned Behavior Factors: On Attitude toward Behavior, 98 respondents or 65% of them strongly agree that green products are useful for health. When asked if they often buy green products, 97 respondents or 65% of them agree that they often buy green products. Attitude of young Filipino consumers have a very positive disposition about green products. It could be a result of the influence from parents or what they see on television.

Subjective Norms are formed by social influences either by family or friends. The result for this variable is also the same as the 2 questions under Peer Influence and the 2 questions under Parental Influence. For peers, 45% are influenced by their

friends, while an average of 58% agree that they are influenced by their parents. Although, for frequency, it may not be too high but the fact that majority of the respondents mentioned that these two contextual factors have a high influence on their green purchasing intention and behavior can be something to focus later on.

For PBC, 76 respondents or 51% of them strongly agree that education is important for purchasing environmental friendly products while 79 or 52% of the young respondents agree that knowledge of environmental issues influences their purchase decisions. This very much shows us that there is still a need for educating our young consumers about green marketing. This is one way that we can promote it. Young consumers really thirst for knowledge and education.

As for the overall Intention to purchase green products in the future, 79 respondents or 52% agree and a close 66 respondents or 44% strongly agree that they intend to buy green products in the future. This only shows that the young Filipino consumers although not yet fully aware and exposed to green marketing is willing to purchase green products in the future.

Inferential Statistics

One-Way Anova

ANOVA								
Constructs		**Demographic Profile**						
		Age		**Year Level**		**Household Income**		**Course**	
	F	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**
Parental Influence	1.808	0.168	-1.820	0.128	0.385	0.819	4.513	0.013
Peer Influence	0.063	0.939	0.485	0.746	0.846	0.498	0.197	0.822
Media Exposure	0.092	0.912	0.322	0.863	1.942	0.107	2.466	0.088
Attitude	5.536	0.005	0.911	0.460	1.435	0.225	4.032	0.020
Subjective Norms	0.468	0.627	0.452	0.771	0.705	0.589	2.080	0.129
Perceived Behavior	1.024	0.362	0.444	0.776	0.917	0.456	5.055	0.008
Green Purchase Intention	**0.768**	**0.466**	**0.701**	**0.592**	**0.201**	**0.937**	**1.798**	**0.169**

A one-way ANOVA between groups was conducted to see the impact of the
demographics factors to the contextual factors, the planned behavior factors and
the intention and behavior to purchase green products. For the demographic factor
age, only attitude has a very high F of 5.536, which means it has a significant
difference at 0.005. In terms of year level and household income, there was no
statistically significant difference at $P>0.05$. Lastly, for the course (whether
bachelor's degree or masters degree),parental influence, attitude and perceived
behavior have a high F at 4.513, 4.032 and 5.055 respectively with a significant
level of 0.013, 0.020 and 0.008. It can be depicted from here that for the
demographic factors only age has a significant difference with attitude and course
has a significant difference with parental influence, attitude and perceived

behavior. The rest do not have any effect on the intention and behavior to purchase green products.

Regression Analysis (Multivariate)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562[a]	.316	.292	.4683

a. Predictors: (Constant), perceived, peers, parents, media, attitude

In the above table it can be seen that 32% of green purchase intention is attributed to the parental influence, peer influence, media exposure, attitude and perceived behavior control factors. Subjective norm is said to be social influence which is similar to peer and parental influence.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.608	5	2.922	13.320	.000[b]
	Residual	31.585	144	.219		
	Total	46.193	149			

a. Dependent Variable: I intend to purchase green products in the future.

b. Predictors: (Constant), perceived, peers, parents, media, attitude

For the Analysis of Variance, F is high at 13.320 which means that green purchase intention and behavior has a significant difference with the contextual and planned behavior factors at 0.000.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.448	.370		1.209	.229	-.284	1.180
	parents	.051	.076	.051	.676	.500	-.099	.202
	peers	.069	.064	.079	1.074	.285	-.058	.196
	media	.157	.077	.155	2.020	.045	.003	.310
	attitude	.315	.098	.254	3.214	.002	.121	.508
	perceived	.355	.081	.315	4.378	.000	.195	.515

a. Dependent Variable: I intend to purchase green products in the future.

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	subjective	.[b]	.	.	.	.000

a. Dependent Variable: I intend to purchase green products in the future.

b. Predictors in the Model: (Constant), perceived, peers, parents, media, attitude

As for the coefficient, it is highly significant at 5%. Here, the perception of the youth on the green purchase intention in terms media, attitude, perceived behavior and subjective norms are all significant at 0.045, 0.002, 0.000 and 0.000 respectively.

T Test for Group Statistics

T-TEST FOR GROUP STATISTICS		Levene's Test for Equaliy of Variances		T-Test for Equality of Means	
		F	Sig.	T	Sig. (2-tailed)
Green Purchase Intention	Equal Variances assumed	1.565	0.213	-0.719	0.473
	Equal Variances not assumed			-0.705	0.482
Parents	Equal Variances assumed	0.165	0.685	0.034	0.973
	Equal Variances not assumed			0.034	0.973
Peers	Equal Variances assumed	0.476	0.491	-0.447	0.656
	Equal Variances not assumed			-0.444	0.658
Media	Equal Variances assumed	1.900	0.17	0.593	0.554
	Equal Variances not assumed			0.584	0.560
Attutude	Equal Variances assumed	1.837	0.177	-1.368	0.173
	Equal Variances not assumed			-1.349	0.180
Subjective Norms	Equal Variances assumed	1.001	0.319	-0.298	0.766
	Equal Variances not assumed			-0.296	0.767
Perceived Control Behavior	Equal Variances assumed	1.605	0.207	-1.039	0.301
	Equal Variances not assumed			-1.018	0.310

The Levene's Test for equality of variances, the sig. value of 0.21 is larger than 0.05. Given this, we can say that the variances are equal. From the column sig. (2 tailed), it is not significant at .000. This is also the result looking at each of the contextual and the planned behavior factors. This was also the same result in a study made in Sweeden by Promotosh & Sajedul (2011).

Pearson Correlation

Correlations

		I intend to purchase green products in the future.	parents	peers	media	attitude	subjective	perceived
I intend to purchase green products in the future.	Pearson Correlation	1	.237**	.204*	.335**	.405**	.294**	.423**
	Sig. (2-tailed)		.003	.012	.000	.000	.000	.000
	N	150	150	150	150	150	150	150
parents	Pearson Correlation	.237**	1	.111	.182*	.415**	.704**	.138
	Sig. (2-tailed)	.003		.178	.026	.000	.000	.093
	N	150	150	150	150	150	150	150
peers	Pearson Correlation	.204*	.111	1	.339**	.173*	.784**	.071
	Sig. (2-tailed)	.012	.178		.000	.034	.000	.386
	N	150	150	150	150	150	150	150
media	Pearson Correlation	.335**	.182*	.339**	1	.280**	.356**	.230**
	Sig. (2-tailed)	.000	.026	.000		.001	.000	.005
	N	150	150	150	150	150	150	150
attitude	Pearson Correlation	.405**	.415**	.173*	.280**	1	.383**	.232**
	Sig. (2-tailed)	.000	.000	.034	.001		.000	.004
	N	150	150	150	150	150	150	150
subjective	Pearson Correlation	.294**	.704**	.784**	.356**	.383**	1	.137
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.095
	N	150	150	150	150	150	150	150
perceived	Pearson Correlation	.423**	.138	.071	.230**	.232**	.137	1
	Sig. (2-tailed)	.000	.093	.386	.005	.004	.095	
	N	150	150	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

*** Significant at 0.05*

For Contextual Factors affecting young consumers, the relationship between parental influence and green purchase intention is very strong with a significance level of 0.003. Peer Influence as well has a strong correlation to green purchase intention at 0.012. Among the three the one with the perfect relationship is that of Media Exposure with a significance level of 0.000. This has a close to perfect relationship since in the Philippines, young consumers are greatly affected by media, specifically social media. This has the same findings as that of Lee (2011) This can be attributed to the fact that Gen Y are more inclined to visuals and other media materials. This is the same result from the Study done in Sweeden by Promotosh & Sajedul (2011). It was also said in the study of Tikka et al (2000) that contextual factors are important in green purchase decisions. Other researchers also

have considered the strong relationship between contextual factors and behavior. (Young et al, 2010) However the findings of this study do not support previous researches made. The study by Lee (2011) found that Hong Kong parents have less influence on their children's green purchase. This can be explained by the fact that Filipinos having close family ties and majority of the youth are still living with their parents. Hong Kong parents may not influence much in facilitating contextual environments that encourage green behavior among the young adolescents. It was also mentioned in one of the studies that the young adult adopts the same and similar behavior that their parents have. (Chaplin & John, 2010)

For the Theory of Planned Behavior Factors, it can be said that all three factors, attitude, subjective norm and perceived behavior control (education and knowledge) have a strong positive correlation with green purchase intention. The significance level for all three is at 0.000, which connotes a perfect relationship. This was also the result in the study made in Sweeden by Promotosh & Sajedul (2011)

Spearman Rank Correlation

Correlations

			I intend to purchase green products in the future.	Parents	Peers	Media	Attitude	Subjective Norm	Perceived behavior
Spearman's rho	I intend to purchase green products in the future.	Correlation Coefficient	1.000	.240**	.193*	.322**	.394**	.275**	.421**
		Sig. (2-tailed)	.	.003	.018	.000	.000	.001	.000
		N	150	150	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The researcher also made used of the Spearman Rank Correlation to determine the relationship between the green purchase intention and the contextual and planned behavior factors. Since a 4-point likert scale was used, it is more appropriate to use this test. It can be seen that parental influence is significant at 0.05 since its significant level is 0.003. Next is the subjective norm which is also significant at 0.001. Media, attitude and perceived behavior control were reported to have the perfect relationship with a significant level of 0.000.

These results show that among the contextual factors, media got the highest correlation with green purchase intention followed by parental influence. This only shows that the youth now are more influenced by media with a high usage rate of social media and their parents as a culture in the Philippines. For the planned behavior factors, all three were reported to be highly-correlated to green purchase intention. This is very true because the intention and behavior to purchase stems from having a positive attitude towards something. Aside from that the youth now are more influenced to purchase something if they are educated about it and if they have knowledge about it which boils down to perceived behavior control. Subjective norm as defined as social influence is also highy correlated as it is similar to parental and peer influence.

CONCLUSION

For demographics, most of the respondents are from the 19-21 age group, 57% of which are female and 43% are male. Most of them are from the 4th year level and earns Php250,000 and over. Females are said to have a higher mean rate of 3.43 than males with 3.36, which means that respondents agree to a large extent that gender has an influence on purchase intention, although the mean scores are too near that can also mean that there is just a slight difference in terms of influence.

For the extent of agreement of Contextual Factors, respondents agree to a large extent that both Parental and Peer Influence has an effect on green purchase intention. In terms of media exposure, respondents also agree to a large extent that it has an influence on green purchase intention. However, among the three, media exposure has the greatest influence followed by the parental influence. As for the Theory of Planned Behavior variables, the highest influencers among the six independent variables are Perceived Behavioral Control and Attitude Toward Behavior. Respondents agree to a great extent that these variables influence purchase intention and behavior. As for the Subjective Norm, since it talks about Social Influence, it is consistent with the peer and the parental influence that respondents agree to a large extent that subjective norms affect green purchase intention and behavior.

The results of the study suggest that the youth can be a lucrative market for green marketers. This segment is more interested to accept new and innovative ideas. They are very receptive to new things as long as they are educated about it and

they have built awareness towards it. They are also becoming more conscious about environmental knowledge and also they have the capacity to influence other people within their peer group. The study also shows that in the Philippines, young consumers are still influenced by parents and peers as explained by our beliefs and culture, however due to the advances in technology, media exposure can be the best tool to educate and influence the younger generation in terms of green marketing.

RECOMMENDATIONS and POLICY IMPLICATIONS

The results of the study show that young Filipinos are open and interested in green products, although there is a need to develop more on their attitude and behavior towards it. This behavior needs to be inculcated in the minds of these students at a young age and since the Filipinos have close family ties, the awareness of green marketing and green products should start with parents providing positive examples to their children as many of these behaviors, such as recycling, are learned at home. To empower students as future managers and consumers who understand the importance of sustainability, courses on environmental protection and green products should also be taught in schools and universities. Such courses should also be a part of the curriculum both for the graduate and undergraduate levels whereby students, through case analysis, discussions and presentations, are taught the importance of personal responsibility for the environment. As a recommendation, parents and schools should have activities for young consumers to be more inclined to educating the younger generation with green marketing.

Marketers should endeavor to attract young Filipino consumers to green products by using social media and sales promotion. Once consumers have adopted green products, they become an important component in their lives and they will be willing to purchase them in larger amounts in the future. This will also lead to positive word of mouth to others. As per the results of this study, media exposure have a strong influence on green purchasing behavior. Celebrity reference groups such as actors and musicians must emphasize environmental protection in their work. These celebrities play an important role as opinion leaders, especially among teenagers. Mass media and social networking is also crucial in promoting environmentalism and the use of environmentally-friendly products. On such websites, Filipino consumers may exchange opinions and might promote one brand over the other in the context of a conversation. It is also possible for them to add interactive content, which makes products or services more attractive to the members of their network and increases the chances of purchasing. Marketers should also devote their attention to segments of parents and disseminate information about the importance of using green products in order to develop favorable attitude towards green purchase and concern for the environment.. Aside from the parents, schools and marketers, the government should also think of ways to promote green products. There should also be laws favorable to the use of green products.

The sample used in this study is just from Pasig City and this may not represent the young Filipino population. For future researchers, they may expand the scope of

the study and increase the respondents to 500. Another interesting addition to this study is to capture the individual factors as well together with the contextual factors to see the whole picture of factors influencing individuals to green purchase intention.

