



Research Report

Managers' less favourable attitude towards bottom of the pyramid (BOP) customers

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Abstract

Investment in low income markets is increasing so too is a sense of controversy regarding poor markets. With BOP investment becoming many a firms' strategy towards achieving growth, it is not clear to what extent managers' attitudes to poor customers differ towards their attitudes towards middle-class customers. It is, however, well described that attitudes to poor people in a social context is negative and in some cases less favourable.

It is postulated that business' mindset may be a barrier towards engaging with BOP markets despite the incentives and benefits that literature puts forward for marketing to the poor. Whether this attitude is negative, neutral, less favourable or similar is not well understood. The findings of this research project, can with a high level of confidence, report that the attitudes of a sample of managers do display a less favourable attitude towards a poor customer than is the case with a similar sample that is exposed to a wealthier customer.

Keywords

(BOP) bottom of the pyramid; general attitude;

the poor; managers

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination at any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

The name and the original signature of the student and the date should follow the declaration.

Danie Nel: Date:

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Dedications

- I dedicate this work to my Creator and Lord. Had I not been blessed with strength and good health, I would have not completed this project... *Baruch haba b'shem Adonai*
- My family, who have endured much alongside me. Thanks to you all – I love you.

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Chapter 1 Introduction to the research problem

1.1 Research title

Managers' less favourable attitude towards bottom of the pyramid (BOP) customers.

1.2 Research Scope

This research set out to establish whether managers' attitude towards BOP (bottom- or base-of-the-pyramid) customers as described by Santos & Laczniak (2009) is less favourable relative to managers' attitude to middle class customers. This research intends to create awareness of attitudinal differences towards poor customers, and with an appeal to managers to guard against their propensity towards negative attitudes.

1.3 Research motivation

The world today seems to view the developing world as increasingly important. Foundations exist that investment decisions should consciously be directed at addressing global poverty versus the more traditional approach of large firms that access wealthy markets. Kirchgeorg & Winn (2006) note this shift in business strategy discourse that increasingly focuses on BOP and motivate their work as a call on researchers and practitioners towards greater engagement with the poor.

Whilst the body of knowledge surrounding attitudes having already peaked with the likes of Thurstone and later Likert from the 1950's through to the early 1970's the body of knowledge regarding BOP is relatively new, with Prahalad introducing the term in the early 2000's. This research project is particularly concerned with better understanding the still reasonably unclear manifestation of attitudes towards BOP.

The Economist (2009) reported that investment in low income markets is increasing and cites financial services as a prominent example of this. This particular article, however, also pointed out that as the idea of BOP grows, so does the controversy surrounding it. An article in the Financial Times by Murray (2010), supported this notion by postulating that investment towards marketing to BOP has become many companies' strategy to achieve the Millennium Development Goals which includes poverty reduction and environmental sustainability.

Amongst these goals is the development of socially useful goods at affordable pricing. What is of particular interest is how this article articulates the business case for marketing to the world's poor as a low-margin-high-volume strategy with an opportunity of scale, given the size of this market.

In Landrum (2007), literature in favour of BOP as a profitable customer base, is cited in stating the size of the global poor customer as being roughly between 2.7 and 5 billion people. Given the size and therefore relative importance of BOP as a business stakeholder, the rationale behind this research stems from the question: given the fact that certain firms choose to market to BOP and others do not are there other forces at play that influence these decisions?

Fishhein & Ajzen (1975) discussed the correlation between behaviour and attitudes where attitudes are proposed as a driver of behaviour. Should it then be inferred that those firms that do manage to successfully trade with the poor, are headed up by managers that display more favourable attitudes towards BOP customers? It would seem so when reviewing how Stephan & Finlay (1999) postulate that low levels of empathy are a contributor to physiological distance and that high levels of empathy contribute to improved and beneficial intergroup interaction and that empathy contributes to positive attitudinal and behavioural change. Santos & Laczniak (2009) also hint that favourable attitudes towards customers tend to manifest in behaviour that engages customers actively and explicitly through ongoing dialogue.

1.4 Research problem

With a compelling argument that business should engage in poor markets, why is it that some firms attempt this and succeed as put forward by Prahalad (2005), whilst other firms fail to succeed or fail to attempt? Is a question posed by Karnani (2007). The question becomes even more compelling given that recent arguments about business strategy propose that the poor is indeed a viable option for business venture, and that business venture is a viable option towards solving poverty. Whilst negative attitudes towards the poor seem to retard this interaction as postulated by Prahalad (2005).

Is the attitude of business managers different to BOP customers than business managers' attitude to middle class customers? This research report set out to determine whether less favourable attitudes towards poor customers are observable, given that less favourable attitudes towards poor customers are cited as a barrier towards investment into poor markets. Prahalad (2002) suggests that a shift in mindset is required: from viewing the poor as a problem, to viewing the poor as an opportunity to innovate.

In the light of negative mainstream attitudes towards the poor as found with students in Cozzarelli, Tagler, & Wilkinson (2002) and suggested of business managers in Olsen & Boxenbaum (2009), this research poses the question whether attitudes held by managers in business towards customers differ, based on the economic characteristics of the customer.

1.5 Relevance and importance to South Africa and business

This project has particular relevance to South African business as well as the greater Africa in that a large portion of its potential target markets may well be classified as BOP.

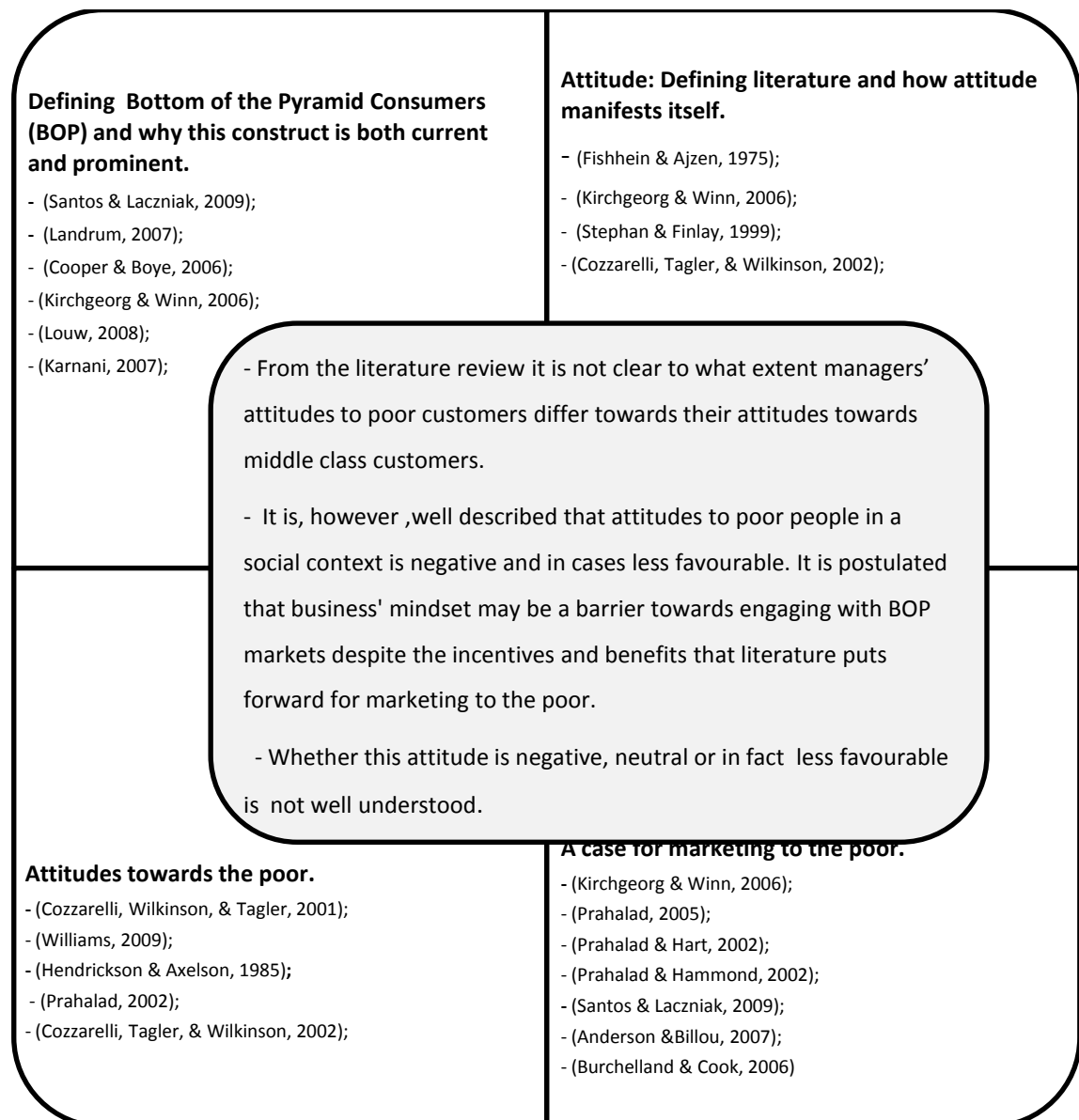
The prediction regarding mobile technology penetration in Africa, is an example of this and according to Cooper & Boye (2005), mobile technology, more specifically mobile connections was predicted to increase by 1.5 billion over the last four years with 78% of that increase bound to happen in emerging markets. In Kirchgeorg & Winn (2006) this trend is underlined in when the concept of emerging markets is described as an attractive growth opportunity combined with the simultaneous benefit of alleviating poverty.

This report has particular reference to academics and business firms in South Africa, firstly, due to the sample which was made up of managers, approximated by business school students that either live or work in South Africa. Secondly, South Africa is part of Africa and as such, firms in South Africa, in many instances, plan to market or are already marketing their goods and services to BOP customers. A third relevant intersection with South Africa, but also relevant to other dynamic economies, is the known high occurrence of unemployed and poor citizens and the resulting higher probability that a firm in South Africa is likely to transact with poor customers.

Chapter 2 Literature review

Taking guidance from Blumberg, Cooper, & Schindler (2008), the literature review for this project will aim to contextualise the research question (including relative prominence) as well as discuss the construct: *BOP*.

Figure 1: A graphic illustration of how this chapter is organised towards justifying the central research question



2.1 Defining BOP and the recent focus of firms towards this segment

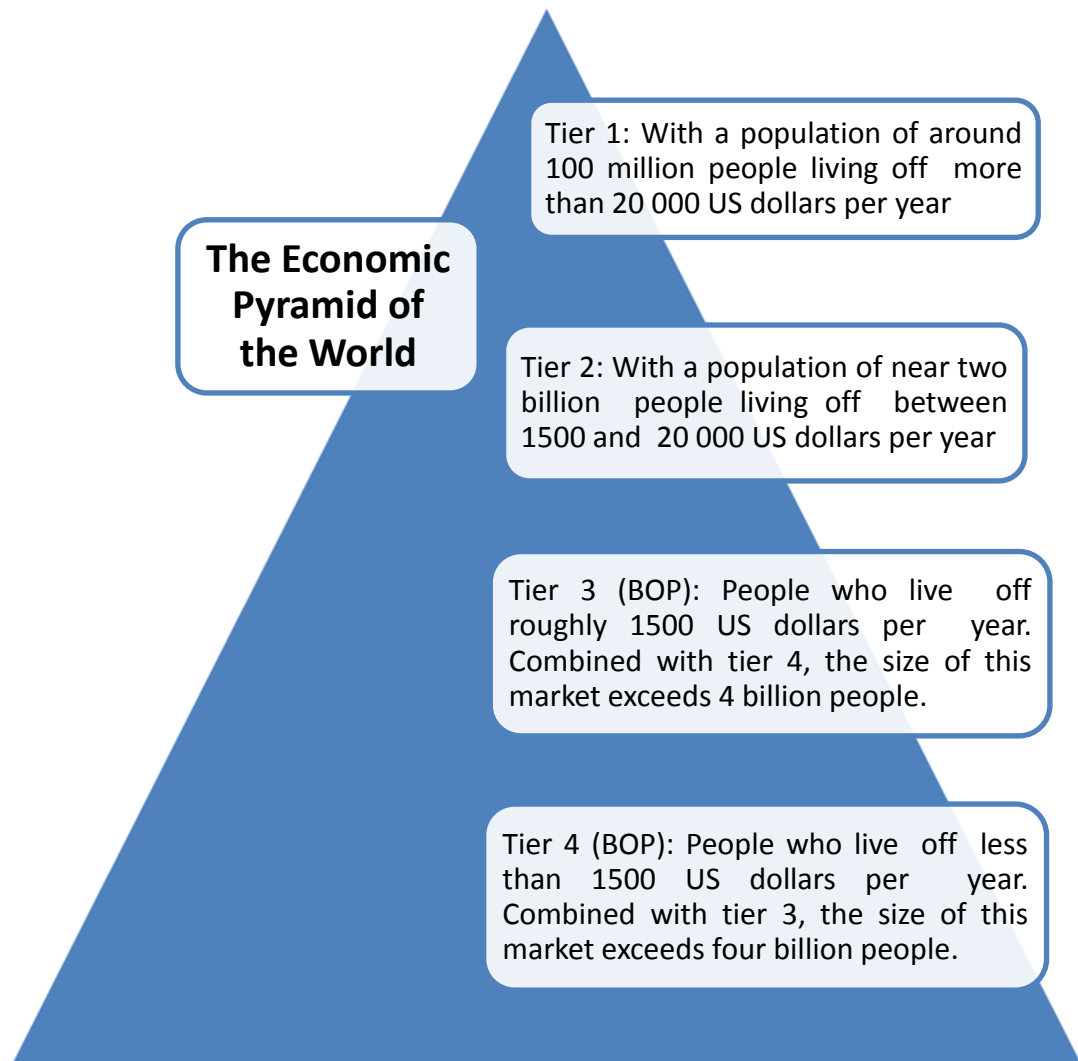
It is generally accepted that the term “poor” predates the term “BOP”. The relevance of both these terms and the manner in which it is used in literature is the reason that this report used the term BOP and poor customers interchangeably. The research title particularly referred to BOP due to its use in the commercial context as in (Karnani, 2007; Louw, 2008; Olsen & Boxenbaum, 2009; Prahalad, 2002), and Although BOP is a key construct in this research, literature describing mainstream attitudes towards “the poor” have been used as the term “the poor” predates the term “BOP” and effectively includes as well as serves as a proxy and also the described BOP segment of the market.

In recent years, multinational corporations (MNCs) have shown an increased interest in low-income market segments; this target market is also sometimes characterised as the bottom- or base-of-the-pyramid market (BOP) as found in Santos & Laczniak (2009). Kirchgeorg & Winn (2006) suggest that the term “bottom” is negative and insulting; more recent work therefore uses the more neutral term “base of the pyramid” (BOP).

Santos & Laczniak (2009) describe this market segment as being made up of people that are “constrained by income”, or lacking in wealth opportunity, literacy, market access and political factors. Louw (2008) describes a BOP person as poor, possibly sick, wearing creased and possibly dirty clothing. This person may be confused with a beggar, is constantly hungry and shows signs of malnutrition.

For the purposes of this study, we exclude the “extreme poor”, a term used by the World Bank as cited in Santos & Laczniak (2009), which refers to, for example, refugees, and denotes persons without any economic resources and therefore not in the sights of commercial engagement but rather dependent on aid. The term “poverty” is explained by Kirchgeorg & Winn (2006) as a situation where a people lack the skills and entitlements to satisfy their basic needs and aspirations

Figure 2: The Economic Pyramid adapted from (Prahalad & Hart, 2002)



Prahalad (2005) affirms that poor market segments have historically been perceived as unprofitable due to low purchasing power. However, poorer markets seem more attractive today, in part due to the notion that traditional developed economies are perceived as saturated and in part due to multiple analyses which demonstrates earnings potential in BOP markets as described in Santos & Laczniak (2009). According to the World Bank, as cited in Kirchgeorg & Winn (2006), more than four billion people live on less than \$1500 a year, three billion people live on less than \$2 per day and over one billion on less than \$1 per day.

Secondary data on BOP theory can thus be divided into four schools of thought:

1. The recent increase in awareness and definition of the so-called BOP as proposed by Louw (2008);
2. The notion that the BOP market is indeed a profitable one and a business case exists for marketing to BOP: as postulated by Prahalad (2005);
3. The criticism of point 2, the notion that BOP is neither a significant market nor a profitable one as argued by Karnani (2007);
4. Literature that suggests challenges or barriers towards engaging with BOP as found in the work of Prahalad & Hart (2002);

2.2 Defining attitude and mainstream attitudes towards the poor

Fishhein & Ajzen (1975) define attitude as a “learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object” (p. 6). Similarly, attitude as described in Cozzarelli, Wilkinson, & Tagler (2001), p.208 is defined as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour”.

More specifically, Fishhein & Ajzen (1975) describe the predisposition as “an enduring organisation of motivation, perceptual cognitive processes with respect to some aspect of an individuals world” (p. 9). In the context of this study, attitude and what distinguishes the concept from other psychological concepts, is its affective characteristic as discussed by Fishhein & Ajzen (1975). They note that the amount of affect for or affect against some object is a conceptualisation of the general attitude concept.

Cozzarelli, Tagler, & Wilkinson (2002) propose that a mainstream attitude, one that embodies a negative stereotypic view of the poor, as well as the belief that the poor is personally responsible for their situation was prevalent amongst middle-class students, and that this attitude is an obstacle to reducing poverty.

Williams (2009) explains how stigmatised individuals are believed to possess some attribute or characteristic that is devalued in a particular context. “Low-income people are stigmatized in a number of ways, including being negatively stereotyped and discriminated against both interpersonally and institutionally” (Williams, 2009, p. 37).

In assessing the works of Cozzarelli, Wilkinson, & Tagler (2001) & Williams (2009), three tendencies were prominent when attitudes of students towards the poor were measured: a) participants may realise that they are exposed to members of an “out-group” and are likely to reflect a prejudice against an out-group member, b) stereotypes about the poor were found to be significantly more negative than stereotypes about the middle class and c) a sense of blaming the poor for being poor in defence of the status quo. This notion is also referred to as achieved as opposed to ascribed.

A further indication of dominant attitudes as found in Hendrickson & Axelson (1985) refers to the dominant ideology in the United States as one that believes each individual should work hard and try to succeed in competition with others. Proponents of these dominant attitudes believe that those who work hard should be rewarded with success based on the notion that opportunity is in fact widespread and not scarce.

Dominant ideology is further described by Hendrickson & Axelson (1985) as being an attitude based on the notion that those who work hard will in fact be rewarded with success and that those who are not economically successful have only themselves to blame, as their failure to succeed is as a result of their own lack of character.

In Prahalad (2002), it is suggested that a shift in mindset is required: from viewing the poor as a problem, to viewing the poor as an opportunity to innovate. A position is postulated that attitudes should change from viewing the poor as wards of the state, to viewing the poor as potential customers and markets.

In critique to Prahalad, Karnani (2007) argues that not many firms manage to serve the poor market successfully due to the simple fact that these customers are too poor and that firms should rather buy from these markets as opposed to marketing to them.

Prahalad (2002) built an argument that business' management still focuses on the middle and upper tiers of the customer market and not the bottom or poorer customers. An open-ended question is offered to explain this statement in the following quotation: "Is it the poor at the bottom of the pyramid who are not ready to innovate or the elites who are unwilling to change their beliefs?" (Prahalad, 2002, p. 8). This indicates the significance of beliefs in this debate although this article does not elaborate on the attitudinal assumptions of this statement.

Another suggestion that attitudes should be considered when examining interaction between firms and markets was observed in research that involved evaluating the sustainability strategy of a firm by Olsen & Boxenbaum (2009). They found that a trade-off mentality was a barrier to marketing to the poor and they quoted an employee in what illustrates this mentality: "A sustainability case is typically something that will involve a huge amount of work, an extensive amount of resources, and a long time horizon before anything at all happens. And part of what does happen is the creation of goodwill and a good feeling and that's just not...that's not a financial thing (p. 110)."

2.2.1 A case for marketing to BOP customers

Anderson & Billou (2007) noted instances of successful entry into BOP by practising the principles of availability, affordability, acceptability and awareness. This said, a view has developed that concerns itself more with the stakeholder view of the firm. This links closely to what Burchelland & Cook (2006), calls Corporate Social Investment (SCI).

In Santos & Laczniak (2009) it was noted that firms are increasingly being encouraged to report on the so-called Triple Bottom Line approach. This is the notion that business should not only serve the interests of its shareholders but consider all the stakeholders in the community in which it operates as well as the environment in which it operates.

This day and age sees firms entering into poor markets where part of the goal is to eradicate poverty, enabling the poor to benefit from economic activity and engagement with the poor and revealing a more inclusive capitalism alongside the profit outcome.

Following on from the above, literature regarding current incentives and barriers towards engaging with BOP will be investigated for further evidence that attitudes are consistently referred to as a barrier for engaging with BOP and verifying that research has not yet specifically assessed managerial attitudes towards BOP.

2.2.2 Financial motivators

Kirchgeorg & Winn (2006) propose that from a financial perspective the following three factors motivate this recent focus of firms towards BOP.