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APPENDICES

A. QUESTIONNAIRE

Good Day! I am currently doing a research study entitled, ***"Green Marketing and It's Effects on Young Consumer Purchase Intentions of Buying Green Products"*** This questionnaire is designed to understand young consumers' purchase intentions of green products. <u>Green products are environmentally safe and preferable products and services</u> (e.g. organic tea, energy saving bulb, green car).

Your honest opinion is extremely valuable for completing this survey. Please complete the questionnaire; it will take only a few minutes. *The information you provide will be confidential and will not be used for any other purposes.* **Please check your preferred answer.** Please choose only one answer per question.

Name: _____ (Optional)

Age:

_____16-18   _____19-21   _____22-24

Gender:

_____ Male   _____ Female

School: _____

Year Level: _____   Course: _____

Household Income: (Income of Whole Family)

_____ Php250,000 and over

_____ Php100,000 – Php249,000

_____ Php60,000 – Php99,000

_____ Php40,000 – Php59,000

_____ Under Php40,000

"The Intentions and Behaviors of Adolescents in Purchasing Green Products"

1. I think green products are useful for health.

Strongly Agree	Agree	Disagree	Strongly Disagree

PLEAS SEE BACK FOR MORE QUESTIONS…

2. I often buy green products.

Strongly Agree	Agree	Disagree	Strongly Disagree

3. I have learned about environmentally related topics and issues from my parents.

Strongly Agree	Agree	Disagree	Strongly Disagree

4. My parents think I should buy green products.

Strongly Agree	Agree	Disagree	Strongly Disagree

5. My friends often discuss environmental-related topics / issues.

Strongly Agree	Agree	Disagree	Strongly Disagree

6. I have learned a lot about environmental topics / issues from my friends.

Strongly Agree	Agree	Disagree	Strongly Disagree

7. I watch TV programs that are devoted to environmental topics / issues.

Strongly Agree	Agree	Disagree	Strongly Disagree

8. I pay attention to environmental messages in advertisements.

Strongly Agree	Agree	Disagree	Strongly Disagree

9. I listen to radio programs that are related to environmental topic / issues.

Strongly Agree	Agree	Disagree	Strongly Disagree

10. Education is important for purchasing environmental friendly products.

Strongly Agree	Agree	Disagree	Strongly Disagree

11. My knowledge of environmental issues influences my purchase decisions.

Strongly Agree	Agree	Disagree	Strongly Disagree

12. I intend to purchase green products in the future.

Extremely Likely	Likely	Unlikely	Extremely Unlikely

B. RELIABILITY ANALYSIS

Table 1: Constructs Development

Construct Development		Questions
Contextual Factors	Parents	I have learned about environmentally-related topics and issues from my parents. My parents think that I should buy green products.
	Peers	My friends often discuss environmental related topics/issues. I have learned a lot about environmental topics/issues from my friends.
	Media	I watch TV programs that are devoted to environmental topics / issues. I pay attention to environmental messages in advertisements. I listen to Radio programs that are related to environmental topics/issues.
Theory of Planned Behavior	Attitude Toward Behavior	I think green products are useful for health. I often buy green products.
	Subjective Norms	I have learned about environmentally-related topics and issues from my parents. My parents think that I should buy green products. My friends often discuss environmental related topics/issues. I have learned a lot about environmental topics/issues from my friends.
	Perceived Behavioral Control (PBC)	Education is important for purchasing environmental friendly products. My knowledge of environmental issues influences my purchase decisions.
Overall Green Marketing Purchase Intention Reliability is $\alpha = .75$		

GREEN PURCHASE INTENTION

Reliability Statistics

Cronbach's Alpha	N of Items
.746	12

DESCRIPTIVE STATISTICS
C. FREQUENCY DISTRIBUTION – DEMOGRPHIC VARIABLE

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16 - 18 years old	13	8.7	8.7	8.7
	19 - 21 years old	125	83.3	83.3	92.0
	22 - 24 years old	12	8.0	8.0	100.0
	Total	150	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	65	43.3	43.3	43.3
	female	85	56.7	56.7	100.0
	Total	150	100.0	100.0	

Year Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1st year	2	1.3	1.3	1.3
	2nd year	8	5.3	5.3	6.7
	3rd year	12	8.0	8.0	14.7
	4th year	105	70.0	70.0	84.7
	5th year	23	15.3	15.3	100.0
	Total	150	100.0	100.0	

Course

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BSBA	99	66.0	66.0	66.0
	MScM	46	30.7	30.7	96.7
	EM	5	3.3	3.3	100.0
	Total	150	100.0	100.0	

D. FREQUENCY DISTRIBUTION – CONTEXTUAL FACTORS

MEDIA EXPOSURE

I watch TV programs that are devoted to environmental topics / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	2.7	2.7	2.7
	Disagree	41	27.3	27.3	30.0
	Agree	77	51.3	51.3	81.3
	Strongly agree	28	18.7	18.7	100.0
	Total	150	100.0	100.0	

I pay attention to environmental messages in advertisements.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	1.3	1.3	1.3
	disagree	22	14.7	14.7	16.0
	agree	93	62.0	62.0	78.0
	strongly agree	33	22.0	22.0	100.0
	Total	150	100.0	100.0	

I listen to radio programs that are related to environmental topic / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	11.3	11.3	11.3
	disagree	72	48.0	48.0	59.3
	agree	54	36.0	36.0	95.3
	strongly agree	7	4.7	4.7	100.0
	Total	150	100.0	100.0	

PEER INFLUENCE

My friends often discuss environmental-related topics / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	9	6.0	6.0	6.0
	disagree	63	42.0	42.0	48.0
	agree	67	44.7	44.7	92.7
	strongly agree	11	7.3	7.3	100.0
	Total	150	100.0	100.0	

I have learned a lot about environmental topics / issues from my friends.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	50	33.3	33.3	35.3
	agree	83	55.3	55.3	90.7
	strongly agree	14	9.3	9.3	100.0
	Total	150	100.0	100.0	

PARENTAL INFLUENCE

I have learned about environmentally related topics and issues from my parents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	40	26.7	26.7	28.7
	agree	88	58.7	58.7	87.3
	strongly agree	19	12.7	12.7	100.0
	Total	150	100.0	100.0	

My parents think I should buy green products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	1.3	1.3	1.3
	disagree	40	26.7	26.7	28.0
	agree	86	57.3	57.3	85.3
	strongly agree	22	14.7	14.7	100.0
	Total	150	100.0	100.0	

E. FREQUENCY DISTRIBUTION – THEORY OF PLANNED BEHAVIOR
ATTITUDE TOWARD BEHAVIOR
I think green products are useful for health.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	1	.7	.7	.7
	agree	51	34.0	34.0	34.7
	strongly agree	98	65.3	65.3	100.0
	Total	150	100.0	100.0	

I often buy green products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	.7	.7	.7
	disagree	43	28.7	28.7	29.3
	agree	97	64.7	64.7	94.0
	strongly agree	9	6.0	6.0	100.0
	Total	150	100.0	100.0	

SUBJECTIVE NORMS
My friends often discuss environmental-related topics / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	9	6.0	6.0	6.0
	disagree	63	42.0	42.0	48.0
	agree	67	44.7	44.7	92.7
	strongly agree	11	7.3	7.3	100.0
	Total	150	100.0	100.0	

I have learned a lot about environmental topics / issues from my friends.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	50	33.3	33.3	35.3
	agree	83	55.3	55.3	90.7
	strongly agree	14	9.3	9.3	100.0
	Total	150	100.0	100.0	

I have learned about environmentally related topics and issues from my parents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	40	26.7	26.7	28.7

		Frequency	Percent	Valid Percent	Cumulative Percent
	agree	88	58.7	58.7	87.3
	strongly agree	19	12.7	12.7	100.0
	Total	150	100.0	100.0	

My parents think I should buy green products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	1.3	1.3	1.3
	disagree	40	26.7	26.7	28.0
	agree	86	57.3	57.3	85.3
	strongly agree	22	14.7	14.7	100.0
	Total	150	100.0	100.0	

PERCIEVED BEHAVIORAL CONTROL
Education is important for purchasing environmental friendly products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	.7	.7	.7
	disagree	8	5.3	5.3	6.0
	agree	65	43.3	43.3	49.3
	strongly agree	76	50.7	50.7	100.0
	Total	150	100.0	100.0	

My knowledge of environmental issues influences my purchase decisions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	14	9.3	9.3	9.3
	agree	79	52.7	52.7	62.0
	strongly agree	57	38.0	38.0	100.0
	Total	150	100.0	100.0	

INTENTION TO BUY GREEN PRODUCTS
I intend to purchase green products in the future.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	5	3.3	3.3	3.3
	agree	79	52.7	52.7	56.0
	strongly agree	66	44.0	44.0	100.0
	Total	150	100.0	100.0	

INFERENTIAL STATISTICS

ANOVA RESULTS
Test of Difference (using One-way ANOVA)
By Age

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	.478	2	.239	.768	.466
	Within Groups	45.715	147	.311		
	Total	46.193	149			
parents	Between Groups	1.110	2	.555	1.808	.168
	Within Groups	45.138	147	.307		
	Total	46.248	149			
peers	Between Groups	.052	2	.026	.063	.939
	Within Groups	60.542	147	.412		
	Total	60.593	149			
media	Between Groups	.057	2	.028	.092	.912
	Within Groups	45.262	147	.308		
	Total	45.319	149			
attitude	Between Groups	2.105	2	1.052	5.536	.005
	Within Groups	27.944	147	.190		
	Total	30.048	149			
subjective	Between Groups	.187	2	.094	.468	.627
	Within Groups	29.450	147	.200		
	Total	29.637	149			
perceived	Between Groups	.501	2	.250	1.024	.362
	Within Groups	35.947	147	.245		
	Total	36.448	149			

By Year Level

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	.877	4	.219	.701	.592
	Within Groups	45.316	145	.313		
	Total	46.193	149			
parents	Between Groups	2.210	4	.553	1.820	.128
	Within Groups	44.038	145	.304		
	Total	46.248	149			
peers	Between Groups	.801	4	.200	.485	.746
	Within Groups	59.793	145	.412		
	Total	60.593	149			
media	Between Groups	.399	4	.100	.322	.863
	Within Groups	44.920	145	.310		
	Total	45.319	149			
attitude	Between Groups	.736	4	.184	.911	.460
	Within Groups	29.312	145	.202		
	Total	30.048	149			
subjective	Between Groups	.365	4	.091	.452	.771
	Within Groups	29.272	145	.202		
	Total	29.637	149			
perceived	Between Groups	.441	4	.110	.444	.776
	Within Groups	36.007	145	.248		
	Total	36.448	149			

By Course

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	1.103	2	.551	1.798	.169
	Within Groups	45.091	147	.307		
	Total	46.193	149			
parents	Between Groups	2.675	2	1.338	4.513	.013
	Within Groups	43.573	147	.296		
	Total	46.248	149			
peers	Between Groups	.162	2	.081	.197	.822
	Within Groups	60.432	147	.411		
	Total	60.593	149			
media	Between Groups	1.471	2	.736	2.466	.088
	Within Groups	43.848	147	.298		
	Total	45.319	149			
attitude	Between Groups	1.562	2	.781	4.032	.020
	Within Groups	28.486	147	.194		
	Total	30.048	149			
subjective	Between Groups	.816	2	.408	2.080	.129
	Within Groups	28.821	147	.196		
	Total	29.637	149			
perceived	Between Groups	2.346	2	1.173	5.055	.008
	Within Groups	34.103	147	.232		
	Total	36.448	149			

By Household Income

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	.255	4	.064	.201	.937
	Within Groups	45.938	145	.317		
	Total	46.193	149			
parents	Between Groups	.486	4	.122	.385	.819
	Within Groups	45.762	145	.316		
	Total	46.248	149			
peers	Between Groups	1.382	4	.346	.846	.498
	Within Groups	59.211	145	.408		
	Total	60.593	149			
media	Between Groups	2.304	4	.576	1.942	.107
	Within Groups	43.015	145	.297		
	Total	45.319	149			
attitude	Between Groups	1.144	4	.286	1.435	.225
	Within Groups	28.904	145	.199		
	Total	30.048	149			
subjective	Between Groups	.566	4	.141	.705	.589
	Within Groups	29.071	145	.200		
	Total	29.637	149			
perceived	Between Groups	.900	4	.225	.917	.456
	Within Groups	35.549	145	.245		
	Total	36.448	149			

Encrypted Profitability! – A Business Plan for Aumne, Inc.

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EXECUTIVE SUMMARY

Aumne, Inc. can become a profitable venture if they take advantage of the existing opportunities to address HIPAA privacy concerns in the healthcare industry through their Indigo

SMSTM product. Aumne can accomplish this by addressing the following:

Rebrand Indigo SMSTM   to reflect a healthcare industry focus and purpose
Aggressively market and advertise the newly branded product
Implement critical product modifications to facilitate an effective and consistent user experience on all major Smartphone and tablet platforms

Since the Health Insurance Portability and Accountability Act (HIPAA) went into law in 1996, stakeholders in the healthcare industry, including medical professionals, hospitals, medical groups, insurance companies, pharmacies, and

countless others, have been required to overhaul their processes and procedures for administering and communicating patients' Protected Health Information (PHI). While HIPAA had a dramatic impact to these processes and procedures related to patient PHI, enforcement of violations of the Act had no teeth.

The game changed with the passage of the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009. Prior to the HITECH Act, HIPAA violation penalties were no more than $100 per violation (with a cap of $25,000 for identical violations) and ignorance of the HIPAA rules was an acceptable excuse. Under the HITECH Act, penalties increased to a maximum of $50,000 per violation with a cap of $1.5 million for identical violations, removing the ignorance as an excuse clause.

Stakeholders involved in the communication of medical records and information now have a substantial risk they must mitigate. As society continues to move towards electronic communication, the healthcare industry must balance the increasing preference of electronic communication methods with the significant costs of non-compliance should those communications inadvertently end up in the wrong hands.

Rebranding the product and investing in sales and marketing is critical to making the product viable in the marketplace. As such, Indigo SMS™ will be rebranded as Dr. Lock, or "Doc Lock," reflecting its focus on healthcare and secure data

transmission. Initial investment in two tenured sales professionals with significant relationships in the healthcare procurement areas will position Doc Lock to aggressively build a customer base. Suggested modifications to the product detailed in this plan will allow for a consistent experience across all Smartphone platforms and introduction of a version for tablets, which are experiencing explosive rates of adoption in the healthcare field. This will position Doc Lock to gain acceptance in the industry.

Implementation of this plan calls for an investment of $650,000 and $250,000 in years one and two respectively to fund the following:

Salaries, commissions, and travel & entertainment expenses for two full time sales professionals
Marketing and rebranding efforts to transform Indigo SMSTM as Doc Lock
Development and implementation of critical modifications necessary to make Doc Lock viable across all major platforms

Positive operational cash flow and EBITDA will be achieved at the end of the second year based upon revenue projections of $222,000 and $1,378,000 in years one and two respectively, with estimated average annual revenue growth of 56% in years three through five. Execution of this strategic plan will provide a sustainable Net Income for Aumne, Inc. moving forward through years three through five, thus

developing a viable exit strategy by positioning itself for a strategic buyout by a larger software development company.

BUSINESS DESCRIPTION

Aumne, Inc. has been attempting to gain a foothold in the Mobile Smartphone Application marketplace since its incorporation in 2008. Led by CEO Surya Kalavagunta, along with four contracted developers located in India, Aumne's primary product offering is Indigo SMSTM, a Smartphone application developed to facilitate encrypted SMS text messages over wireless telecom carriers' SMS networks. Indigo SMSTM is available in the five primary Smartphone operating platforms of Android, iOS (Apple iPhone), Blackberry, Symbian, and Windows Mobile through the application marketplaces applicable to each of the platforms.

The genesis of Aumne's existence was the result of a single idea from a physician in Texas, Board Chairman, Dr. Suresh Neelagaru, who has funded much of the business development to date. In essence, the good doctor simply wanted to be able to hand his phone to someone else without the possibility they may read his private text messages. From there, Aumne and Indigo SMSTM were born.

While the technology behind Aumne's product is advanced, a lack of focus on a specific market or niche with a need for such a product has put Aumne's financial position in dire straits. As presented in the executive summary, we believe Aumne's greatest opportunity lies in the healthcare industry, specifically providing

secure and encrypted electronic communication of patient PHI between medical professionals as well as doctor-to-patient. In order to effectively direct the organization's focus, we recommend Aumne transform its identity by adopting a vision and mission consistent with this opportunity as follows below:

Vision Statement – Work to ensure the secure communication of patient data in the healthcare industry through encrypted messaging services.
Mission Statement – Leverage our encryption capabilities to become a leader in secure doctor-to-doctor and doctor-to-patient electronic messaging
services, exceeding stringent HIPAA security and privacy regulations, protecting patient information, and reducing HIPAA liability risks to medical organizations and professionals.

In alignment with the vision and mission of Aumne as defined, the key objectives to be met based upon the execution of this business plan are to:

Rebrand and market Indigo SMS™ as Dr. Lock (Doc Lock), a secure messaging application which exceeds HIPAA security and privacy standards
Implement minor upgrades to Dr. Lock to be usable on all major Smartphone and tablet platforms
Become operationally profitable and generate positive cash flow within 24 months

INDUSTRY AND MARKET ANALYSIS

Research conducted to date reveals that the data and SMS encryption markets have dozens of offerings from small to medium tech companies without an obvious market leader. However, due to the dynamic nature of the technology available in this market, along with the fact that the players in the market are privately held entities, detailed data is limited. While company specifics are limited, it is evident companies have noticed the opportunities in the marketplace for secure communications and are marketing products to fill the business needs in the financial services and healthcare industries.

As electronic and wireless communications continue to evolve and permeate the lives of doctors and patients alike, the increased use of SMS, MMS, and email in the healthcare industry should come as no surprise. These technologies allow medical professionals to quickly communicate patient data, reducing the administrative workloads of doctors and nurses while improving the speed and effectiveness of patient care. Unfortunately, this type of communication often contains patient PHI that needs to be communicated in a method by which intruders could not obtain the data.   During the early years of HIPAA, security and privacy violations were commonplace as enforcement was limited and infrequent. It is for this reason government regulators increased enforcement and penalties through HITECH.

When HITECH was enacted in 2009, the health information firm Manhattan Research reported 42% of physicians having had online communication with patients. Two years later, a separate study conducted by InformationWeek Analytics (Figure 1) saw that number rise to 67%, though only 24% reported to have email and secure messaging widely used in the organization. This comes at a time when patients are demanding fast, direct communication from their healthcare providers. This reluctance has been attributed to concerns about privacy, security, and legal liability. Nearly 75% of Americans polled would use a secure online tool to get lab results, request appointments, pay bills, and communicate with their doctor's office, according to a survey of 1,000 adults conducted by Intuit Health. Even more significant is almost half of the respondents say they would consider switching doctors to obtain such e-services.
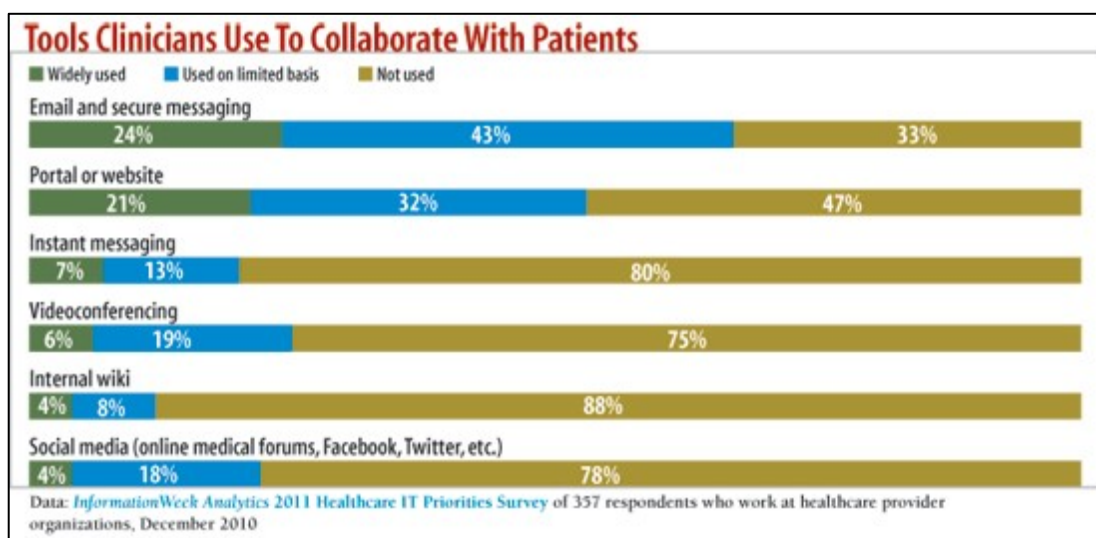
Figure 1

Target Market

While the encrypted communication technology industry is still in development,
the healthcare industry in the United States is rather mature. In 2009, hospitals
employed over 5.4 million people (including 954,000 doctors), all of which fall
under HIPAA regulations and would be potential users of an encrypted messaging
solution
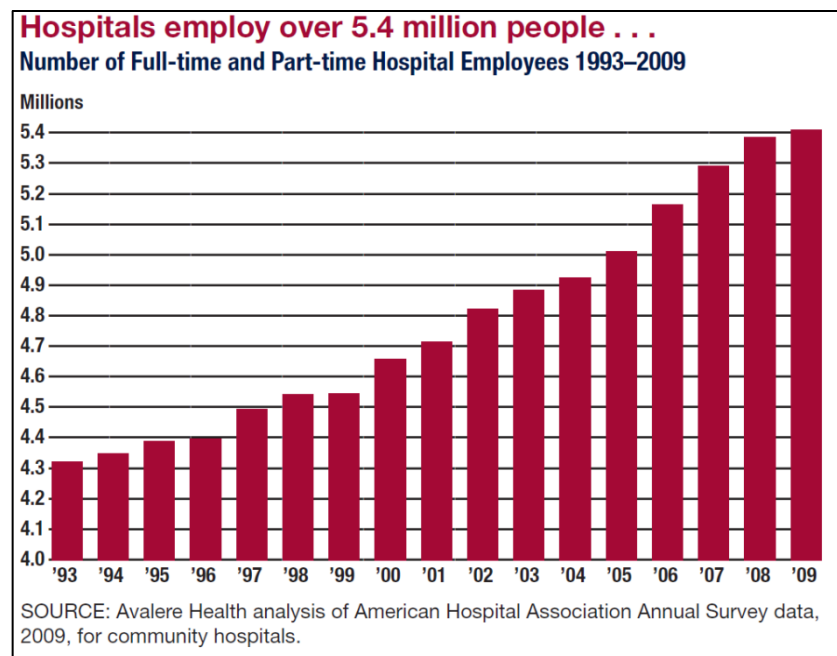
Figure 2

For Aumne to penetrate this immense marketplace, they will need to focus its sales
and marketing efforts towards penetrating midsize hospital networks. The average

hospital in the United States has approximately 185 beds (the most common unit to measure hospital size). Small community hospitals with less than 50 beds will not provide the revenue opportunities to focus Aumne's limited sales staff with the initial launch of Doc Lock. On the other end of the spectrum, large hospitals with more than 400 beds will most likely not invest in unproven technology until it has been vetted in the marketplace.

In order for Aumne to gather the number of early adopters needed to "cross the chasm" in the Technology Adoption Life Cycle, they will target midsize hospitals (and their networks) ranging in size from 100 to 200 beds, which comprise approximately 39 percent of the 4,043 hospitals in the United States. A hospital of this size generates average annual gross patient revenue of over $600 million and employs approximately 235 physicians.

With a limited sales staff, it will be important for Aumne to begin its sales efforts in the states surrounding the corporate office in Lisle, IL and expand from there. This will limit the cost of sales while still giving the sales team access to 672 hospitals in Illinois, Indiana, Michigan, Missouri, Ohio, and Wisconsin. The hospitals in these states alone have a combined operating budget of over $340 billion and provide a large resource base from which Aumne can draw.

Attempting to make inroads one region at a time will be beneficial to Aumne because of the close relationships many regional hospitals and doctors have with

one another. If a doctor works at several hospitals or offices in one area, they will want one encrypted messaging solution. If that solution is well received, the doctor is likely to spread the news through word of mouth amongst the other area hospitals and doctors. Once Aumne has established a customer base in the Midwest, expansion to the east and west coasts would be the logical next step.

Competitive analysis

As with any technology company, Aumne faces a myriad of competitors from companies large and small, yet no two are the same. Encrypted messaging technologies are as diverse and complicated as the number of ways in which the world is able to communicate. What sets Aumne and Doc Lock apart from their competition and what makes it a suitable technology for the healthcare industry, is the ability for the application to be used on all the major Smartphone and tablet platforms. By developing a product that can be used on the major mobile device operating systems, Aumne has separated itself from the pack of would be suitors looking to capture the marketplace.

Aumne has additional advantage over its competitors by offering a combination of encrypted SMS, MMS, and push technology in the near future. Much like the flexibility Aumne has shown in creating encryption services that are device agnostic, the company has gone to great lengths to be able to provide customers with options in which to communicate. There are currently applications for encrypted SMS and others for encrypted MMS, but rarely both. By adding push

technology to the application, Aumne will be adding further value to its customers that will have its competitors scrambling to catch up.

Willingness to Pay

When speaking with local medical offices, the interest level in the technology was encouraging, yet many remained skeptical of whether they needed to invest in the upgrade. They were able to see the value of secure communication but admitted to only having serious interest when the issue of HIPAA compliance came up. With HIPAA and the HITECH Act increasing penalties and enforcement at an all-time high, more and more physicians and hospital personnel are realizing the need for critical protection of PHI data for inter-hospital and hospital-to-patient communications.

HIPAA regulations are often nebulous and confusing, which has led to reluctance in adopting electronic communications, even if cost savings prove the technologies worthwhile. When meeting with decision makers in the healthcare industry, Aumne needs to emphasize the fact that Doc Lock can and will protect the organizations from possible legal ramifications stemming from unprotected communications. With fines for HIPAA violations ranging up to $1.5 million, the financial risks associated with non-compliance are present and very real, but Aumne needs to make the clients feel comfortable Doc Lock can protect them.

MARKETING PLAN

Objective

Aumne will create a go-to-market strategy driven by impactful advertising focusing on creating brand recognition and customer awareness of the benefits and value of the product. To broadcast the re-launch of our product, Aumne should employ the use of multiple media outlets which provide vital opportunities to connect with target markets.

First and foremost, Aumne will change the name of its Indigo SMSTM application to Dr. Lock (Doc Lock) and will use this brand name to market the product in future advertising campaigns to effectively connect with the markets Aumne will pursue.

To raise product awareness, Doc Lock will be advertised in journals, periodicals, and through direct mail campaigns to healthcare providers in regional markets across the U.S. In addition, Aumne's sales representatives must participate in and establish a presence as a business services provider to the healthcare industry at various medical trade shows and conferences throughout the U.S. over the next 12 to 18 months.

Positioning

Doc Lock will be positioned as the HIPAA compliant software leader in privacy protection for secure wireless transfer of patient-related medical data from healthcare provider to patients, as well as medical record transfers among a network of healthcare professionals.

Doc Lock encrypted messaging software is a secure, easy to use, communications application that can be customized and utilized to send appointment reminders to patients, communicate private medical test results, and transfer medical information safely and securely among healthcare professionals.

Product/Service Distribution

Doc Lock is a downloadable, application-based, encrypted messaging application and will be distributed by our clients to their employees and patients via a link sent by email or SMS text. The distribution process is efficient, non-intrusive, and a quick install for all users. Doc Lock is compatible with all major Smartphones and tablet platforms, including Android, Apple's iOS, Blackberry, and Windows Mobile. With broad compatibility and utilization with various devices, Doc Lock is poised and positioned to integrate seamlessly with most healthcare provider's existing business operating systems and processes.