1. They noted the significant size of the BOP market with the entrance into global trade by the likes of China and India and their large but relatively poor populations.
2. Global firms are positioned to unlock the BOP-market's potential. MNCs and their substantial resources, political influence, mass-production capacity and technological competencies were listed as potential ingredients to launch high volume products at low cost to a large consumer base.
3. Bringing the poor into the market solves the global poverty problem. This was presented as an alternative to donor-based models based on the argument that when these programmes are entered into in co-operation with other institutions, relational blockages can be overcome when market principles are applied to BOP.

2.2.3 Ethical and moral motivators

Santos & Laczniak (2009) promote two principles as a means to reach a mutual value situation that is born from collaboration between the customer and firm. "Always treat the humanity in a person as an end and never as a means merely" and "So act as if you were a member of an ideal kingdom of ends in which you were both subject and sovereign at the same time". (Santos & Laczniak, 2009, p. 9).

Santos & Laczniak (2009) argue that the basis for ethical behaviour is when marketers consult their inner conscience and to do good when the opportunity arises. This is further argued to produce actions that result in the happiness of others. Santos & Laczniak (2009) promote the use of “Inherent Fairness” in marketing transactions: To explain this concept, they refer to the concepts of “Veil of Ignorance” and “Original Position” that will enable decision making where self-interest is served whilst minimising social risk due to the fact that the person making the decisions is unaware of his/her position in society.

Santos & Laczniak (2009) deduct two guidelines from their above position: “Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all” and “Social and economic inequalities are to be arranged so that they are both (a) to the greatest benefit of the least advantaged and (b) attached to offices and positions open to all under conditions of fair equality of opportunity” (p. 8).

2.2.4 Barriers towards engaging with BOP customers

Kirchgeorg & Winn (2006) explain four barriers towards engaging with the BOP markets:

1. The absence of pro-poor policies is illustrated by poor customers’ lack of voice and representation, information flow and incentives that do not facilitate policy makers’ increased attention to the poor.
2. Policies without resources and services often do not reach the poor due to limited information by government about the needs of the poor, negative attitudes toward the poor, corruption and lacking systems.

3. Lack of demand is a further barrier that renders services useless.
4. Lastly low levels of buying power do not facilitate acquisition of goods and services.

Kirchgeorg & Winn (2006) propose a market model as a possible solution to low levels of engagement with BOP customers; however, challenges to such a model are noted.

2.2.5 The market model's challenges for sustainable development

Kirchgeorg & Winn (2006) postulate that a market driven solution to the poor will necessitate higher levels of: competition, regulation and governance. A second challenge was raised that pertained to the question of how it would be at all possible to raise the consumption levels of two thirds of the world's population to that of levels in developed countries without triggering a catastrophic ecological impact.

Gardetti (2007) argues that organisational culture and more specifically resistance to change are major challenges towards the "divergent thinking" necessary to innovatively serve the BOP. According to Gardetti (2007) organisations do not only find it difficult to view stakeholders as a source of information, but mutual distrust and ignorance are attitudinal barriers that prevent successful engagement with BOP. These attitudinal barriers tend to be more prominent in an environment of institutional weakness such as the absence of market-driven regulations and education that does not address sustainability effectively.

2.3 Necessary conditions for marketing to the poor

Table 1: Normative Theory Framework and elements of An Integrative Justice: A model for engaging impoverished market segments (Santos & Lacznia, 2009)

Values	<ul style="list-style-type: none"> •Authentic engagement with impoverished customers •Co-creation of value with customers •Investment in future consumption •Interest representation of all stakeholders •Long-term profit management
Grounds	<ul style="list-style-type: none"> •Fairness and equity •Sustainable business enterprise •Moral philosophy and management frameworks
Decision principles	<ul style="list-style-type: none"> •Same as values
Agents	<ul style="list-style-type: none"> •Business executives and decision makers of organisations that engage impoverished segments
Scope	<ul style="list-style-type: none"> •Extends to all stakeholders of the organisation, particularly impoverished customers
Context	<ul style="list-style-type: none"> •Applicable to all marketplace transactions involving impoverished customers, whether in the developing or developed world
Structure	<ul style="list-style-type: none"> •Assumes the legal and regulatory structures of the capitalist system

2.4 Towards refining a hypothesis

Kirchgeorg & Winn (2006) assert certain challenges towards engaging with the poor. Gardetti (2007) advances some of these barriers. Necessary conditions for engaging with the poor as found in Santos & Laczniak (2009) were examined for indications that a more positive attitude towards the poor will facilitate engagement with them.

From the literature review it is not clear to what extent managers' attitudes to poor customers differ from their attitudes towards middle class customers.

It is, however, well described that attitudes to poor people in a social context is negative and in cases less favourable.

It is postulated that business' mindset may be a barrier towards engaging with BOP markets despite the incentives and benefits that literature puts forward for marketing to the poor. Whether this attitude is negative, neutral or indeed less favourable seemed not to be well understood.

Chapter 3 Hypothesis

From the literature review instances of negative and less favourable attitudes towards poor people have been observed. The available research seemed to suggest that academics consistently considered less favourable attitudes towards a prominent, but poor consumer-segment, as a barrier towards engagement despite the well documented argument for engaging with this segment.

The research project postulates that:

- given the literature review wherein negative and less favourable attitudes to poor people in a general-social setting have been observed;
- subsequently a manager in business may hold a similarly negative or less favourable attitude towards a BOP customer;
- despite the incentives for engaging with the BOP market segment;

if managers in a business context have a particular attitude towards a person with middle-class-like economic characteristics (let us call this group A) is at a certain level, and this attitudinal score is compared to that of if managers in a business context who have a particular attitude towards a person with economic characteristics similar to that of a poor person (let us call this group B);

this study hypothesises that a statistically significant difference between the mean attitudinal scores of this samples A & B will be observed.

The null hypothesis states that the sample means of participants A will not differ significantly from that of participants B. The alternate hypothesis will be where a statistically significant difference between the sample mean of participants A and that of participants B is observed where the mean of sample A will be greater than the mean of sample B.

$$H_0 : \mu_A = \mu_B$$

For: $H_1 : \mu_A > \mu_B$

Chapter 4 Research methodology

4.1 Design

The research method took the form of an experimental design. The unit of analysis was the attitudinal score of a sample. The sample's attitude towards a hypothetical potential customer was measured and compared to an independent sample. Blumberg, Cooper, & Schindler (2008) explain how experiments are the manner in which to test if certain phenomena occur under certain conditions and not under others. The dependant variable relates to the attitudinal score that is the unit of analysis of this research.

Also referred to as dependant and independent variables, the independent variable in this study referred to the economic context of the vignette (an illustration of a hypothetical customer) which was presented to participants prior to the completion of an attitude measurement instrument.

Data were collected using a questionnaire that was adapted from the market orientation section of the Psychometric Risk Attitude Scale as used in Pennings & Smidts (2000) and literature on scale construction in (Likert, 1974): refer to appendix A for the questionnaire.

The population, in this case business school students, was be targeted via SURVEY MONKEY (Survey Monkey, 2011), a web based survey tool.

A “Vignette” as used in Sniderman & GrobSource (1996) is a short story in which a fictional actor, in this case a potential customer, is described in terms of economic characteristics and a brief situation that the actor experiences: refer to appendix A for the vignettes used for sample groups A and B.

In Fishhein & Ajzen (1975), examples of similar attitudinal measurement designs by amongst others Likert and Thurstone are noted where attitudes where measured in terms of a sample’s evaluations of unambiguous favourable, neutral and unfavorable objects.

Blumberg, Cooper, & Schindler (2008) describe Lickert type scale as the most frequently used instruments to assess attitudes. This is typically achieved through rating statements that express attitudes as favourable or unfavourable towards a particular object. The design of this project bears close resemblance to the above mentioned methodology with the object in the case of this project being the vignette-type “hypothetical customer”.

The instrument relied on the vignette not displaying any age, racial or gender-related characteristics or as described in Welman & Kruger (2001), nuisance variables that could influence the dependant variable. The aim of this design was to differentiate between sample groups only in terms of their exposure to the independent variable which will focus on the economic characteristic of the portrayed customer for priming or stimuli purposes.

Broadly defined by Welman & Kruger (2001), priming is an intervention by the researcher, towards exposing a sample to something to which they otherwise would not have been exposed to. The exposure to vignettes becomes the basis of separating between the three tests groups, with group A being the participants who received a vignette where the actor has middle-class economic characteristics and group B being the participants who received a vignette where the actor has the economic characteristics of a poor person.

In an effort to mitigate nuisance variables such as age, gender and racial bias of the sample, instruments were at random assigned to the sample where each respondent had a known chance to be exposed to either vignette A or B. Blumberg, Cooper, & Schindler (2008) call this process random assignment with respondents having an equal chance of exposure to each level of the independent variable.

Fishhein & Ajzen (1975) note that more than 500 differing operations for the measurement of attitude exists. No evidence was found of a standardised instrument for the intents and purposes of this research. Having said this, the following guidelines from (Likert, 1974) were implemented towards achieving a useful instrument:

- 1) prior testing of the questionnaire and vignettes was done to narrow down questionnaire items towards isolating only useful items;
- 2) statements were kept concise and straightforward;
- 3) statements related to desired behaviour were used.

In Struwig & Stead (2001), steps for ensuring reliability in internet research are proposed and the following steps were implemented through conducting a pilot study. Respondents in the pilot study were asked to comment on the design, language use, instructions and perceptions of the vignette and make recommendations towards its improvement.

The instrument as seen in appendix A was designed based on inference from the accompanying literature, as illustrated in the table below, whereby certain constructs are proposed as defining of attitudes. With these in mind, the instrument was designed.

Table 2: Design rationale for the instrument

Question	Literature concepts that link to the question construction:
1. WHAT IS THE LIKELIHOOD OF YOU SPENDING MONEY TOWARDS MARKETING THE FIRM'S PRODUCTS TO THIS PERSON?	<ul style="list-style-type: none"> - Viewing the poor as an opportunity to innovate (Prahalad, 2002); - Negatively stereotyping and discriminating against the poor (Williams, 2009); - Having a trade-off mentality towards poor consumers (Olsen & Boxenbaum, 2009); - To view stakeholders as a source of information, not with ignorance but within a market-driven mindset (Gardetti, 2007); - Propensity towards affect for or affect against particular object (Fishhein & Ajzen, 1975); - Viewing poor persons as potential customers (Prahalad, 2002);
2. WHAT IS THE LIKELIHOOD OF YOU MARKETING YOUR SERVICES TO THIS PERSON?	<ul style="list-style-type: none"> - <i>Viewing the poor as part of an out-group with a measure of prejudice and deserving of their circumstance (Cozzarelli, Tagler, & Wilkinson, 2002);</i> - <i>With particular favour or disfavour (Hendrickson & Axelson, 1985);</i> - <i>Negatively stereotyping and discriminating against the poor (Williams, 2009);</i> - <i>Having a trade-off mentality towards poor consumers (Olsen & Boxenbaum, 2009);</i> - <i>Viewing the poor as an opportunity to innovate (Prahalad, 2002);</i> - <i>To view stakeholders as a source of information, not with ignorance but within a market-driven mindset (Gardetti, 2007);</i>
3. WHAT IS THE LIKELIHOOD OF YOU MODIFYING YOUR OFFERING TO BETTER SUIT THIS PERSON'S TASTES AND NEEDS?	<ul style="list-style-type: none"> - <i>To view stakeholders as a source of information, not with ignorance but within a market-driven mindset (Gardetti, 2007);</i> - <i>A sense that the poor has a lack of voice (Kirchgeorg & Winn, 2006);</i> - <i>Collaborating with the poor (Santos & Laczniak, 2009);</i> - <i>Viewing the poor as an opportunity to innovate (Prahalad, 2002);</i> - <i>Engaging with customers in a manner that is explicit through active dialogue (Santos & Laczniak, 2009);</i>

<p>4. WOULD YOU WORK LATE TO ENSURE THAT COMPLAINTS, FROM THIS PERSON AND SIMILAR CUSTOMERS GET RESOLVED?</p>	<ul style="list-style-type: none"> - Propensity towards affect for or affect against particular object (Fishhein & Ajzen, 1975); - To view stakeholders as a source of information, not with ignorance but within a market-driven mindset (Gardetti, 2007); - With particular favour or disfavour (Hendrickson & Axelson, 1985); - Collaborating with the poor (Santos & Laczniak, 2009); - Viewing the poor as part of an out-group with a measure of prejudice and deserving of their circumstance (Cozzarelli, Tagler, & Wilkinson, 2002); - Propensity towards empathy and the extent to which physiological distance is prevalent (Stephan & Finlay, 1999); - Engaging with customers in a manner that is explicit through active dialogue (Santos & Laczniak, 2009); - Ethicality or a sense of inner conscience (Santos & Laczniak, 2009);
<p>5. DO YOU ASPIRE TO HAVE THIS PERSON AS A CUSTOMER?</p>	<ul style="list-style-type: none"> - Viewing poor persons as potential customers (Pralhalad, 2002); - Propensity towards affect for or affect against particular object (Fishhein & Ajzen, 1975); - Having a trade-off mentality towards poor consumers (Olsen & Boxenbaum, 2009); - Viewing the poor as part of an out-group with a measure of prejudice and deserving of their circumstance (Cozzarelli, Tagler, & Wilkinson, 2002); - Viewing the poor as an opportunity to innovate (Pralhalad, 2002);
<p>6. DO YOU REGARD THIS PERSON AS DESERVING OF YOUR TIME?</p>	<ul style="list-style-type: none"> - Viewing the poor as an opportunity to innovate (Pralhalad, 2002); - Viewing poor persons as potential customers (Pralhalad, 2002); - A sense that the poor has a lack of voice (Kirchgeorg & Winn, 2006); - Negatively stereotyping and discriminating against the poor (Williams, 2009); - Engaging with customers in a manner that is explicit through active dialogue (Santos & Laczniak, 2009);
<p>7. WOULD YOU DESCRIBE YOUR ATTITUDE TOWARDS THIS PERSON AS FAVOURABLE?</p>	<ul style="list-style-type: none"> - Negatively stereotyping and discriminating against the poor (Williams, 2009); - Propensity towards affect for or affect against particular object (Fishhein & Ajzen, 1975);
<p>8. WOULD YOU VALUE THE OPINION OF THIS POTENTIAL CUSTOMER REGARDING YOUR PRODUCT & SERVICE?</p>	<ul style="list-style-type: none"> - To view stakeholders as a source of information, not with ignorance but within a market-driven mindset (Gardetti, 2007); - A sense that the poor has a lack of voice (Kirchgeorg & Winn, 2006); - Collaborating with the poor (Santos & Laczniak, 2009); - Having a trade-off mentality towards poor consumers (Olsen & Boxenbaum, 2009);
<p>9. DO YOU FEEL THAT IT WOULD BE IN THE BEST INTEREST OF THE FIRM TO TARGET THIS PERSON AS A CUSTOMER?</p>	<ul style="list-style-type: none"> - Viewing poor persons as potential customers (Pralhalad, 2002); - Having a trade-off mentality towards poor consumers (Olsen & Boxenbaum, 2009); - Collaborating with the poor (Santos & Laczniak, 2009); - Engaging with customers in a manner that is explicit through active dialogue (Santos & Laczniak, 2009);
<p>10. WOULD YOU WANT TO BE ASSOCIATED WITH THIS CUSTOMER?</p>	<ul style="list-style-type: none"> - Propensity towards affect for or affect against particular object (Fishhein & Ajzen, 1975); - Negatively stereotyping and discriminating against the poor (Williams, 2009); - Viewing the poor as part of an out-group with a measure of prejudice and deserving of their circumstance (Cozzarelli, Tagler, & Wilkinson, 2002);

Having illustrated that the final item selection for the questionnaire has visible ties to literature, prior testing of a larger, broader-based questionnaire was conducted. The 24 questions used, were narrowed down to ten, based on the strength of the attitudinal difference between the average score of Group A and group B after the pilot study response data had been analysed. Only questions that delivered a marked difference in scores were selected for the final instrument. The next section describes the nature and motivation behind the pilot study.

4.2 The Pilot Study

As outlined in Welman & Kruger (2001), the reasoning behind a pilot test of the intended instrument is to detect flaws in the measurement procedure such as ambiguity in the instructions, inadequate time limits and test whether the independent variable primes the sample effectively. A second argument for conducting a pilot study is in the case where an instrument was purposefully designed for this study, where a non-standardised questionnaire will be used. This is over and above the face validity of the design that was achieved through asking for feedback from experienced researchers. The pilot study targeted a population of roughly 20 full time MBA students in a class environment where a brief introduction regarding the research was given to the class. The class was asked to complete the instrument and comment on any uncertainty or difficulties they experienced with understanding the instructions.

This was done taking guidance from Struwig & Stead (2001) when they describe a pilot study as a process to help eliminate comprehension and response problems on the side of the respondents. The pilot study achieved a sample size of 8 respondents for group A and 7 respondents for group B. A group C was also included in the pilot study and a sample size of 5 was achieved. The motivation behind including a third group was to expose the population to an economically neutral hypothetical customer, taking guidance from Fishhein & Ajzen (1975) and establishing how this group's attitudes would compare to that of group B.

Independent variable C was not used in the actual data collection phase due to two reasons: a) that the low response rates of targeting the population through e-mail and directing them to the web-based instrument a third sample group would have risked the sample sizes A and B being too small (<30) and would have limited the normal distribution of data points. A second reason for not including group C data, was that the pilot data collection suggested that scores related to group C were significantly lower than even that of group B, possibly suggesting that a totally neutral vignette seemed unrealistic to the respondents, possibly to the point of irritation or lack of seriousness in participation, both of which may explain the low attitudinal scores achieved with pilot group C.

The pilot questionnaire contained 25 question items that included questions directly enquiring how the respondent perceived the hypothetical customer as illustrated in the relevant vignette in terms of demographics. This was done to determine whether the vignette construction satisfied the gender and race neutrality it set out to display. An outcome of the pilot questionnaire was to select a reduced number of questions that a) reduced the fatigue and non-response / completion error; and b) produce a set of items that consistently produced response means where group A's average score per question exceeded that of group B.

Vignettes were mixed in the order a,b,c,a,b,c and so on, and were attached to the instrument. The batch of questionnaires was cut and shuffled and distributed to the sample at random. This approach related closely to the Randomised Group Design Method as mentioned in Welman & Kruger (2001), as most suitable and the simplest organisation of an experiment.

4.3 Population and sample

The population of the study referred to business managers in general. The population frame can be defined as GIBS business school students, all of whom have registered for postgraduate studies in 2010 and 2011. The sampling frame is class lists. The sample was drawn with no regard to unit or frame from the entire population.

The sample was drawn from business school students consisting of 1st and 2nd year MBAs (Masters of Business Administration) and 1st year PDBAs (Postgraduate Diploma in Business Administration). The rationale behind the population was two-fold.

Firstly, inferences from this research were to be expressed in terms of the attitudes of managers and were not limited to any particular grouping of manager due to the prevalent use of business school students as a popular approximation of business managers. Due to the relative certainty that these students were in fact part-time students but full-time senior personnel at organisations as per the admission requirements of business schools.

Secondly, the availability of business school students and the convenient nature of this sample option was a driver of the choice of population and whilst given that the convenience of targeting a population of business school students as a proxy for managers outweighs the possible limited generalisation to a general and universal population of managers. Convenience sampling methodology is described by Struwig & Stead (2001) as suitable when the researcher is constrained for time and resources.

The universe, in this case managers approximated by business school students, is sufficiently homogeneous on the basis of their participation at that firm at a management level, at a particular firm, as such. This design is described by Blumberg, Cooper, & Schindler (2008) as useful when testing relatively new and non-researched hypotheses, as is the case with this research project.

Other studies using similar samples defend their sample selection, such as Zgheib (2005) and Phau & Kea (2007) who have used similar samples and argue that even if they are not managers yet, they are likely to become managers and practitioners in future.

Approximately 500 students that included six MBA classes and two PDBA classes were targeted to complete the instrument. A sample size exceeding 30 per vignette was aimed for, based on the Central Limit Theorem (CLT). CLT as described in Levine, Krehbiel, & Berenson (2010), argues that when a sample size exceeds 30, the mean distribution of that sample is approximately normal.

4.4 Data measurement and analysis

The response of respondents was converted into numerical data by assigning a numerical value to each response. The sum of responses, per respondent, became the attitudinal score of a particular respondent.

Table 3: Response value

Response Option	Response Value
<i>Not at all</i>	1
<i>Unlikely</i>	2
<i>Maybe</i>	3
<i>Probably</i>	4
<i>Absolutely</i>	5

4.4.1 Analytical statistics section

The measurement of the responses was analysed through descriptive and analytical statistical computations. The analytical statistics entailed that a one-tailed t-test was computed to analyse the variance between two independent sample means.

The one-tailed nature of the test was set to test for directionality in the test for variance in that sample A's mean distribution was to be significantly greater than that of sample B. Levine, Krehbiel, & Berenson (2010) describe this test as suitable for testing for hypotheses that test for "particular direction" with the rejection region being location in the lower tail of the distribution.

Rejecting the H_0 in H_1 would demonstrate a significant statistical difference between the mean sample scores of samples A & B and indicate that attitudinal scores of the sample was in fact different to that of a middle class customer than that of BOP customers.

In Welch (1947) the Welch t-test is proposed where unequal variance may exist. The F-statistic output, as necessitated to determine distribution variance between two populations as described in Levine, Krehbiel, & Berenson, (2010) was used to assist in using the correct t-test statistic.