Pricing

Doc Lock's suggested market pricing grid has six (6) levels and is largely related to the number of full time equivalent (FTE) employees the health care provider organization employs.

The initial go-to- market pricing is structured as follows:

Aumne Pricing Structure

Employees (FTE's)	Annual Fee
1 - 50	$2,500
50 - 100	$5,000
100 - 500	$12,500
500 - 1500	$25,000
1500 - 5000	$50,000
5000 +	$75,000

* All fees paid by healthcare provider. There is no cost to patients.
* Normal text/messaging rates charged by wireless carriers will apply.
* No per use rate. Unlimited usage covered by annual fee.

Figure 3

Promotion

To promote Doc Lock, multiple advertising and marketing campaigns will be launched to create brand awareness and product interest, while spreading the word to prospective clients about the advantages and benefits of integrating our product

into their workflow. Doc Lock will be promoted by Aumne's sales representatives at healthcare provider trade shows and conferences throughout the U.S. To further promote branding and name recognition, Aumne sales and marketing will give away promotional items (tchotchke's such as pens, mouse pads, coffee mugs, Smartphone protective cases, tablet styluses, stress balls, etc.) to coincide with brand re-launch and product name change from Indigo SMS™ to Doc Lock.

To create sales and marketing momentum, Aumne will offer a free one year subscription for the first two clients who sign-up for a minimum term of three years. Clients receiving a free one year subscription will be asked to provide audio/video testimonials, which will be used by Aumne to promote their brand and build confidence in their product and services as they grow revenues and attract new clients. Client testimonials will be used in advertising clips on Aumne's company website, and other internet sites, such as YouTube, allowing for viral brand exposure in multiple markets.

Sales Strategies

Aumne's sales team will initially focus on prospective clients in regional markets within the U.S. The initial target will be the Great Lakes region consisting of mid-sized hospital networks in Illinois, Indiana, Michigan, Missouri, Ohio and Wisconsin. To build momentum and confidence in Doc Lock, Aumne will focus heavily on customers with employee FTE counts ranging from 500–2000 (assumption of five FTE's per hospital bed). Prior to launch of the sales and

marketing blitz, an in-depth analysis of Aumne's potential client lists will be completed to assess each regional market opportunity.

Aumne's go-to-market sales strategy will focus on the advantages Doc Lock provides to clients in achieving HIPAA compliance. Given the stiff penalties imposed on healthcare providers who fail to comply with HIPAA laws, the risk mitigation achieved by using Doc Lock will be a compelling selling point. In addition, using product functionality to aggregate and send variable communications to patients and/or healthcare professionals simultaneously, Doc Lock improves efficiencies and reduces administrative costs for Doc Lock users.

Performance Metrics

Aumne's key performance metrics will focus on sales activities and number of accounts closed. With this in mind, Aumne will structure the sales team's compensation in a manner which will drive aggressive sales efforts which will result in scheduled meetings with prospective clients and closure of multi-year client agreements.

As closure of deals and receipt of fees is integral to business performance and longevity, Aumne has set the following sales-related targets and milestones, to be reported and reviewed weekly by Aumne management:

 28 accounts closed in 2012 (11 in Q3, 17 in Q4)

 72 accounts closed in 2013 (12 in Q1, 20 in Q2, 19 in Q3, 21 in Q4)   Four direct advertising campaigns with a 2% response rate

   Five meaningful client contacts per day

   Representation at six medical/healthcare provider conventions annually

MANAGEMENT PLAN

With Aumne's future business plan and recent cost cutting measures taken into consideration, positions added will be strictly market facing and focus on revenue generation in the next 24 months. As Aumne's current cash flow does not allow the luxury to add layers of management, the near term on-going management and company functional structure will be extremely flat in nature. An immediate stream of revenue is necessary to establish growth, and for the further development and refinement of their products. Therefore the CEO will also have the near-term responsibility as the ad-hoc director of sales and marketing.

Two immediate positions to be created and filled at Aumne are the roles of dedicated sales representatives reporting directly to the CEO. The ideal candidates will be familiar with the healthcare industry and have a deep knowledge regarding who makes procurement decisions and how those decisions are made. The

individuals will come to Aumne with prior industry sales experience, a substantial client list, and relationship capital built in the industry to draw from for sales leads and contacts. A working knowledge of the utilization of IT in the healthcare industry would be a benefit, but likely not a mandate at this juncture.

Product development and enhancements will continue to be conducted by the outsourced team in India.   Outside of the push technology and rebranding efforts, other initiatives will be kept to a minimum until such time that Doc Lock generates positive operational cash flows.   Therefore, the requirements of a full-time operations manager will be differed, but decision to fill the position may be revisited as sales demands grow from the expanding customer network.

As minimal revenues have been generated, the requirement of an accountant will be omitted at this time and such responsibilities will be managed by the CEO, until revenues become significant enough to support the addition of another key executive to the firm. The financial plan calls for a full time accountant in 2014 as revenues will be robust enough at that time. Refer to Appendix A for a view of the proposed Organizational Chart of Aumne, Inc.

OPERATIONS PLAN

Key Operational Highlights:

All technical software development to remain in India as an outsourced function. Sales team is expected to be mobile, working from the road/home office. No capital is required for further office expansion at this time. The focus of future capital spending is solely to establish marketing and revenues. As sales grow dedicated resource(s) will likely need to be added for customer management and support.

Aumne has focused extensive resources at development of their existing SMS based encryption text messaging solution. Current program development and enhancement work is completed by the outsourced staff in India.   The programmers update the software as needed in support of encrypted messaging solutions on the four Smartphone platforms Aumne offers, including Android, Apple's iOS, Blackberry, and Windows Mobile, which represents a substantial majority of Smartphones in today's market space. Future updates will be required to include the expansion of Doc Lock on tablet devices. Tablets are gaining in popularity as a bridge between Smartphones and PCs in the healthcare industry. The popularity of iPhones and iPads running Apple's iOS, and Windows Mobile devices will also require the adoption of new programming for Push Technology messaging on each platform, which will replace the standard SMS text protocols currently in place today. This is necessary to provide a consistent and enjoyable

user experience across all platforms. The product as it stands today would not be adopted by users of Apple products and would be largely dismissed by potential buyers as a result.

The staff for maintaining and developing the software will remain in India. This option offers the least disruption for continued software coding support. Programming time and effort will likely have to be deployed immediately for the Push Technology option mentioned previously.

Cost estimates for the required platform development for support and implementation of Push Technology are shown in the financial projections.

It is also expected with current programming resources remaining offshore, no new spending for office space will be required beyond the current offices in Lisle, IL. The addition of sales representatives is not likely to require added office space as the expectation is that they will be traveling or working from the road or their home offices. The sales force will be expected to exploit their existing client contacts as well as develop new ones in order for Aumne and Doc Lock to gain a presence in the market place. The sales force, with as needed support from the CEO, will be the driving factor behind growing exposure and sales in the Great Lakes region, and eventually nationwide.

With expected revenues and client growth in the coming 12-24 months, Aumne may need to hire a customer service representative (CSR) to manage client requests and inquiries on a going forward basis. However, until such time as a critical mass of clients is established, these responsibilities can be differed until revenues can support the additional staffing. Such support services may be fulfilled internally or from an outsourced vendor.

As a small firm with explosive sales in the marketplace, customer service will be a key factor in determining client satisfaction with Doc Lock. Once a client agrees to purchase and use Doc Lock, they will likely have questions regarding installation, training, and routine FAQ's with regard to the functionality and maintenance of the service on their Smartphone and tablet devices. Such daily questions and service can likely be handled by the CEO and sales force initially. As the client list grows, a dedicated resource or team will likely have to be implemented to assure someone is always ready and able to address customer needs of the growing user base.

FINANCIAL PLAN
Financial considerations are critical to the execution of the business plan in order for Aumne to successfully launch their Doc Lock product and realize the financial gains of their substantial investment in ecrypted messaging services. Through implementation of the business plan, Aumne can quickly capture sales revenues

and turn an operating profit within 14 months on a first year investment of $650,000, and turn a net profit within 18 months with an additional $250,000 investment in 2013. Detailed pro forma statements are available in Appendices B - F.

Financing / Investment

With negative shareholder equity, no substantial capital, and a lack of revenues, financing sources outside of the initial investment group are not viable options for the capital necessary to transform Aumne into a profitable enterprise. Aumne's current cash burn rate of approximately $30,000 monthly will increase to a maximum of $80,000 at the onset of the business plan and will decrease monthly as revenue is generated. As such, an additional investment from the original shareholders in the form of a long term loan in the sum of $900,000 over the course of the next 18 months is necessary. The loan will be paid into the company on either a monthly or quarterly basis in order to fund operations and the expansion of sales, marketing, and focused product development activities. The loan will be made at an interest rate of 9% annually, compounded monthly, similar to the terms of the existing long term debt currently accruing interest expenses.

Cost Drivers

In order to facilitate the transformation of Indigo SMSTM to Doc Lock and implement effective sales and marketing activities, it will be necessary to increase the monthly costs of business activities. Five outsourced software developers will

be contracted to complete the data transfer encryption technology and Push Technology necessary for Doc Lock to go-to-market. The monthly developer cost of $12,500 will serve to provide the capabilities of customizing the product to fit the needs of large clients. Sales and marketing efforts will focus on the hiring of two experienced sales representatives. Annual base salaries per sales representative will average $140,000 annually along with a commission component of 15% sales commission on new sales and 5% commission on subscription renewals. Additional Sales expenses resulting from direct advertising, travel, and entertainment is included in the financial plan totaling approximately $380,000 annually. Existing General & Administrative expenses will be held static as the plan is implemented until enough sales and revenue generation takes place to justify additional administrative and support staff.

Sales & Revenue Generation

The target market for Doc Lock will be mid-sized hospital networks with between 500 to 2,000 FTE's. Based on the sales and marketing plan, it is expected for the full time sales staff to close on three to six clients within the target range each month (Figure 4). As such, sales are projected as $207,500 in 2012, growing to $1,378,000 in 2013, $2,835,000 in 2014, and $4,157,000 in 2015 (Figure 5). Revenues will be generated from sales to new customers as well as renewal of annual contracts for Doc Lock. A targeted renewal rate of 80% will result in significant and sustainable revenues moving forward.

Sales By Client Size (FTE Employees)

Figure 4

Revenue Breakdown
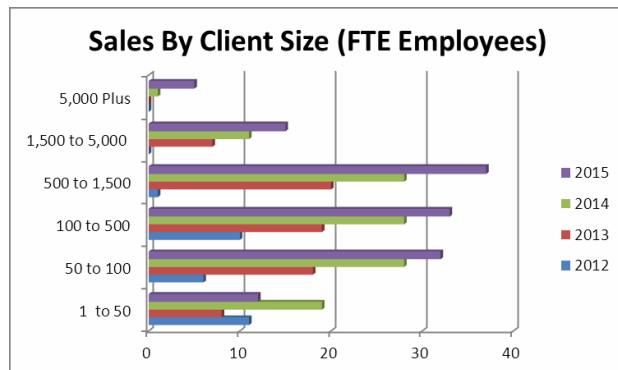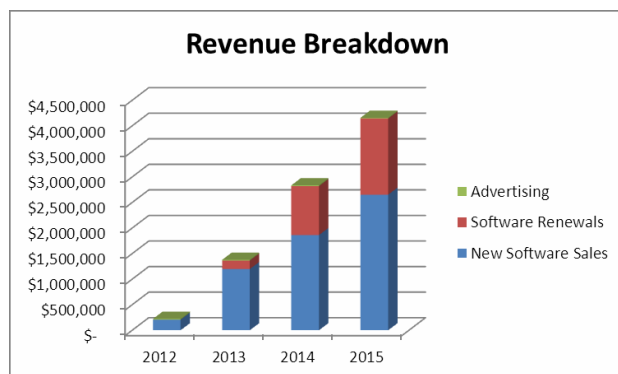
Figure 5

Profitability & Breakeven Point

Based on the additional selling and development costs, the breakeven point for operational profitability is monthly revenues of approximately $119,000. While this revenue generation will make Aumne operationally profitable and cash flow positive, due to interest payments on long term debt obligations, net income will remain negative until sales exceed $184,000 monthly (Figure 6). Once Aumne does reach consistent operational profitability, it will be able to begin utilizing its

positive cash flow to return regular interest payments to its long term debtors rather than simply accruing these interest expenses as current liabilities on its balance sheet.   It is projected that operational profitability will be realized within 14 months of plan execution and will provide a net profit by the 18 month mark.
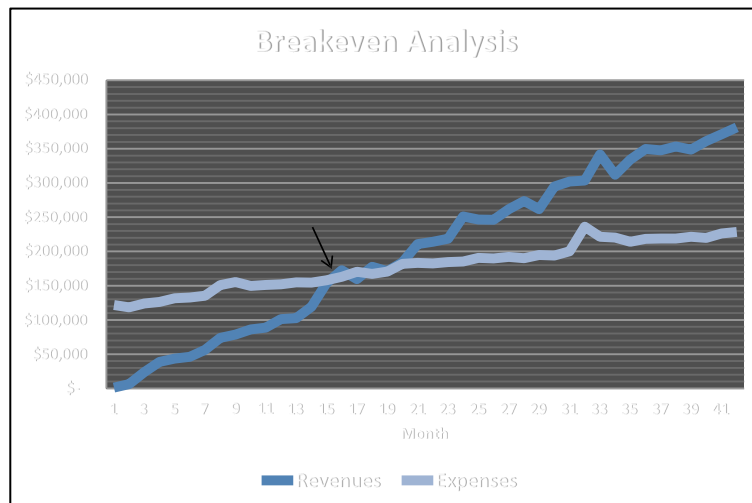
Figure 6

Exit Strategy

Once Doc Lock gains traction in the marketplace and Aumne reaches operational profitability while meeting its current interest payments, the company will become a much more valuable entity. The value of its market positioning, profitability, and technical capabilities is anticipated to make Aumne a desirable acquisition for a larger software or technology corporation. Specifically, software companies specializing in Electronic Medical Records (EMR) or one providing ERP suites

targeted at the healthcare industry will be prime suitors for Aumne. A conservative business valuation based on a multiplier of EBITDA is provided in Figure 7.