The confidence interval for rejecting the Null hypothesis or H_0 was set at 95% resulting in an alpha (α) at 0.05. This setting was based on the two sample sizes exceeding 30 and therefore satisfying the CLT.

Descriptive statistics were used to indicate the direction of the difference, in other words, which were greater: group A or group B in terms of attitudinal mean, 1st quadrant, median, 3rd quadrant, minimum and maximum scores.

4.4.2 Descriptive statistics section

Albright, Winston, & Zappe (2009), describe histograms as a visual display of the distribution of the sample around a mean. Histograms were computed as a first step in visually assessing for difference and to assess whether a normal or “symmetric” distribution was the case with the respective samples as mentioned by Albright, Winston, & Zappe, (2009).

Boxplots were used to better illustrate the difference in mean distribution. Levine, Krehbiel, & Berenson (2010) discuss a five number summary that includes, minimum, 1st quadrant, mean, 3rd quadrant and maximum value as the foundation of the boxplot. These five numbers, when applied to groups A and B and subsequently compared in table form made for ready comparison of the descriptive data.

The last quantitative analysis was concerned with comparing the per question average responses. This was intended to compare a) the consistency of responses as primed by the vignette and b) the effectiveness of the instrument in delivering responses that differed per sample group.

Finally individual responses for question-options (1) and (2) were compared in terms of the number of respondents who opted for these responses; these were compared as absolute numbers, also as a proportion of total responses.

Chapter 5 Results

5.1 Response

Response for group A was 56 responses with completed questionnaires totalling 89% of the response resulting in $n = 50$. See appendix D.

Response for group B were 50 responses with completed questionnaires totaling 90% of the response resulting in $n = 45$. See appendix D.

Table 4: Comparing the average response (score) per question

Question Number	Group A - Average per question scores	Group B - Average per question scores	Difference in average scores per question (ranked from high to low)
2	3.84	2.62	1.22
1	3.62	2.62	1.00
5	4.12	3.16	0.96
9	4.00	3.09	0.91
10	3.96	3.24	0.71
4	4.14	3.76	0.38
7	4.04	3.71	0.33
8	4.18	3.89	0.29
3	3.56	3.36	0.20
6	4.12	3.98	0.14

The significance of the table on the previous page is the strong link in how Fishhein & Ajzen (1975) define attitude as a “learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object”(p. 6). The reponses are without exeption, less favourable per question with respect to group B when compared to group A.

Table 5:Comparing instances of certain option choices to determine popularity-proportionately

Comparing instances of certain option choices to determine popularity of and the proportion of the total responses.	Group A (N= 50)		Group B (N= 45)	
	Nr of	As % of response	Nr of	As % of response
Respondents selecting at least one option (1)	5	10.0%	12	26.7%
Total (1) responses	6	1.2%	23	5.1%
Respondents selecting at least one option (2)	17	34.0%	29	64.4%
Total (2) responses	35	7.0%	96	21.3%

The above table illustrates the higher occurrence and number of group B respondents selecting option (1) and/or option (2) when compared to group A. This differece is further underlined when comparing the two groups in terms of proportion (%) of total response.

5.2 Descriptive statistics

The statistical package RStudio (RStudio™, 2011) was used to compute the descriptive statistics section of this chapter.

Histograms (figures 3 and 4) illustrate the distribution of attitudinal scores that were calculated based on responses from sample groups A and B. These scores tend towards normality according to the central limit theorem, given that the sample sizes of both group A and group B exceed 30.

Figure 3: Histogram Group A

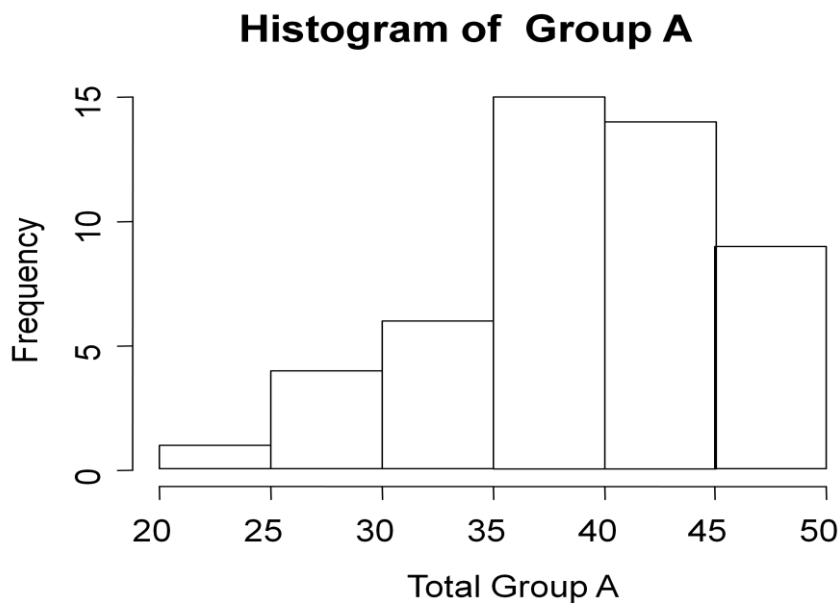


Figure 4: Histogram of Group B

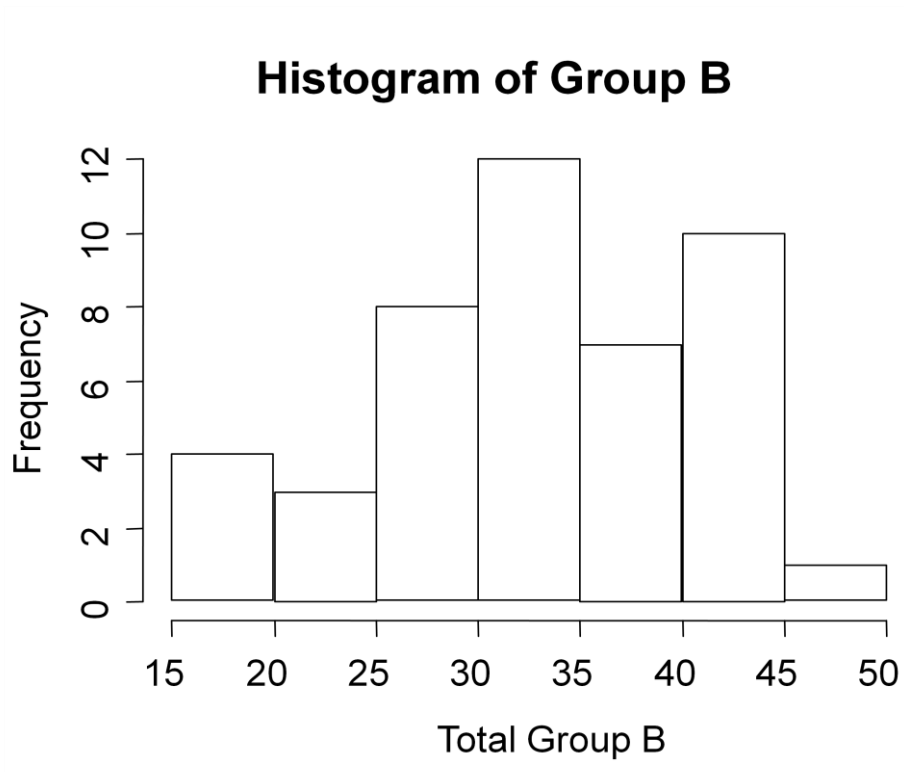


Figure 5: Boxplot comparing distribution of attitudinal scores of group A and group B

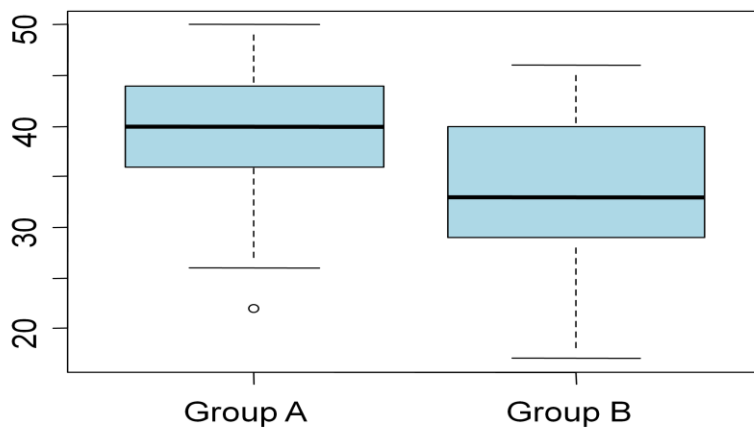


Table 6: Descriptive Statistical Tests output

Statistical Tests	Group A	Group B
Minimum	22	17
1st quartile	36	29
Median	40	33
Mean	39.51	33.42
3rd quartile	44	40
Maximum	50	46
Number of Outliers	1	
Std. Deviation	6.5451	7.9786
Range	22.5	17.46
Variance	42.838	63.659

5.3 5.3 Analytical Statistics

FOR

$$H_0 : \mu_A = \mu_B$$

$$H_1 : \mu_A > \mu_B$$

F Test to compare two variances: Sample A and Sample B.

$F_{STAT} = 0.6729$; numerator degrees of freedom = 48; denominator degrees of freedom = 44; p-value = 0.9096;

Alternative hypothesis: true ratio of variances is greater than 1 at 95 percent confidence interval: 0.4107808

Therefore the $F_{STAT} > F_{Distribution\ of\ \alpha/2}$ results in rejecting H_0 thus accepting H_1 which states that there is a significant difference in the variability of the distribution of the attitudinal scores of Sample A and Sample B.

Table 7: Analytical Statistical Output

WELCH T Test (one-tailed) output: Testing for Statistical Significant Differences in Sample Mean A and Sample Mean B.	
P-Value	0.00006166
Confidence Interval set at 95%	YES
$\alpha = 0.05$	YES
P Value > α	YES
Reject Null Hypothesis	YES
Directional and significant statistical difference by accepting alternate hypothesis.	YES

Chapter 6 Discussion of results

This chapter will aim to illustrate that the design, instrument construction, response and analysis hereof links to the hypothesis as described in chapter three of this research project and that the design aligns with the literature study as found in chapter two of this project. This chapter will critically evaluate the data in terms of validity and interpret the data-analysis as outlined in chapter five of this project and give insight into the meaning of the findings. This process as a whole will also be critically evaluated in terms of limitations.

6.1 Was the response indicative of differing attitudes of managers when faced with a potential BOP customer?

From the initial collection of pilot data the aggregation hereof suggested that managers achieved a higher attitudinal score when answering questions pertaining to their attitude to a potential consumer who displays characteristics that are similar to that of the middle-class, when compared to the attitudinal scores of managers faced with a potential consumer who displays characteristics that reflects that of BOP.

This difference is further signified when the larger population of the actual study was exposed to the research instrument. The boxplot (Figure 5) on page 44 of this research report illustrates this difference.

The observed difference is statistically significant and satisfies the statistical requirements of the hypothesis that this research project aimed to test. See Table 7 in the analytical statistics section on page 46 where hypotheses testing through computing a t-test, verifies this.

6.2 Was the response reflective of the theoretical basis of this project?

The fundamental theoretical basis of this research project is concerned with how people, in a given setting, more especially managers in a business context, display certain attitudes, when confronted with the BOP construct. These attitudes are characterised as possibly negative in a general social setting that involves a poor person as illustrated by Cozzarelli, Tagler, & Wilkinson (2002). This research has found that business school students (group B), as a proxy for managers, do display less favourable attitudes towards a hypothetical potential poor customer, when compared to business school students (group A), who were exposed to a hypothetical potential middle class customer.

Stephan & Finlay (1999) postulate that lower levels of empathy, that is the ability to share feelings and has been linked to attitude as a prerequisite thereof, will be less present in persons confronted with a poor person as opposed to being exposed to a more similar, in the case of group A, middle-class customer due to lower levels of physiological distance.

This research found that the differences between group A and group B is illustrated by consistently lower means, minimum and maximum test statistics, overall range, 1st and 3rd quartile statistics and medians, of group B when compared to group A, refer to Table 4 in the descriptive statistics section on page 41.

In Fishhein & Ajzen (1975), a direct link is drawn between attitude and behaviour. The instrument that was used in this research proposes certain behaviours and the propensity of the respondent towards these behaviours whilst also enquiring from the respondents to rate themselves on certain attitudinal feelings. The fact that aggregated responses per question, refer to Table 4 on page 41, in all cases, display higher scores for group A when compared to group B corroborates this link.

The final evidence that is obtained refers to the data in Table 5 on page 42, where the occurrences where respondents chose options (1) and/or (2). The significance of this section highlights the less favourable attitude of group B compared to that of group A in the following manner. In group B there were 12 respondents (representing 26.7% of the sample) that chose (1) as an option to indicate their attitude, compared to the 5 respondents (representing 10% of the sample) that chose option (1) in group A. Option (1) represented an “absolutely not” in response to a “what is the likelihood of you...” type question. When comparing the total occurrence of option (1) in the response of group B to that of group A, it was observed that group B had selected the (1) option 23 times (representing 5,1% of the total response) compared to group A, who had opted for option (1) 6 times (representing 1,2% of the total response).

With respect to the similarly higher occurrence of option (2) both as an absolute value as well as in proportion to the total response of that group the following comparison was made:

Choosing option (2) as an option to indicate their attitude occurred 17 times (representing 34% of the sample) compared to the 29 times (representing 64, 4% to the sample) in group B. When comparing the total occurrence of option (2) in the responses of group B to that of group A, it was observed that group B had selected the (2) option 96 times (representing 21,3% of the total responses) compared to group A, who had opted for option (2) 35 times (representing 7% of the total responses).

This comparison may be used to illustrate that managers are more likely to respond in a less favourable way more of the time when confronted with a BOP customer as opposed to how managers may respond to a middle class customer.

6.3 Validity of the respondent's attitudinal scores

6.3.1 External validity

In Struwig & Stead (2001) external validity entails the extent to which the results of this study can be applied to other "external" populations. A particular strength of the sample is that business students present a broad representation of senior staff. A further strength of this sample is that the population from which this sample was drawn comprises business school students between the ages 25 – 52, both males and females and is generally diverse in terms of culture and language.

6.3.2 Internal validity

Struwig & Stead (2001) describe the concept internal validity as being concerned with the manner in which the dependant variable (in this case the attitudinal scores of samples A and B), is affected by the dependant variable (in this case the economic context of the vignette).

Internal validity could be compromised by other externalities or “confounding variables” as noted by Struwig & Stead (2001). These variables interfere with the dependant variable to the extent as to cause variance over and above the intended variance via the vignette as priming mechanism.

Table 8 on page 52 describes measures to enhance internal validity.

Table 8: Evaluation of internal validity – adopted from (Struwig & Stead, 2001, p. 137)

Extraneous variables and its influence on validity?	<i>Design precaution</i>	Verdict on Validity
Maturation: Does the test scores change over time due to the natural growth of the person tested?	<i>The research and was conducted on a once-off basis per respondent. Resulting in the unit of analysis representing an attitudinal score at a single point in time.</i>	Valid
History: Were there changes in the independent variable due to events that are unrelated to the independent variable?	<i>Due to the sample not being demographically analysed no inferences can be made in terms of history. The random allocation to a diverse population mitigates this validity risk somewhat.</i>	Arguably Valid
Testing: Are changes in the participants test scores due to influence of prior testing?	<i>Participants where only tested once. The population (as a popular sample) has, however been exposed to other tests (related to other research) recently which may or may not influence their responses.</i>	Arguably Valid
Instrumentation: Changes in the questionnaire during data collection.	<i>The instrument was at no time altered during the data collection phase.</i>	Valid
Regression to the mean: If samples are selected to high of low test scores convergence of scores towards a mean may occur regardless of the influence of an independent variable.	<i>The whole sample, excluding incomplete responses, where used for statistical analysis.</i>	Valid
Selection: The groups are not equivalent to key variables at the start of the study.	<i>Highly equivalent groups were targeted at random, in such a manner that each respondent had a known chance to participate in either group -test A or B.</i>	Valid
Attrition: Participants drop out during the research.	<i>Approximately 90% of participants completed the survey. Only completed questionnaires were used to calculate attitudinal scores. The omission of 10% of the respondents due to their non-completion of the instrument could be argued as non-significant.</i>	Arguably Valid
Diffusion of treatment: Participants communicate information of the research to other participants prior to testing which may influence their responses.	<i>The population was targeted through a web-based instrument. Assuming that they completed the instrument reasonably secluded from other participants makes a case that low diffusion occurred.</i>	Arguably Valid

6.4 Validity of the instrument

Struwig & Stead (2001) note that an instrument is deemed valid if it measures what is intended for. The following criteria were used to assess the validity of the instrument.

Table 9: Evaluation of the instrument's validity – adopted from (Struwig & Stead, 2001, pp. 139-142)

Validity of the instrument	Comment	Verdict
Face Validity: Does the instrument measure what it claims to measure.	<i>The face validity of the instrument was established at the pilot phase of this project. A critique of the instrument may be that part of the design is modified from a risk attitude scale and not a general attitude scale.</i>	Arguably Valid
Content Validity: Does the test's items reflect the theoretical constructs that constitute, in this case attitude.	<i>In chapter 4 the key literature that informs the instrument design is discussed and evidence of building constructs is presented. However, a critique of the design may be that the instrument was not sufficiently presented to experts in the field of attitude measurement, towards evaluating internal consistency of the items contained in the instrument.</i>	Arguably Valid
Criterion-related Validity: Does the instrument correlate with other tests that purport to measure attitude.	<i>Need to compare this instrument to similar tests - Limitations in this regard are that another instrument was never used on the population towards determining whether the output of this instrument correlates with another similar instrument's output. Similarly, no attempt was made to test whether concurrent use of a similar instrument that purports to measure a similar construct obtains similar test scores.</i>	TEST NOT DONE
Construct Validity: Does the construct being tested bear relation to other related variables (as identified in the literature review).	<i>In chapter 4 the key literature that informs the instrument design is discussed and evidence of building constructs is presented.</i>	Arguably Valid
Convergent and discriminate Validity: The test score should correlate with similar tests and should have low correlation with tests measuring a different construct.	<i>Need to compare this instrument to similar tests</i>	TEST NOT DONE

A last measure employed to assess whether the instrument displayed internal reliability was to compute Cronbach's Coefficient Alpha with the two data sets – pertaining to group A and B.

Blumberg, Cooper, & Schindler (2008) describe Cronbach's test statistic as a manner in which to test whether correlation exists between the individual test items. Consistency here indicates that the test is reliable and would be useful for replication.

The instrument when subjected to Cronbach in terms of group A delivered an alpha value where $\alpha = 0.8864911$; in terms of group B, $\alpha = 0.9110575$.

At these levels the instrument's validity and consistency may be considered good to excellent.

6.5 Inferences from the descriptive statistical output

A point of departure for this section entails a comparison of the two histograms as found on pages 43 and 44 of this chapter. What seemed prominent when comparing figure 3 (Histogram of Group A) to figure 4 (Histogram of Group B) is the lower frequency of Group B's attitudinal scores in the area greater than 35 and the higher occurrence of Group B's attitudinal scores in the area lesser than 35.

A second observation is concerned with individually comparing the average score per question of the instrument. Of significance is the fact that in all ten questions used to test for attitude, the average score of group B respondents was less than the average score of group A respondents for each question.

The above observation is corroborated by the boxplot figure 5 on page 44 where a difference between the distributions of A scores and B scores and the concurrent mean scores of the respective groups were observed with group B markedly lower than that of group A.

A fourth and compounding observation relates to Table 6 on page 45 in which the cases of comparing the mean, minimum, maximum median, 1st quartile and 3rd quartile scores of group A and group B, group B scores decidedly lower than the corresponding score in group A.

In chapter three, it was hypothesised that when faced with a potential poor customer, attitudes of managers towards this construct will be less favourable than their counterparts who are faced with a potential middle-class customer. The above four observations all satisfy the above hypothesis.

The second consideration towards testing the hypothesis and essentially accepting the alternative hypothesis H_1 relied on testing whether the difference between the attitudinal mean scores of group A and group B were a statistically significant difference.

The corroborating nature of these descriptive test and statistics infer that the statistically significant difference is indeed basis to infer that the difference between managers' attitudes, illustrated through attitudinal scores, notably differ when faced with potential customers of differing economical capacity.

These observations also clearly illustrate a directional difference with managers' attitudinal scores (group B) towards poorer customers being less favourable than their counterparts in group A.

6.6 Inferences form the analytical statistics

At a confidence interval of 95% where $\alpha = 0.05$, the probability that the mean of A was equal to the mean of B (H_0), or otherwise known as the P Value, was computed to be 0.00006166, which is notably less than the 0.05 confidence level. This resulted in us rejecting H_0 accepting H_1 which states that a statistical significant difference between the mean scores of group A and group B was observed. The relative power of this test statistic infers that the statistically significant difference is indeed basis to infer that the difference between managers' attitudes, illustrated through attitudinal scores, notably differ when faced with potential customers of differing economical capacity.

6.7 The response as indicative of managers' generally less favourable opposed to unfavourable attitudes towards BOP customers

This research project set out to establish through an experimental design, whether managers' attitudes to poor customers is different when compared to managers' attitudes towards middle-class customers.