AUMNE, INC. ANALYSES OF PROJECTED BUSINESS VALUATION	2012	2013	2014	2015
INCOME (LOSS) FROM OPERATIONS	$ (548,840)	$ 15,684	$ 1,112,906	$ 1,995,493
DEPRECIATION	-	-	-	-
EBITDA	$ (548,840)	$ 15,684	$ 1,112,906	$ 1,995,493
VALUATION AT 3x EBITDA	$ (1,646,521)	$ 47,053	$ 3,338,718	$ 5,986,478

Figure 7

RISK ASSESSMENT AND CONTINGENCY PLAN

Five items must be addressed immediately to assure a profitable ongoing operation of Aumne Inc., including:

Product Focus on a specific niche market sector

Speed to Market

Sales and Marketing staff

Platform development and technical support

Additional funding

Sales of Indigo SMSTM as positioned in the marketplace today have been insufficient to finance business operations and place Aumne in jeopardy of continuing as an ongoing concern. The business plan as presented for Doc Lock is in perfect alignment with the capabilities of Aumne's technology and the government's HIPAA regulatory requirements, providing an opportunity to develop a profitable niche for Aumne's technology. To take advantage of this synergy, speed to market will be critical. The industry is in the early growth stage and competition is intense. To obtain a competitive advantage, Doc Lock must launch immediately to capture market share. Time is of the essence and the risk of being second will result in the loss of potential financial gain.

Doc Lock will require an aggressive sales and marketing strategy. As mentioned earlier, two experienced sales representatives with extensive industry contacts and relationship capital in the healthcare industry must be quickly identified and hired. Additional responsibilities of these sales representatives will include the development of short term and long term sales and marketing strategies. The success of Doc Lock will be greatly dependent upon the abilities of the sales team to develop and execute upon a successful sales and marketing strategy.

Additional technical support will be needed to modify the current Smartphone platforms to a Push Technology platform. This is required to prevent obsolescence of the current system, allow for a consistent experience across all Smartphone and

tablet platforms, and perform at a level of service expected by customers. According to Surya Kalavagunta, CEO of Aumne, the current development staff located in India has the ability to perform the required modifications and can easily implement the new platform in a timely fashion. The business plan's financial model includes consideration for five full time development contractors, in order to accomplish the required upgrades and modifications. If additional technical support is required on a short term basis for a specific task, Aumne management is confident it could be secured on an as needed basis in India. Upgrade to Push Technology is paramount to the launch of the Doc Lock brand.

Private investor funds have been used as the primary financial support mechanism since the inception of the company. The continuation of this funding source is currently limited and at present, funding has been reduced to cover existing operational expenses only. To become a profitable operation as presented in the business plan, additional financial support will be necessary. Bank financing is not possible and additional venture capital from other sources is unlikely until a revenue stream is developed. The most realistic funding play is for the current shareholders to raise their stake and provide the additional funds to finance the launch of Doc Lock. The total additional investment is projected to result in positive cash flows and profitable operations within two years.

Lastly, there is the potential, albeit minimal, the regulatory environment in the United States relative to security and privacy of patient data will trend towards one

that is less punitive and regulated.   In this scenario, the value proposition of an encrypted messaging solution for medical professionals to mitigate risks related to HIPAA violations and fines is significantly inhibited.   This scenario is unlikely given the trend over the last several decades to provide greater protections for the privacy of patient data.   If it does play out, modifications to the value propositions of Doc Lock or opportunities in other market niches will need to be identified and executed.

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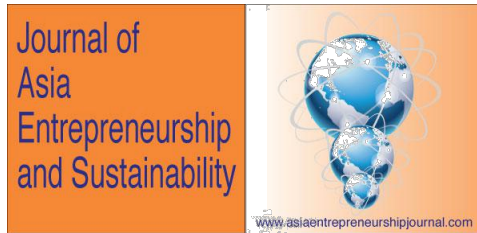
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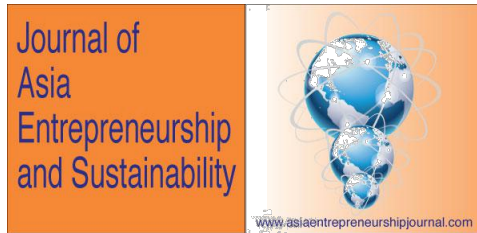
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Intentions and Behaviors of Adolescents in Purchasing Green Products

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ABSTRACT: The research study is focused on the contextual factors affecting young consumer's intentions and behaviors towards purchasing green products. It aims to understand deeply the adolescent's green purchase intentions through the Theory of Planned Behavior. In this study 150 young people from Pasig City were surveyed. Results show that parental influence and media exposure are the top predictor among the contextual factors. As for the Planned Behavior Factors, it was seen that all three has a perfect relationship with Green Purchase Intention. From this study it can be said that parents, peer, media exposure, education and knowledge have a critical role in influencing young consumer's purchase intentions of buying green products.

INTRODUCTION

Green Marketing is becoming the latest and most popular trend in the world. However in Asian countries, it is seen to have been growing just recently. With

the ASEAN Integration unfolding, businesses are now becoming competitive as they strategize and practice ''green''. They have also modified their marketing strategy and included environment friendly steps in their marketing channel. Companies have started to choose different media (paper, electronics) to send the information about their product or service to consumers who are interested to use environment friendly products. (Rhaman, 2013) Advertisements' message encourages and explains how the green or environment friendly product can be beneficial for the consumer as well as for the environment. Those messages are expected to motivate consumers to buy more green products (Wahid, Rahbar & Tan, 2011). Hence, companies are now clearly more concerned about the consumers' green product perception and want to take advantage of consumers' green loyalty for their products or services. (Rahman, 2013) The businesses and consumers have started to challenge eco-friendly products as they become more concerned on the environment, health and wealth in order to protect the earth's resources and the environment. In addition, the firms have slowly applied green marketing practices in their projects as a part of social conscience and they are demanding to reach the consumers with their green messages (Nagaraju & Thejaswini, 2014). Nowadays, Asian countries become the primary target market by international marketers due to the increase of environmental awareness and the purchasing power of Asian consumers (Lasuin & Ching, 2014; Noor & Muhammad, 2012;). However, the local and international marketers are facing difficulties in developing adequate and effective marketing strategies caused by lacking of information related to the green purchase intention of the consumers in

that particular country (Lasuin & Ching, 2014; Aman et al., 2012).

In the Philippines, marketers are gradually shifting to green marketing as consumers are now being aware of the benefits of green products as a result to their exposure to these practices in other countries. There are several non-profit organizations and industry associations who are doing projects that support this initiative. There is one called "Go Green Philippines", which is a sustainable environmental program to revitalize the Philippine ecosystem and sustain the Philippine fashion accessories industry. It is an initiative of the Fashion Accessories Manufacturers And Exporters Foundation Philippines, Inc. (FAME Foundation) in partnership with the Department Of Environment And Natural Resources Region VII (DENR-VII).

Due to fast-growing economy in Asia, the purchasing power of Asians is increasing compared to the previous generations. A study by Li and Su, (2007) shows many countries have raised the environment awareness and they are willing to purchase the green product which has less harmful effect product against environment. Since this is becoming an important trend in society, there were a handful of researchers who focused more on profiling the green consumers by different demographic factors such as age, gender and income. In a study by Lee (2011), on the green purchase intention of the consumers of Hong Kong, it was seen that they are motivated by two different factors. These are (1) Individual factors which is the composition of awareness for environment, environmental involvement and knowledge on environmental issue and (2) Contextual factors

which consist of media exposure, influence of parents in home and influence of peer outside of home regarding environment issue. Among these two factors, there were already a handful of researches made that study the demographic and individual factors. Majority of the literature available do not provide enough contextual environments. The main limitation of the other literature and studies failed to address how these contextual factors are significant for understanding the behavior of young Filipino consumers. These contextual factors, then, are tested using the Theory of Planned Behavior.

In this study, the researcher focused on the Adolescents or the young consumers and the Contextual factors affecting their intentions and behaviors of purchasing green products. Aside from the Contextual Factors, the Theory of Planned Behavior will also be used to understand more the intentions of the youth. Youth is best understood as a period of transition from dependence of childhood to adulthood's independence. As a category, youth is more fluid than other fixed age-groups. For statistical purposes, the United Nations, defined "youth", as those persons between the ages of 15-24 years, without prejudice to other definitions by Member States. The Secretary General first referred to the current definition of youth in 1981 in his report to the General Assembly on International Youth Year and endorsed it in ensuing reports.

Literature Review

Green Marketing. The American Marketing Association (AMA) defines green marketing as marketing of products that are believed to be environment-friendly, which organizes into various activities such as product adjustment, modification of production processes, packaging, labeling, advertising strategies as well as increases awareness on compliance marketing amongst industries (Yazdanifard, 2011) Green marketing is the marketing strategies where marketers aim to discover environmental responsive consumers. Displaying and positioning eco-friendly products in front of the consumers, is consider as consumer products marketing (Rahman, 2013)

Green Product. "Green products" and "environmental products" describe products which protect or enhance the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, pollution, and waste. The characteristics of green products which consist of original grown, recyclable and reusable, contain natural ingredients, contain recycled content, do not pollute environment, contain approved chemical and not test on animals. Thus, Green product is interchangeable with the term "eco-friendly product", "environmental-friendly product" and "ecological product" (Chen & Chai, 2010). It is the product which has minimum impact on environment and it incorporates the strategies with recycled materials, reduced packaging and using less harmful substances (Chen and Chai ,2010).

Green Consumers. The present researches focus on the generational cohort of the young consumers. This segment is chosen due to the fact that young consumers are the consumers of the future (Vermeir & Verbeke, 2006). They are the ones who could and should be capable of making the difference in green purchases in the future. Furthermore, the young consumers are considered to be 'the driving power' behind the increased attention to green products (Heaney, 2007). Also, they are known for contradicting themselves when it comes to their behavior and their thoughts about certain topics, which makes this cohort especially interesting to research. However, the young consumers' green buying behavior is never researched extensively (Kolkailah et al., 2012). In size, Generation Y outnumbers all previous generations (Rainer & Rainer, 2011). Generation Y is known to work together very well, not to break the rules and to accept authority. At this moment Generation Y is in higher education or in their first jobs. The generation is known for being more narcissistic and sceptical than previous generations and has the tendency to look after its own needs before thinking about the needs of others (Schmeltz, 2012). While the approach to life of this group may be very narcissistic, Generation Y has a well-developed social awareness being concerned with topics like ethical activities and environment protection (Ellis, 2010). The generation thinks it is a company's obligation to invest in a better environment and society and produce products in a sustainable way (Schweitzer & Lyons, 2010). In the US 85% of young adults (18-30 year old) even identify themselves as an environmentalist (Grimmer & Woolley, 2012). Next to that, Schmeltz (2012) shows Generation Y holds a very positive attitude towards green products.

Green Purchase Intention. Green purchasing is defined as buying the environmental-friendly products or so-called green products. It is the purchase or buying of products that can reduce the environmental impact. (Lasuin & Ching, 2014) However for other researchers, green purchase intention can be defined as the willingness of an individual to consider and prefer the green product rather than conventional or traditional product in the decision making process (Aman et al.*,* 2012; Rashid, 2009; Ali & Ahmad, 2012). Green purchasing intention is also examined as an indicator of a subsequent behavior in response to the purchase of green products (Park & Ha, 2012). In general, when people have the stronger intention to engage in a behavior, the more likely should be its performance. Thus, when customer has show the strong intention toward the green product, they more likely transcend to performance which perform the actual purchase.

CONCEPTUAL FRAMEWORK

CONTEXTUAL FACTORS
1. Media Exposure
2. Parental Influence
3. Peer Influence

THEORY OF PLANNED BEHAVIOR
1. Attitudes Towards Behavior
2. Subjective Norms
3. Perceived Behavioral Control

GREEN PURCHASE INTENTION

DEMOGRAPHIC FACTORS
Age
Gender
Year Level
Household Income

In the above conceptual framework, it can be seen that the Contextual Factors such as media exposure, parental influence and peer influence together with the use of the Theory of Planned Behavior which includes attitude, subjective norms and perceived behavioral control will affect the green purchase intention and behaviors of young consumers. Both are considered to be the independent variables while the green purchase intention and behavior are the dependent variables. These variables put together, will determine the extent and the level of agreement whether these factors has a great effect on the green purchase intention. The Demographic Factors on the other hand are moderating variables that could also affect the purchase of green products.

Contextual Factors that affect Purchase Intention

Media Exposure. A number of studies have found that young peoples' purchase decisions are also influenced by mass media. Young adolescents possess positive attitudes than older adolescents, and they are normally become more interested to gather information from a variety of communication sources (Promotosh & Sajedul, 2011)

Parent Influence. Family members specifically, the parents play an important role in shaping and molding consumer's learning. Communication has a huge effect on influencing choices made by consumers. This communication effect can either be direct or indirect. Direct influences of family can stem from an individual's consumer behavior, beliefs and practices seen in other members of the family.