The literature review for this project suggested that generally unfavourable attitudes have been observed to poor persons in a social context with reference to less favourable attitudes to poor persons a second feature of the secondary data.

The instrument that was used in this experiment tested for attitude based on a five-point scale that had on the least favourable or negative end of the scale, answers that constituted “not at all” whilst the most favourable or positive end of the scale had “absolutely” as the answer option.

The mean of group B centred slightly more favourable than the “maybe” option whilst the mean of group A centred slightly below the “probably” answer on the scale. This infers that group A, with more than 50% of respondents scored at a higher level than “probably”, could be described as a favourable attitude score, group B’s attitudinal score, although significantly lower than that of group A, cannot convincingly be labelled as negative. To further qualify this statement, it was found that only 32% of the respondents in group B scored lower than the “maybe” level. What can, however, be inferred from the data is that group B did appear to score at a less favourable level.

Whilst the research title specifically refers to managers’ attitudes, the population of this study was business school students as a proxy for managers. The use of this popular sample, despite its merits, has particular weaknesses and limitations which limit the extent to which inferences to a more universal population could be made. The following section is concerned with critically evaluating the design and response.

6.8 Design: Limitations and assumptions

Disadvantages and limitations to the experimental design, as described in Blumberg, Cooper, & Schindler (2008), state that experimental designs are not a clear reflection of the real world, in that data are in fact collected from an artificial environment.

This research assumes that due to the admission requirements of business schools, particularly that of the GIBS part-time MBA programme, a large proportion of the students are at a fairly advanced level in their respective organisations. In terms of this project, how well the participant can view the dilemma from a manager's perspective, is questionable and limits the extent to which results from this study may be generalised to the universal business world which may result in business' interest in this particular topic to be limited also. In terms of questionnaire design the following may have been improved upon if we take the following by Struwig & Stead (2001) into consideration:

- a) start with general to specific questions;
- b) have a specific order that will ensure that participants are sufficiently interested in the topic as this will minimise non-response error (including non-completion of instrument);
- c) consider what effect one question will have on another.

The work of Likert (1974) could be critical of the scale construction in this project, with the principle that scales should be purposely constructed towards neutrality. This is done with designing a scale of two halves: one that generates a right-tailed response and one that generates a left-tailed response. Items should then be randomised.

The above limitations are to an extent downplayed given the following two factors:

- 1) The relative strength of the Cronbach's test statistic output when subjected to data from group A and Group B. The instrument designed for this study achieved $\alpha = 0.8864911$ with group A's response and $\alpha = 0.9110575$ with group B.
In Hair, Black, Babin, & Anderson (2010), test statistics between .60 and .70 is described as being at the lowest acceptable level with test statistics ranging between .80 and .90 being described as indicative of a reliable instrument.
- 2) The observed consistently lower attitudinal scores, per instrument item, that group B achieved relative to group A.

Chapter 7 Conclusion

7.1 Did the research deliver on the scope it set out to achieve?

This research set out to establish whether managers' attitude towards BOP customers is less favourable, relative to managers' attitude to middle-class customers. This research project was undertaken based on how literature that discusses BOP as a market option suggests that attitudes may be one of many challenges that firms may experience when marketing to the poor.

Literature also calls for mindsets to change towards a more positive view of poor consumers. Kirchgeorg & Winn (2006) note the shift in business strategy discourse towards BOP and motivate their work by calling on researchers and practitioners to motivate a greater engagement with the poor.

From the literature review it was not clear to what extent managers' attitudes to poor customers differed towards their attitudes towards middle-class customers. It was, however, well described that attitudes to poor people in a social context were less favourable and in some cases even negative. It was postulated that business' mindset may be a barrier towards engaging with BOP markets despite the incentives and benefits that literature puts forward for marketing to the poor. Whether this attitude is negative, neutral, less favourable or similar was not well understood.

Despite current arguments on business strategy that propose the poor is indeed a viable option for business ventures, and that business ventures are a viable option towards solving poverty, negative attitudes towards the poor were presented as a barrier to these ventures in (Prahalad, 2005). This research report set out to explore if other factors causes firms to engage with poor markets, other than the known size and ability of this market to consume.

This report found that a sample exposed to a potential poor customer achieved a lower attitudinal mean score compared to a sample exposed to a middle-class customer. This report therefore argues that other factors, despite market size, may be at work in driving a decision whether to engage with poorer markets. This notion is supported by the manner in which respondents' answers consistently centred on and around a "likely propensity" towards positive actions when confronted with the wealthier customer scenario. This was true also for the average score of all ten questionnaire answers. In line with this when confronted with the poor customer, respondents consistently chose less favourable responses that centred on and around the "maybe-propensity" on the instrument.

Whilst this does not conclusively signal negative attitudes towards poor customers as held by managers, the more frequent occurrence of responses in the "unlikely" *and* "absolutely not" section of the instrument signal negativity. This finding is supported by the similarly higher proportion of responses in the "unlikely" *and* "absolutely not" section of the instrument.

Having said this, the findings of this research project, can with a high level of confidence, report that attitudes of a sample of managers display a less favourable attitude towards a poor customer than is the case with a similar sample exposed to a wealthier customer and tentatively suggests that instances of negative attitudes to poor customers may be observed.

The report positions itself as relevant to business globally and also to the South African business community. Due to the global interest in emerging economies as a destination for investment, South African firms can expect to engage with on average poorer consumers, more so than those in the management ranks of a firm that follow the more traditional investment choice of developed economies.

This report cautions these firms to be conscious of the fact that their management complement at all levels may hold less positive views toward new and existing poorer customers. Firms that have expansion or acquisition goals into dynamic markets on their agenda are cautioned that non-financial and operational factors should not be the only elements that are examined prior to making the investment decision.

This report refers particularly to academics and firms in South Africa firstly due to the sample which is made up of managers, approximated by business school students that either live or work in South Africa. Secondly, South Africa is part of Africa and as such, firms in South Africa in many instances plan to market or already market their goods and services to BOP customers.

A third relevant intersection with South Africa, but also relevant to other dynamic-economies, is the known high occurrence of unemployed and poor citizens and the resulting higher probability that a firm in South Africa is likely to transact with poor customers.

Whilst this report does not actively explore the effects of less favourable attitudes towards poor customers, this report is concerned with creating awareness of this notion amongst practitioners and academia. Given the fact that this study concerns managers, enrolled at a business school, this study claims to be forward thinking, in that tomorrow's academic and business leaders may well be represented in the sample that was drawn.

Whilst this report does not present an opinion on whether negative or less favourable attitudes are in fact ethical or productive, this report is concerned with illustrating that due to noted instances of such attitudes, firms may find it more difficult to innovate, engage and collaborate with the poorer market segments that they target.

And lastly, whilst this report does not claim to describe a correct or appropriate scenario with regard to the attitudes or behaviour of managers, this report does attempt to describe that firms may be less market-driven given the observed instances of managers' less favourable attitudes to BOP.

7.2 Limitations and concerns

Limitations to this study relate mostly to the design trade-off. Given the population, sample and experimental design of this study, despite well motivated, limits the extent to which inferences may be drawn to the real world. The use of vignettes as opposed to real life customers is an example hereof. Having said this, the relative strength of the results mitigates some of the design trade-off. The seeming scarcity of literature that explicitly deals with the particular research topic, leaves certain questions unanswered, such as why less-favourable attitudes to poor customers manifest? This research aimed to spark interest in this area.

7.3 Possible scope for follow-on research

An indication that attitudes are present in decision-making is found in Allphin (2005) and in Elm and Nichols (1993). Ethical attitude is defined in Allphin (2005) as a person's inner-authority and it is noted that it is not clearly defined, but manifests in doubt and uncertainty, which further links with the formal codes of ethics, but is more complex than simply following the rules. In so far as a definition of moral reasoning is concerned, Elm & Nichols (1993) explain this construct as the cognitive skills a manager uses to reason about a moral problem. Research concerned with exploring the links between ethical theories as causal to less favourable attitudes may better explain this phenomenon.

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Appendix A The instrument

Consent Section:

I am doing research on Business Managers' attitudes. To that end you are asked to respond to a number of questions regarding your propensity toward certain hypothetical actions. You will receive a brief illustration of a customer that is to be read prior to completing the questionnaire. Your response will assist researchers to better understand causality factors in attitudes towards customers. The reading of the illustration & completing of the questionnaire should take no more than 10 minutes to complete.

Your participation is voluntary and you may withdraw at any time without penalty. All data will be kept confidential and no identifiable information regarding your person will be collected.

Please be as honest and accurate as possible. Consider your responses carefully.

Any concerns and questions pertaining to this research may be directed to me or my supervisor - our contact details are enclosed.

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Please consider the following potential customer.

VIGNETTE (GROUP A)

Alex is planning to host a birthday for a sibling. Roughly 30 friends & family will be invited to this party. Alex owns a property in Johannesburg, and is planning to host the party at home. Arrangements are made with a firm that specializes in function hire – payment to them was made in advance using a personal credit card. A DJ who, will be paid in cash, is arranged and entertainment for the kids of some of the people invited to this party is also arranged. Alex will take the next two days off from work, on the basis that some time-off is due to Alex because of some business travelling that Alex was involved in off late. During this time-off final arrangements relating to the following has to be done:

- Finalise arrangements and menu planning with a small local catering business.*
- Do weekly maintenance of the pool and garden.*
- Pick up a pair of double-tickets to a concert by a famous international artist (this would be the gift to the sibling).*
- Visit the bank to finalise a small personal loan towards the renovating of the bathrooms that Alex was going to do in any case, but thought that it might as well happen prior to the party, and make the decent looking house that Alex calls home look a touch nicer for when the friends and family arrive.*

VIGNETTE (GROUP B)

Alex spent a large part of childhood in and out of school. Due to the financial burden of being raised in a single parent home this was the norm in Alex's neighbourhood. Alex has many brothers and sisters and must lend hand where possible, even if it means going into town to ask passing motorists for spare change, in return for possibly washing or keeping an eye out for their cars in a nearby car park.

Alex is now faced with the difficult task, yet again, of finding meaningful employment. However, this will have to wait a day as Alex must accompany a frail, elderly family member to the queue to collect a social grant.

Despite the frustration of this trip, the long queues, long walk and endless forms to be filled in, the money they will receive today is of vital importance to the family of six.

Assume that you are a manager in a firm that sells “widgets” (a universal term for a manufactured device) and after sales services and upgrades for this widget and similar widgets. Consider now the potential customer and answer the questions that follow. Answers were required in the below manner.