Indirect influences on the other hand, can also come from other information sources such as mass media and peers. (Promotosh & Sejedul, 2011) The influence of parents is seen as a socialization factor that can affect adolescence. Parents' consumption habits, attitudes and their intentions to buy products can strongly affect and influence the consumption and purchase intention patterns of young consumers. The parents also hold strong desire to consume material goods, their children also value material goods in a similar way like their parents do. (Chaplin & Josh, 2010) Parental supports affect the children's behavior and their voluntary activities in a society. (Promotosh and Sajedul, 2011)

Peer Influence. Peer relationship is a dominant factor for adolescents' decision making. Relationship among adolescents that formed in early childhood considered as weak. The relationships in adolescent stage become more influential, intimate, and strong. An individual's environmental friendly behavior also depends on his or her social context. A study made by Tikka et al., (2000) pointed out that the social context as well as social groups influence our thoughts and acts. As we belong to different social groups and our social context is also different from one another, so our attitude toward the ecological behavior will be significantly different from one another. In one study it was also pointed out that social influence plays an important role in consumers' purchase decision on buying green product (Ohman, 2011). Ohman (2011) supported that social pressure has an influence toward the consumers with green purchase intention in performing the actual buying behavior. Ooi et al (2012) also figured out that peer pressure as a part of social influence will

influence the consumers on green purchasing among Malaysian consumers. Informal sources, such as friends, neighbors, relatives and others that consumers meet on social network sites can have a strong influence on a person's behavior. Soonthonsmai (2001) in a study on Thai consumers' purchase intention for green products found that the subjective norm (family, friends, peers and relevant others) plays a major role in the intention to purchase green products.

Below is the basis for the conceptual framework. This research study only focused on the contextual factors and how it influences adolescent's Green Purchase Behavior.

Figure 1: Adapted from "Young Consumer's Purchase Intentions of Buying Green Products", (Promotosh & Sajedul, 2011 as cited by Lee, 2011

Figure 2: Adapted from "The Theory of Planned Behavior", Ajzen & Fishbein, 1980

While the Contextual Factors may lead to the green purchase behavior, the theory of planned behavior which is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) is necessary in dealing with intentions which will lead to behaviors over which people have incomplete volitional control based on the original model's limitations. Based on Azjen research studies of TPB back in 1991 explained that high accuracy from attitudes toward the behavior, subjective norms, and perceived behavioral control able to predict the intentions to perform behaviors of different kinds; and these intentions, together with perceptions of behavioral control, account for considerable variance in actual behavior. In some cases, these three are sufficient to understand people's attitudes on an action. However, complete understanding of one's action is possible when these three factors are broken into their foundations (Azjen, 2005 as cited by Rahman, 2013)

Attitudes Towards Behavior (Behavioral Beliefs). Behavioral beliefs are the immediate determinants of a person's attitude. An individual may hold a large number of beliefs about a given object, but he or she can only attend a relatively small number of beliefs. These small numbers of beliefs he or she can attend are called *behavioral beliefs.* Indeed, these Behavioral beliefs are used to understand why a person holds a certain attitude toward an object (Ajzen & Fishbein, 1980 as cited by Rahman, 2013)

Subjective Norms. A subjective norm is an individual's belief about others, if an individual should (or should not) perform the behavior in question. When an individual's attitude toward a behavior is driven by his or her own beliefs about performing the behavior, these beliefs are behavioral beliefs. By comparison, an individual's subjective norm is a function of normative beliefs. They are not behavioral beliefs. In this case, individuals want to get feedback from specific individuals and groups to perform (or not perform) a behavior. (Ajzen & Fishbein, 1980 as cited by Rahman, 2013) Wahid et al. (2012) also stated that "social influence is a proxy of subjective norm". In other words, social influence has the same meaning with subjective norm. In addition, DeLamater and Myers (2010) stated that social influence is the changes of a person's attitude and behavior which influenced by another person's action such as persuading and threatening.

Perceived Behavioral Control. Perceived behavioral control refers to people's perception of the ease or difficulty of performing the behavior of interest.

Perceived behavioral control can vary depending on situations and actions. For instance, a person may believe that he can achieve this task easily, so his perceived behavioral control will be determined by his set of control beliefs. Several studies reported that "people's behavior is strongly influenced by their confidence in their ability to perform it (i.e., by perceived behavioral control)" perceived behavioral control may be unrealistic when people have little information about their behavior. (Ajzen & Fishbein, 1980 as cited by Rahman, 2013)

Scope and Delimitation

In this study, the researcher considers the following limitations: This study covers literatures, research questions and structure, a designed research method, and a questionnaire created and distributed to young consumers in Pasig City. After which, answers for the research question were tallied through which conclusions were formulated and implications will be drawn.

The study only focused on contextual factors and not the individual factors that affect young consumer's green purchase intention. The factors under the Theory of Planned Behavior were also used to determine green purchase intention. The study also intends to explore young consumers' purchase intention of buying green products in general. This study is not based on young consumers' intention of buying a particular green product. Thirdly, the student sample is taken from a particular location. Lastly, scale items used to measure contextual factors are limited in this study.

RESEARCH PROBLEM/OBJECTIVES/HYPOTHESIS

Given that there is an increasing need and concern to take care of the environment, local companies are slowly practicing green marketing and converting their processes and products to be eco-friendly. But that is only one side of the coin, there is also a strong need to educate the young consumers about green marketing and study on how specifically these young Filipino consumers would accept this new trend. What would be the factors that could highly influence them on purchasing green products. The key to the success of Green Marketing would really be dependent on the hands of these young consumers.

Research Question: How can the contextual factors and the factors of theory of planned behavior affect the green purchase intentions and behaviors of young consumers?

Ho (Null): Contextual factors and the factors of Theory of Planned Behavior do not affect the green purchase intention and behavior of young consumers.

Ha (Alternative): Contextual factors and the factors of Theory of Planned Behavior affect the green purchase intention and behavior of young consumers. Green products could possibly be successful in the Philippines if the potential contextual factors such as media exposure to environmental messages, parental influence and peer influence are fully researched and understood within the country. As such, to therefore instigate green marketing to develop within the young consumers of the country, this study is aimed at determining the purchasing intentions and behaviors of the youth segment in the Philippines with reference to

purchasing green products, to fully understand the green market potential of the country.

The main objective of this study is to identify factors influencing youths' intention and behavior towards purchasing green products. It seeks to examine and understand whether contextual factors such as media exposure, parental influence and peer influence affect youth's intention to purchase green products and whether the factors under the Theory of Planned Behavior such as attitude towards behavior, subjective norms and perceived behavioral control also has an effect to the intention and behavior to purchase green products. This study is significant and beneficial to business in terms of knowing the green market capabilities, especially the market targeted to green consumers. The current study contributes to the following parts:

h. To determine the level of green purchase intention and behavior in terms of demographics.

i. To determine the level of contextual factors and theory of planned behavior factors in relation to green purchase intention and behavior.

j. To determine the difference in the perception of youth in terms of demographics.

k. To determine the relationship between green purchase intention and behavior in terms of contextual factors and theory of planned behavior factors.

l. To support the businesses to better understand the potential of the green market.

m.   To assist businesses to better understand the buying behavior of young green

consumers.

n.To help marketers promote and increase awareness for youth consumers toward green products.

METHODS

Research Design. This study is a descriptive, exploratory and explanatory type of research, where the researcher used a 4-point likert type survey questionnaire to gather information. It is descriptive since the means and frequencies will be presented. As for being exploratory, the study will identify contextual factors affecting young consumers' attitudes and their intentions of green purchase behavior. Being explanatory will explain the factors greatly affecting the green purchase intention and the possible reason behind it. This strategy allows us to collect quantitative data, and these will be used analyze descriptive and inferential statistics. This Likert scale helps to indicate to what extent respondents either agree or disagree with a series of belief statements about intention of purchasing green products. The verbal interpretation used is from 1 to 4 where 4 is strongly agree and 1 is strongly disagree. The norms of interpretation on the other hand would be agree to a great extent, agree to a large extent, agree to a moderate extent and agree to a little extent. The researcher also used Ajzen's (2006) '*Constructing a theory of planned behavior questionnaire*' to address the research problem within the framework of TPB. Ajzen's questionnaire reflects the different contextual factors and theory of planned behavior factors as it is related to green purchase intention. The researcher exactly lifted the said questionnaire in the study.

Sampling Procedure. The researcher used the student sample to collect quantitative data from questionnaires. In this study, the sample for questionnaires was based on non- probability sampling technique, convenience sampling. This sampling technique was used since the researcher is currently connected to UA&P and the respondents are very accessible.. The criteria used were simply to get young college student consumers studying bachelor or masteral's program at the School of Management, University of Asia and the Pacific. These students are within the ages of 16 - 24. The total number is young consumers used in this study is 150. The study had 43% males and 57% females that are aligned to the ratio of young male population as compared to the female youth. For the age groups, majority of the respondents were represented by the 19-21-year olds at 83%, followed by the 22-22 year olds with 8% and the 16-18-year old group at 5%. For the program type, 69% are said to be taking the bachelors program and 31% are masteral program. Fifty nine percent (59%) of the respondents came from Classes AB which has a monthly household income of Php250,000 and over, followed by Class lower B and Upper C with 24% with a monthly household income of Php100,000 – Php240,000.

Statistical Treatment. The researcher used a descriptive and inferential type of statistics. For the descriptive statistics, weighted mean, standard deviation and frequency will be computed. This will be used for the demographic profile of the respondents as well as the analysis of consumers on the average perceptions pertaining to each question on the questionnaire. Descriptive statistics can also be

used to look into the purchase intentions. As for the inferential statistics, ANOVA (Analysis of Variance) was used to see the impact of demographic variables, Theory of Planned Behavior variables and the contextual factors on intention to purchase green products. Respondents were classified into three groups according to their age (Group 1: 16 to 18; Group 2: 19-21; Group 3: 22-24). The T-test was also used for group statistics. To measure the strength of the relationships between two variables, the researcher used Spearman Rank Correlation and Pearson Correlation. To see the relationships among variables, Multiple Regression was done. The researcher used SPSS (Statistical Package for Social Sciences) to run all statistical data seen in the results.

RESULTS ADND DISCUSSION

For the reliability of the questionnaire, the overall cronbach alpha was computed based on a reliability score of $\alpha = .75$ considered as high.

Analyzing Young Consumers

This descriptive statistics table implies some important issues among young consumers' overall evaluations of green products. The average perception about the *usefulness* of green products for health is considered highest level of priority (*Mean Value=3.65*) in 4 point Likert scale. The second highest priority goes to *education* is considered to be a favorable factor toward buying green products (*Mean Value=3.44*) Next is the *intention* to buy green products which is (*mean*

Value – 3.41). Knowledge of environmental issues comes it at fourth in purchasing green products. (*Mean Value = 3.29)* This tells us that respondents agree to a large extent in terms of usefulness of green products, education is considered to buy green products, intention to buy green products and knowledge of environmental issues are considered in buying green products.

On contrary to these factors, media exposures like *radio* is not considered too much influential to young consumers' buying intentions. It can be seen that radio programs are considered to be less important (*Mean Value=2.34*). *Discussing it with friends* also got a low mean score. (*Mean Value = 2.53)* This means that the respondents only agree to a moderate extent to this.   In addition, moderate priority was given toward the role of parents for green buying behavior (*Mean Value=2.82 & 2.85*). *TV* programs are considered be little bit higher (*Mean Value=2.86*) in position to create intentions for buying green products among young consumers. From here we can say that in terms of peer and parental influence, young consumers agree to a great extent that these contextual factors affect their green purchasing intention and behaviors.

Descriptive Information	N	Mean	Std. Deviation
I think green products are useful for health.	150	3.65	0.49
I often buy green products.	150	2.76	0.56
I have learned about environmentally related topics and issues from my parents.	150	2.82	0.67
My parents think I should buy green products.	150	2.85	0.67
My friends often discuss environmental-related topics / issues.	150	2.53	0.72
I have learned a lot about environmental topics / issues from my friends.	150	2.72	0.66
I watch TV programs that are devoted to environmental topics / issues.	150	2.86	0.74
I pay attention to environmental messages in advertisements.	150	3.05	0.65
I listen to radio programs that are related to environmental topic / issues.	150	2.34	0.74
Education is important for purchasing environmental friendly products.	150	3.44	0.63
My knowledge of environmental issues influences my purchase decisions.	150	3.29	0.63
I intend to purchase green products in the future.	150	3.41	0.56

Descriptive Statistics Per Variable

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
parents	150	1.50	4.00	2.8367	.55713
peers	150	1.00	4.00	2.6267	.63770
media	150	1.00	4.00	2.7489	.55150
attitude	150	2.00	4.00	3.2033	.44907
subjective	150	1.50	4.00	2.7317	.44599
perceived	150	2.00	4.00	3.3633	.49459
Valid N (listwise)	150				

Summarizing and comparing the six independent variables above, it can be said that the one with the highest influence on the intention and behavior towards purchasing green products is the Perceived Behavioral control. With a mean of *3.36*, we can say that respondents agree to a large extent that education and knowledge on environmental issues has an influence on their purchase intention and behavior. Attitude Toward Behavior with a mean of *3.21* comes in at second.

This means that respondents agree to a great extent that this is true. After which, this is followed by the parental influence with a mean of *2.84* which also tells us that the respondents agree to a great extent that parents really have a big influence on them regarding green purchasing intention and behavior. Next is media with a mean of *2.75*. This also means that respondents agree to a great extent that media has the power to influence them. Subjective norms are at the middle of parental and peer influence with a mean of *2.73*. The last among the six variables is that of peer influence with *2.62*, which still means that respondents agree to a great extent.

In terms of Test of Difference by Gender, Females have a higher intention rate to buy green products than male with a mean of *3.43* and *3.36* respectively. Female youth are found to be more inclined to parental and peer influence, while male youth are more influenced by media exposure. Perceived behavioral control and attitude towards behavior is consistent being the top most influencers to young consumers regarding green purchase intentions and behaviors. In a previous study, Lee (2011) suggested that female consumers have higher potential to become green consumers. In terms of level of education, well-educated people tend to have a moderately higher level of environmental concern than their counterparts (Mertig & Dunlap, 2001). Hockett, McClafferty, and McMullin (2004) also reported that the more highly educated individuals and those with higher incomes were more likely to behave pro-environmentally.

The research finding on green purchasing behavior might have different outcomes in different demographic contexts due to the complexity in green purchasing behavior of consumers (Ali & Ahmad, 2012). In other words, green purchasing behavior might be influenced by the demographic factors such as gender, ethnic group and other demographic factors. However, the study of Shahnaei (2012) and Chen and Chai (2010) indicated that there was no gender difference in green purchasing behavior among Malaysian consumers.

Contextual Factors: For media exposure it can be seen that 77 respondents or 51% of the respondents agree that they watch TV programs that are devoted to environmental topics or issues. A high 62% or 93 respondents also agree that they pay attention to environmental messages in advertisements. However, a big 48% or 72 respondents disagree to the statement that they listen to the radio programs related to environmental topics or issues. This last result for media exposure is understandable as not much radio programs are into discussing or promoting environmental issues. For Peer Influence, it can be seen that 67 respondents or 45% of which agree that they often discuss environmental-related topics or issues. However, what is surprising is that there is also a big chunk of the respondents, 63 of them or 42% disagree with the above said statement. It can be seen here that discussing about environmental issues are done but it is possible that it is not often. This can be a reason why there is a close result between those who agree and those who do not agree with the statement. It could be possible that those in the upper age bracket are those which discusses environmental issues For Parental Influence,

it was seen that 88 respondents or 59% of which agree that they have learned about environmentally related topics and issues from their parents. Aside from this 86 respondents or 57% also agree that their parents think they should buy green products. We can see here the usual Filipino close-knit family. Parents have a high influence over their children. Among the three contextual factors, it can be seen that it is consistent that parental influence got a high frequency rate. With the exception of the influence of TV programs with 62% in the previous analysis. Again, this mirrors our society today that children or the young / adolescents are greatly influenced by media specifically what they watch or see on television.

Planned Behavior Factors: On Attitude toward Behavior, 98 respondents or 65% of them strongly agree that green products are useful for health. When asked if they often buy green products, 97 respondents or 65% of them agree that they often buy green products. Attitude of young Filipino consumers have a very positive disposition about green products. It could be a result of the influence from parents or what they see on television.

Subjective Norms are formed by social influences either by family or friends. The result for this variable is also the same as the 2 questions under Peer Influence and the 2 questions under Parental Influence. For peers, 45% are influenced by their friends, while an average of 58% agree that they are influenced by their parents. Although, for frequency, it may not be too high but the fact that majority of the

respondents mentioned that these two contextual factors have a high influence on their green purchasing intention and behavior can be something to focus later on. For PBC, 76 respondents or 51% of them strongly agree that education is important for purchasing environmental friendly products while 79 or 52% of the young respondents agree that knowledge of environmental issues influences their purchase decisions. This very much shows us that there is still a need for educating our young consumers about green marketing. This is one way that we can promote it. Young consumers really thirst for knowledge and education.

As for the overall Intention to purchase green products in the future, 79 respondents or 52% agree and a close 66 respondents or 44% strongly agree that they intend to buy green products in the future. This only shows that the young Filipino consumers although not yet fully aware and exposed to green marketing is willing to purchase green products in the future.

Inferential Statistics

One-Way Anova

ANOVA								
Constructs		**Demographic Profile**						
		Age		**Year Level**		**Household Income**		**Course**	
	F	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**
Parental Influence	1.808	0.168	-1.820	0.128	0.385	0.819	4.513	0.013
Peer Influence	0.063	0.939	0.485	0.746	0.846	0.498	0.197	0.822
Media Exposure	0.092	0.912	0.322	0.863	1.942	0.107	2.466	0.088
Attitude	5.536	0.005	0.911	0.460	1.435	0.225	4.032	0.020
Subjective Norms	0.468	0.627	0.452	0.771	0.705	0.589	2.080	0.129
Perceived Behavior	1.024	0.362	0.444	0.776	0.917	0.456	5.055	0.008
Green Purchase Intention	**0.768**	**0.466**	**0.701**	**0.592**	**0.201**	**0.937**	**1.798**	**0.169**

A one-way ANOVA between groups was conducted to see the impact of the demographics factors to the contextual factors, the planned behavior factors and the intention and behavior to purchase green products. For the demographic factor age, only attitude has a very high F of 5.536, which means it has a significant difference at 0.005. In terms of year level and household income, there was no statistically significant difference at $P>0.05$. Lastly, for the course (whether bachelor's degree or masters degree),parental influence, attitude and perceived behavior have a high F at 4.513, 4.032 and 5.055 respectively with a significant level of 0.013, 0.020 and 0.008. It can be depicted from here that for the demographic factors only age has a significant difference with attitude and course has a significant difference with parental influence, attitude and perceived

behavior. The rest do not have any effect on the intention and behavior to purchase green products.

Regression Analysis (Multivariate)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562[a]	.316	.292	.4683

a. Predictors: (Constant), perceived, peers, parents, media, attitude

In the above table it can be seen that 32% of green purchase intention is attributed to the parental influence, peer influence, media exposure, attitude and perceived behavior control factors. Subjective norm is said to be social influence which is similar to peer and parental influence.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.608	5	2.922	13.320	.000[b]
	Residual	31.585	144	.219		
	Total	46.193	149			

a. Dependent Variable: I intend to purchase green products in the future.

b. Predictors: (Constant), perceived, peers, parents, media, attitude

For the Analysis of Variance, F is high at 13.320 which means that green purchase intention and behavior has a significant difference with the contextual and planned behavior factors at 0.000.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.448	.370		1.209	.229	-.284	1.180
	parents	.051	.076	.051	.676	.500	-.099	.202
	peers	.069	.064	.079	1.074	.285	-.058	.196
	media	.157	.077	.155	2.020	.045	.003	.310
	attitude	.315	.098	.254	3.214	.002	.121	.508
	perceived	.355	.081	.315	4.378	.000	.195	.515

a. Dependent Variable: I intend to purchase green products in the future.

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	subjective	.[b]	.	.	.	.000

a. Dependent Variable: I intend to purchase green products in the future.

b. Predictors in the Model: (Constant), perceived, peers, parents, media, attitude

As for the coefficient, it is highly significant at 5%. Here, the perception of the youth on the green purchase intention in terms media, attitude, perceived behavior and subjective norms are all significant at 0.045, 0.002, 0.000 and 0.000 respectively.

T Test for Group Statistics

T-TEST FOR GROUP STATISTICS		Levene's Test for Equaliy of Variances		T-Test for Equality of Means	
		F	Sig.	T	Sig. (2-tailed)
Green Purchase Intention	Equal Variances assumed	1.565	0.213	-0.719	0.473
	Equal Variances not assumed			-0.705	0.482
Parents	Equal Variances assumed	0.165	0.685	0.034	0.973
	Equal Variances not assumed			0.034	0.973
Peers	Equal Variances assumed	0.476	0.491	-0.447	0.656
	Equal Variances not assumed			-0.444	0.658
Media	Equal Variances assumed	1.900	0.17	0.593	0.554
	Equal Variances not assumed			0.584	0.560
Attutude	Equal Variances assumed	1.837	0.177	-1.368	0.173
	Equal Variances not assumed			-1.349	0.180
Subjective Norms	Equal Variances assumed	1.001	0.319	-0.298	0.766
	Equal Variances not assumed			-0.296	0.767
Perceived Control Behavior	Equal Variances assumed	1.605	0.207	-1.039	0.301
	Equal Variances not assumed			-1.018	0.310

The Levene's Test for equality of variances, the sig. value of 0.21 is larger than 0.05. Given this, we can say that the variances are equal. From the column sig. (2 tailed), it is not significant at .000. This is also the result looking at each of the contextual and the planned behavior factors. This was also the same result in a study made in Sweeden by Promotosh & Sajedul (2011).

Pearson Correlation

Correlations

		I intend to purchase green products in the future.	parents	peers	media	attitude	subjective	perceived
I intend to purchase green products in the future.	Pearson Correlation	1	.237**	.204*	.335**	.405**	.294**	.423**
	Sig. (2-tailed)		.003	.012	.000	.000	.000	.000
	N	150	150	150	150	150	150	150
parents	Pearson Correlation	.237**	1	.111	.182*	.415**	.704**	.138
	Sig. (2-tailed)	.003		.178	.026	.000	.000	.093
	N	150	150	150	150	150	150	150
peers	Pearson Correlation	.204*	.111	1	.339**	.173*	.784**	.071
	Sig. (2-tailed)	.012	.178		.000	.034	.000	.386
	N	150	150	150	150	150	150	150
media	Pearson Correlation	.335**	.182*	.339**	1	.280**	.356**	.230**
	Sig. (2-tailed)	.000	.026	.000		.001	.000	.005
	N	150	150	150	150	150	150	150
attitude	Pearson Correlation	.405**	.415**	.173*	.280**	1	.383**	.232**
	Sig. (2-tailed)	.000	.000	.034	.001		.000	.004
	N	150	150	150	150	150	150	150
subjective	Pearson Correlation	.294**	.704**	.784**	.356**	.383**	1	.137
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.095
	N	150	150	150	150	150	150	150
perceived	Pearson Correlation	.423**	.138	.071	.230**	.232**	.137	1
	Sig. (2-tailed)	.000	.093	.386	.005	.004	.095	
	N	150	150	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

*** Significant at 0.05*

For Contextual Factors affecting young consumers, the relationship between parental influence and green purchase intention is very strong with a significance level of 0.003. Peer Influence as well has a strong correlation to green purchase intention at 0.012. Among the three the one with the perfect relationship is that of Media Exposure with a significance level of 0.000. This has a close to perfect relationship since in the Philippines, young consumers are greatly affected by media, specifically social media. This has the same findings as that of Lee (2011) This can be attributed to the fact that Gen Y are more inclined to visuals and other media materials. This is the same result from the Study done in Sweeden by

Promotosh & Sajedul (2011). It was also said in the study of Tikka et al (2000) that contextual factors are important in green purchase decisions. Other researchers also have considered the strong relationship between contextual factors and behavior. (Young et al, 2010) However the findings of this study do not support previous researches made. The study by Lee (2011) found that Hong Kong parents have less influence on their children's green purchase. This can be explained by the fact that Filipinos having close family ties and majority of the youth are still living with their parents. Hong Kong parents may not influence much in facilitating contextual environments that encourage green behavior among the young adolescents. It was also mentioned in one of the studies that the young adult adopts the same and similar behavior that their parents have. (Chaplin & John, 2010)

For the Theory of Planned Behavior Factors, it can be said that all three factors, attitude, subjective norm and perceived behavior control (education and knowledge) have a strong positive correlation with green purchase intention. The significance level for all three is at 0.000, which connotes a perfect relationship. This was also the result in the study made in Sweeden by Promotosh & Sajedul (2011)

Spearman Rank Correlation

Correlations

			I intend to purchase green products in the future.	Parents	Peers	Media	Attitude	Subjective Norm	Perceived behavior
Spearman's rho	I intend to purchase green products in the future.	Correlation Coefficient	1.000	.240**	.193*	.322**	.394**	.275**	.421**
		Sig. (2-tailed)	.	.003	.018	.000	.000	.001	.000
		N	150	150	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The researcher also made used of the Spearman Rank Correlation to determine the relationship between the green purchase intention and the contextual and planned behavior factors. Since a 4-point likert scale was used, it is more appropriate to use this test. It can be seen that parental influence is significant at 0.05 since its significant level is 0.003. Next is the subjective norm which is also significant at 0.001. Media, attitude and perceived behavior control were reported to have the perfect relationship with a significant level of 0.000.

These results show that among the contextual factors, media got the highest correlation with green purchase intention followed by parental influence. This only shows that the youth now are more influenced by media with a high usage rate of social media and their parents as a culture in the Philippines. For the planned behavior factors, all three were reported to be highly-correlated to green

purchase intention. This is very true because the intention and behavior to purchase stems from having a positive attitude towards something. Aside from that the youth now are more influenced to purchase something if they are educated about it and if they have knowledge about it which boils down to perceived behavior control. Subjective norm as defined as social influence is also highy correlated as it is similar to parental and peer influence.

CONCLUSION

For demographics, most of the respondents are from the 19-21 age group, 57% of which are female and 43% are male. Most of them are from the 4[th] year level and earns Php250,000 and over. Females are said to have a higher mean rate of 3.43 than males with 3.36, which means that respondents agree to a large extent that gender has an influence on purchase intention, although the mean scores are too near that can also mean that there is just a slight difference in terms of influence.

For the extent of agreement of Contextual Factors, respondents agree to a large extent that both Parental and Peer Influence has an effect on green purchase intention. In terms of media exposure, respondents also agree to a large extent that it has an influence on green purchase intention. However, among the three, media exposure has the greatest influence followed by the parental influence. As for the Theory of Planned Behavior variables, the highest influencers among the six independent variables are Perceived Behavioral Control and Attitude Toward Behavior. Respondents agree to a great extent that these variables influence

purchase intention and behavior. As for the Subjective Norm, since it talks about Social Influence, it is consistent with the peer and the parental influence that respondents agree to a large extent that subjective norms affect green purchase intention and behavior.

The results of the study suggest that the youth can be a lucrative market for green marketers. This segment is more interested to accept new and innovative ideas. They are very receptive to new things as long as they are educated about it and they have built awareness towards it. They are also becoming more conscious about environmental knowledge and also they have the capacity to influence other people within their peer group. The study also shows that in the Philippines, young consumers are still influenced by parents and peers as explained by our beliefs and culture, however due to the advances in technology, media exposure can be the best tool to educate and influence the younger generation in terms of green marketing.

RECOMMENDATIONS and POLICY IMPLICATIONS

The results of the study show that young Filipinos are open and interested in green products, although there is a need to develop more on their attitude and behavior towards it. This behavior needs to be inculcated in the minds of these students at a young age and since the Filipinos have close family ties, the awareness of green marketing and green products should start with parents providing positive examples to their children as many of these behaviors, such as recycling, are

learned at home. To empower students as future managers and consumers who understand the importance of sustainability, courses on environmental protection and green products should also be taught in schools and universities. Such courses should also be a part of the curriculum both for the graduate and undergraduate levels whereby students, through case analysis, discussions and presentations, are taught the importance of personal responsibility for the environment. As a recommendation, parents and schools should have activities for young consumers to be more inclined to educating the younger generation with green marketing. Marketers should endeavor to attract young Filipino consumers to green products by using social media and sales promotion. Once consumers have adopted green products, they become an important component in their lives and they will be willing to purchase them in larger amounts in the future. This will also lead to positive word of mouth to others. As per the results of this study, media exposure have a strong influence on green purchasing behavior. Celebrity reference groups such as actors and musicians must emphasize environmental protection in their work. These celebrities play an important role as opinion leaders, especially among teenagers. Mass media and social networking is also crucial in promoting environmentalism and the use of environmentally-friendly products. On such websites, Filipino consumers may exchange opinions and might promote one brand over the other in the context of a conversation. It is also possible for them to add interactive content, which makes products or services more attractive to the members of their network and increases the chances of purchasing. Marketers should also devote their attention to segments of parents and disseminate

information about the importance of using green products in order to develop favorable attitude towards green purchase and concern for the environment.. Aside from the parents, schools and marketers, the government should also think of ways to promote green products. There should also be laws favorable to the use of green products.

The sample used in this study is just from Pasig City and this may not represent the young Filipino population. For future researchers, they may expand the scope of the study and increase the respondents to 500. Another interesting addition to this study is to capture the individual factors as well together with the contextual factors to see the whole picture of factors influencing individuals to green purchase intention.

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APPENDICES

A. QUESTIONNAIRE

Good Day! I am currently doing a research study entitled, *"Green Marketing and It's Effects on Young Consumer Purchase Intentions of Buying Green Products"* This questionnaire is designed to understand young consumers' purchase intentions of green products. Green products are environmentally safe and preferable products and services (e.g. organic tea, energy saving bulb, green car).

Your honest opinion is extremely valuable for completing this survey. Please complete the questionnaire; it will take only a few minutes. *The information you provide will be confidential and will not be used for any other purposes.* **Please check your preferred answer.** Please choose only one answer per question.

Name: _____ (Optional)

Age:

_____16-18   _____19-21   _____22-24

Gender:

_____ Male   _____ Female

School: _____

Year Level: _____ Course: _____

Household Income: (Income of Whole Family)

_____ Php250,000 and over

_____ Php100,000 – Php249,000

_____ Php60,000 – Php99,000

_____ Php40,000 – Php59,000

_____ Under Php40,000

"The Intentions and Behaviors of Adolescents in Purchasing Green Products"

1. I think green products are useful for health.

Strongly Agree	Agree	Disagree	Strongly Disagree

PLEAS SEE BACK FOR MORE QUESTIONS…

2. I often buy green products.

Strongly Agree	Agree	Disagree	Strongly Disagree

3. I have learned about environmentally related topics and issues from my parents.

Strongly Agree	Agree	Disagree	Strongly Disagree

4. My parents think I should buy green products.

Strongly Agree	*Agree*	*Disagree*	*Strongly Disagree*

5. My friends often discuss environmental-related topics / issues.

Strongly Agree	*Agree*	*Disagree*	*Strongly Disagree*

6. I have learned a lot about environmental topics / issues from my friends.

Strongly Agree	*Agree*	*Disagree*	*Strongly Disagree*

7. I watch TV programs that are devoted to environmental topics / issues.

Strongly Agree	*Agree*	*Disagree*	*Strongly Disagree*

8. I pay attention to environmental messages in advertisements.

Strongly Agree	Agree	Disagree	Strongly Disagree

9. I listen to radio programs that are related to environmental topic / issues.

Strongly Agree	Agree	Disagree	Strongly Disagree

10. Education is important for purchasing environmental friendly products.

Strongly Agree	Agree	Disagree	Strongly Disagree

11. My knowledge of environmental issues influences my purchase decisions.

Strongly Agree	Agree	Disagree	Strongly Disagree

12. I intend to purchase green products in the future.

Extremely Likely	Likely	Unlikely	Extremely Unlikely

B. RELIABILITY ANALYSIS

Table 1: Constructs Development

Construct Development		Questions
Contextual Factors	Parents	I have learned about environmentally-related topics and issues from my parents. My parents think that I should buy green products.
	Peers	My friends often discuss environmental related topics/issues. I have learned a lot about environmental topics/issues from my friends.
	Media	I watch TV programs that are devoted to environmental topics / issues. I pay attention to environmental messages in advertisements. I listen to Radio programs that are related to environmental topics/issues.
Theory of Planned Behavior	Attitude Toward Behavior	I think green products are useful for health. I often buy green products.
	Subjective Norms	I have learned about environmentally-related topics and issues from my parents. My parents think that I should buy green products. My friends often discuss environmental related topics/issues. I have learned a lot about environmental topics/issues from my friends.
	Perceived Behavioral Control (PBC)	Education is important for purchasing environmental friendly products. My knowledge of environmental issues influences my purchase decisions.
Overall Green Marketing Purchase Intention Reliability is $\alpha = .75$		

GREEN PURCHASE INTENTION

Reliability Statistics

Cronbach's Alpha	N of Items
.746	12

DESCRIPTIVE STATISTICS

C. FREQUENCY DISTRIBUTION – DEMOGRPHIC VARIABLE

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16 - 18 years old	13	8.7	8.7	8.7
	19 - 21 years old	125	83.3	83.3	92.0
	22 - 24 years old	12	8.0	8.0	100.0
	Total	150	100.0	100.0	

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	65	43.3	43.3	43.3
female	85	56.7	56.7	100.0
Total	150	100.0	100.0	

Year Level

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1st year	2	1.3	1.3	1.3
2nd year	8	5.3	5.3	6.7
3rd year	12	8.0	8.0	14.7
4th year	105	70.0	70.0	84.7
5th year	23	15.3	15.3	100.0
Total	150	100.0	100.0	

Course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BSBA	99	66.0	66.0	66.0
	MScM	46	30.7	30.7	96.7
	EM	5	3.3	3.3	100.0
	Total	150	100.0	100.0	

D. FREQUENCY DISTRIBUTION – CONTEXTUAL FACTORS

MEDIA EXPOSURE

I watch TV programs that are devoted to environmental topics / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	2.7	2.7	2.7
	Disagree	41	27.3	27.3	30.0
	Agree	77	51.3	51.3	81.3
	Strongly agree	28	18.7	18.7	100.0
	Total	150	100.0	100.0	

I pay attention to environmental messages in advertisements.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	1.3	1.3	1.3
	disagree	22	14.7	14.7	16.0
	agree	93	62.0	62.0	78.0
	strongly agree	33	22.0	22.0	100.0
	Total	150	100.0	100.0	

I listen to radio programs that are related to environmental topic / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	17	11.3	11.3	11.3
	disagree	72	48.0	48.0	59.3
	agree	54	36.0	36.0	95.3
	strongly agree	7	4.7	4.7	100.0
	Total	150	100.0	100.0	

PEER INFLUENCE

My friends often discuss environmental-related topics / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	9	6.0	6.0	6.0
	disagree	63	42.0	42.0	48.0
	agree	67	44.7	44.7	92.7
	strongly agree	11	7.3	7.3	100.0
	Total	150	100.0	100.0	

I have learned a lot about environmental topics / issues from my friends.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	50	33.3	33.3	35.3
	agree	83	55.3	55.3	90.7
	strongly agree	14	9.3	9.3	100.0
	Total	150	100.0	100.0	

PARENTAL INFLUENCE

I have learned about environmentally related topics and issues from my parents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	40	26.7	26.7	28.7
	agree	88	58.7	58.7	87.3
	strongly agree	19	12.7	12.7	100.0
	Total	150	100.0	100.0	

My parents think I should buy green products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	1.3	1.3	1.3
	disagree	40	26.7	26.7	28.0
	agree	86	57.3	57.3	85.3
	strongly agree	22	14.7	14.7	100.0
	Total	150	100.0	100.0	

E. FREQUENCY DISTRIBUTION – THEORY OF PLANNED BEHAVIOR

ATTITUDE TOWARD BEHAVIOR

I think green products are useful for health.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	1	.7	.7	.7
	agree	51	34.0	34.0	34.7
	strongly agree	98	65.3	65.3	100.0
	Total	150	100.0	100.0	

I often buy green products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	.7	.7	.7
	disagree	43	28.7	28.7	29.3
	agree	97	64.7	64.7	94.0
	strongly agree	9	6.0	6.0	100.0
	Total	150	100.0	100.0	

SUBJECTIVE NORMS

My friends often discuss environmental-related topics / issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	9	6.0	6.0	6.0
	disagree	63	42.0	42.0	48.0
	agree	67	44.7	44.7	92.7
	strongly agree	11	7.3	7.3	100.0
	Total	150	100.0	100.0	

I have learned a lot about environmental topics / issues from my friends.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	50	33.3	33.3	35.3
	agree	83	55.3	55.3	90.7
	strongly agree	14	9.3	9.3	100.0
	Total	150	100.0	100.0	

I have learned about environmentally related topics and issues from my parents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	2.0	2.0	2.0
	disagree	40	26.7	26.7	28.7
	agree	88	58.7	58.7	87.3
	strongly agree	19	12.7	12.7	100.0
	Total	150	100.0	100.0	

My parents think I should buy green products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	1.3	1.3	1.3
	disagree	40	26.7	26.7	28.0
	agree	86	57.3	57.3	85.3
	strongly agree	22	14.7	14.7	100.0
	Total	150	100.0	100.0	

PERCEIVED BEHAVIORAL CONTROL

Education is important for purchasing environmental friendly products.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	.7	.7	.7
	disagree	8	5.3	5.3	6.0
	agree	65	43.3	43.3	49.3
	strongly agree	76	50.7	50.7	100.0
	Total	150	100.0	100.0	

My knowledge of environmental issues influences my purchase decisions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	14	9.3	9.3	9.3
	agree	79	52.7	52.7	62.0
	strongly agree	57	38.0	38.0	100.0
	Total	150	100.0	100.0	

INTENTION TO BUY GREEN PRODUCTS

I intend to purchase green products in the future.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	5	3.3	3.3	3.3
	agree	79	52.7	52.7	56.0
	strongly agree	66	44.0	44.0	100.0
	Total	150	100.0	100.0	

INFERENTIAL STATISTICS

ANOVA RESULTS

Test of Difference (using One-way ANOVA)

By Age

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	.478	2	.239	.768	.466
	Within Groups	45.715	147	.311		
	Total	46.193	149			
parents	Between Groups	1.110	2	.555	1.808	.168
	Within Groups	45.138	147	.307		
	Total	46.248	149			
peers	Between Groups	.052	2	.026	.063	.939
	Within Groups	60.542	147	.412		
	Total	60.593	149			
media	Between Groups	.057	2	.028	.092	.912
	Within Groups	45.262	147	.308		
	Total	45.319	149			
attitude	Between Groups	2.105	2	1.052	5.536	.005
	Within Groups	27.944	147	.190		
	Total	30.048	149			
subjective	Between Groups	.187	2	.094	.468	.627
	Within Groups	29.450	147	.200		
	Total	29.637	149			
perceived	Between Groups	.501	2	.250	1.024	.362
	Within Groups	35.947	147	.245		
	Total	36.448	149			

By Year Level

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	.877	4	.219	.701	.592
	Within Groups	45.316	145	.313		
	Total	46.193	149			
parents	Between Groups	2.210	4	.553	1.820	.128
	Within Groups	44.038	145	.304		
	Total	46.248	149			
peers	Between Groups	.801	4	.200	.485	.746
	Within Groups	59.793	145	.412		
	Total	60.593	149			
media	Between Groups	.399	4	.100	.322	.863
	Within Groups	44.920	145	.310		
	Total	45.319	149			
attitude	Between Groups	.736	4	.184	.911	.460
	Within Groups	29.312	145	.202		
	Total	30.048	149			
subjective	Between Groups	.365	4	.091	.452	.771
	Within Groups	29.272	145	.202		
	Total	29.637	149			
perceived	Between Groups	.441	4	.110	.444	.776
	Within Groups	36.007	145	.248		
	Total	36.448	149			

By Course

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	1.103	2	.551	1.798	.169
	Within Groups	45.091	147	.307		
	Total	46.193	149			
parents	Between Groups	2.675	2	1.338	4.513	.013
	Within Groups	43.573	147	.296		
	Total	46.248	149			
peers	Between Groups	.162	2	.081	.197	.822
	Within Groups	60.432	147	.411		
	Total	60.593	149			
media	Between Groups	1.471	2	.736	2.466	.088
	Within Groups	43.848	147	.298		
	Total	45.319	149			
attitude	Between Groups	1.562	2	.781	4.032	.020
	Within Groups	28.486	147	.194		
	Total	30.048	149			
subjective	Between Groups	.816	2	.408	2.080	.129
	Within Groups	28.821	147	.196		
	Total	29.637	149			
perceived	Between Groups	2.346	2	1.173	5.055	.008
	Within Groups	34.103	147	.232		
	Total	36.448	149			

By Household Income

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
I intend to purchase green products in the future.	Between Groups	.255	4	.064	.201	.937
	Within Groups	45.938	145	.317		
	Total	46.193	149			
parents	Between Groups	.486	4	.122	.385	.819
	Within Groups	45.762	145	.316		
	Total	46.248	149			
peers	Between Groups	1.382	4	.346	.846	.498
	Within Groups	59.211	145	.408		
	Total	60.593	149			
media	Between Groups	2.304	4	.576	1.942	.107
	Within Groups	43.015	145	.297		
	Total	45.319	149			
attitude	Between Groups	1.144	4	.286	1.435	.225
	Within Groups	28.904	145	.199		
	Total	30.048	149			
subjective	Between Groups	.566	4	.141	.705	.589
	Within Groups	29.071	145	.200		
	Total	29.637	149			
perceived	Between Groups	.900	4	.225	.917	.456
	Within Groups	35.549	145	.245		
	Total	36.448	149			