	Not at all	Unlikely	Maybe	Probably	Absolutely
Mark an option.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1. WHAT IS THE LIKELIHOOD OF YOU SPENDING MONEY TOWARDS MARKETING THE FIRM’S PRODUCTS TO THIS PERSON?
2. WHAT IS THE LIKELIHOOD OF YOU MARKETING YOUR SERVICES TO THIS PERSON?
3. WHAT IS THE LIKELIHOOD OF YOU MODIFYING YOUR OFFERING TO BETTER SUIT THIS PERSONS’ TASTES AND NEEDS?
4. WOULD YOU WORK LATE TO ENSURE THAT COMPLAINTS, FROM THIS PERSON AND SIMILAR CUSTOMERS GET RESOLVED?
5. DO YOU ASPIRE TO HAVE THIS PERSON AS A CUSTOMER?
6. DO YOU REGARD THIS PERSON AS DESERVING OF YOUR TIME?
7. WOULD YOU DESCRIBE YOUR ATTITUDE TOWARDS THIS PERSON AS FAVOURABLE?
8. WOULD YOU VALUE THE OPINION OF THIS POTENTIAL CUSTOMER REGARDING YOUR PRODUCT & SERVICE?
9. DO YOU FEEL THAT IT WOULD BE IN THE BEST INTEREST OF THE FIRM TO TARGET THIS PERSON AS A CUSTOMER?
10. WOULD YOU WANT TO BE ASSOCIATED WITH THIS CUSTOMER?

Appendix B Summarised collected data

Table 10: Data extracted from Survey Monkey

Respondent Nr (group A)												Respondent Nr (group B)													
	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	SCORE		q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	SCORE		
1	5	4	5	3	4	5	4	5	4	4	<u>43</u>	1	1	2	3	4	5	6	7	8	9	10	<u>55</u>		
2	2	2	2	4	4	5	4	5	2	3	<u>33</u>	2	1	1	2	2	2	2	3	2	3	1	<u>19</u>		
3	2	2	2	3	2	2	1	3	2	3	<u>22</u>	3	2	2	2	1	1	3	2	3	2	2	<u>20</u>		
4	5	4	4	5	3	4	5	5	5	4	<u>44</u>	4	4	4	4	5	5	5	5	4	4	4	<u>45</u>		
5	3	4	4	4	5	3	4	5	3	3	<u>38</u>	5	2	3	4	1	1	2	2	2	2	2	<u>21</u>		
6	4	4	5	5	4	4	4	5	4	4	<u>43</u>	6	4	2	4	5	5	5	5	5	4	3	<u>42</u>		
7	3	3	2	3	4	2	3	2	4	4	<u>30</u>	7	2	2	2	2	2	2	3	3	2	2	<u>22</u>		
8	2	3	3	3	4	3	4	4	4	4	<u>34</u>	8	2	2	3	2	3	4	2	3	3	2	<u>26</u>		
9	2	3	2	3	3	3	3	2	2	3	<u>26</u>	9	2	2	2	4	4	4	5	4	3	4	<u>34</u>		
10	4	4	2	3	3	4	4	1	3	3	<u>31</u>	10	5	5	4	4	5	5	4	5	4	3	<u>44</u>		
11	5	5	5	5	5	5	5	5	5	5	<u>50</u>	11	2	2	2	2	2	2	2	2	2	2	<u>20</u>		
12	Incomplete response											12	Incomplete response												
13	Incomplete response											13	1	1	1	2	1	2	3	3	1	2	<u>17</u>		
14	5	5	5	2	5	5	5	3	4	3	<u>42</u>	14	3	3	4	4	3	4	4	4	3	3	<u>35</u>		
15	Incomplete response											15	Incomplete response												
16	2	3	4	5	4	3	4	5	4	4	<u>38</u>	16	4	3	5	4	4	5	5	5	4	4	<u>43</u>		
17	3	3	3	3	3	3	3	3	3	3	<u>30</u>	17	Incomplete response												
18	3	4	5	5	5	5	5	5	5	5	<u>47</u>	18	2	3	4	2	2	4	5	5	2	2	<u>31</u>		
19	4	4	5	5	5	5	4	4	5	4	<u>45</u>	19	Incomplete response												
20	2	3	4	4	3	4	2	4	3	3	<u>32</u>	20	5	4	3	5	5	5	5	5	4	3	<u>44</u>		
21	3	4	2	3	3	4	4	2	3	3	<u>31</u>	21	2	2	4	5	3	4	4	5	3	5	<u>37</u>		
22	Incomplete response											22	2	2	3	3	3	4	4	4	3	4	<u>32</u>		
23	4	3	4	4	4	4	4	4	4	4	<u>39</u>	23	3	2	4	4	2	4	4	3	3	2	<u>31</u>		
24	4	4	3	4	4	4	3	4	4	4	<u>38</u>	24	4	4	5	3	4	5	5	5	4	5	<u>44</u>		
25	4	5	4	5	4	4	5	5	4	4	<u>44</u>	25	2	2	3	5	4	5	4	4	5	4	<u>38</u>		
26	3	4	3	5	4	4	4	5	4	5	<u>41</u>	26	4	4	5	5	3	4	4	5	3	3	<u>40</u>		
27	5	4	3	2	1	2	3	4	5	4	<u>33</u>	27	3	4	4	5	3	4	4	5	3	4	<u>39</u>		
28	3	3	4	4	5	5	4	4	4	4	<u>40</u>	28	3	3	2	4	3	4	3	2	3	3	<u>30</u>		
29	3	4	4	5	5	4	4	5	4	4	<u>42</u>	29	2	2	2	2	2	4	4	3	2	3	<u>26</u>		
30	4	2	4	5	4	5	5	4	4	4	<u>41</u>	30	2	2	3	3	3	3	3	3	3	3	<u>28</u>		
31	4	4	4	5	5	5	2	5	5	5	<u>44</u>	31	4	4	5	3	4	5	5	4	2	3	<u>39</u>		
32	5	5	3	5	5	5	5	5	5	5	<u>48</u>	32	2	4	2	4	3	4	2	2	2	2	<u>27</u>		
33	3	3	3	3	4	4	4	4	4	4	<u>36</u>	33	3	2	3	3	3	4	4	4	3	3	<u>32</u>		
34	4	4	4	4	4	4	4	4	4	4	<u>40</u>	34	2	2	3	4	4	4	3	3	4	4	<u>33</u>		
35	3	4	3	4	4	4	4	5	4	4	<u>39</u>	35	2	2	2	4	3	4	2	4	3	3	<u>29</u>		
36	5	5	4	5	5	5	5	5	5	4	<u>48</u>	36	3	3	3	5	1	3	4	3	4	2	<u>31</u>		
37	5	5	5	5	5	4	3	4	5	4	<u>45</u>	37	3	3	5	5	4	5	4	5	3	4	<u>41</u>		
38	3	3	4	5	5	4	4	4	3	3	<u>38</u>	38	1	3	4	5	2	3	4	5	2	4	<u>33</u>		
39	4	4	4	5	5	5	5	5	5	5	<u>47</u>	39	3	3	4	5	5	4	4	4	4	4	<u>40</u>		
40	4	4	2	4	4	4	4	4	4	4	<u>38</u>	40	2	2	3	5	2	5	4	4	1	3	<u>31</u>		
41	2	3	1	2	1	3	4	4	3	3	<u>26</u>	41	Incomplete response												
42	4	4	3	4	5	4	4	5	4	2	<u>39</u>	42	3	3	5	5	5	5	5	5	4	5	<u>45</u>		
43	Incomplete response											43	3	3	4	3	3	3	3	4	3	3	<u>32</u>		
44	3	4	4	4	5	5	4	4	5	4	<u>42</u>	44	4	4	5	5	3	5	3	5	3	4	<u>41</u>		
45	5	5	5	5	5	5	5	5	5	5	<u>50</u>	45	3	3	4	4	3	4	4	3	3	4	<u>35</u>		
46	3	3	4	4	4	4	4	3	4	4	<u>37</u>	46	4	1	3	5	4	5	5	4	5	5	<u>41</u>		
47	5	5	2	4	5	4	5	4	5	5	<u>44</u>	47	1	2	3	5	4	5	4	4	5	5	<u>38</u>		
48	4	4	4	4	4	4	4	4	4	4	<u>40</u>	48	1	2	3	2	1	3	2	4	3	3	<u>24</u>		
49	3	4	1	5	4	4	4	3	4	4	<u>36</u>	49	1	1	2	4	4	4	3	4	3	3	<u>29</u>		
50	4	4	4	5	5	4	4	5	4	5	<u>44</u>	50	1	1	2	4	4	4	3	4	3	3	<u>29</u>		
51	4	4	4	5	5	4	4	5	4	5	<u>44</u>	51	4	4	5	5	5	5	5	5	4	4	<u>46</u>		
52	4	5	4	4	5	5	5	4	5	5	<u>46</u>														
53	4	5	5	4	5	5	5	5	4	4	<u>46</u>														
54	Incomplete response																								
55	4	4	5	5	5	5	5	5	5	5	<u>48</u>														
56	3	4	3	5	2	5	5	5	2	4	<u>38</u>														

Appendix C R STUDIO output sheet

R version 2.13.1 (2011-07-08); Copyright (C) 2011 The R Foundation for Statistical Computing ISBN 3-900051-07-0 Platform: i386-pc-mingw32/i386 (32-bit); R is free software and comes with ABSOLUTELY NO WARRANTY. Type 'license()' or 'licence()' for distribution details. R is a collaborative project with many contributors. Type 'contributors()' for more information and 'citation()' on how to cite R or R packages in publications.

Descriptive statistics

```
Summary(totalNewA): Min. 1st Qu. Median Mean 3rd Qu. Max. NA's; 22.0,
36.00, 40.00, 39.51, 44.00, 50.00 1.00
```

```
> summary(totalNewB): Min. 1st Qu. Median Mean 3rd Qu. Max. 17.00
29.00 33.00 33.42 40.00 46.00
```

```
> sd(na.exclude(totalNewA)): [1] 6.545108; > sd(na.exclude(totalNewB)): [1]
7.978633
```

```
> var(na.exclude(totalNewA)): [1] 42.83844; > var(na.exclude(totalNewB)): [1]
63.65859
```

```
> range(na.exclude(totalNewA)): [1] 22 50; > range(na.exclude(totalNewB)): [1]
17 46
```

```
> boxplot(totalNewA, totalNewB, col="lightblue", names=c("Group A","Group
B"))
```

Analytical statistics

```
> Tests for equal variance > var.test(totalNewA,
totalNewB,alternative="greater")
```

F test to compare two variances data: totalNewA and totalNewB

F = 0.6729, num df = 48, denom df = 44, p-value = 0.9096

alternative hypothesis: true ratio of variances is greater than 1; 95 percent confidence interval: 0.4107808

Inf sample estimates: ratio of variances 0.6729404;

```
> t.test(na.exclude(totalNewA), na.exclude(totalNewB),
alternative="greater",var.equal=FALSE,conf.level=0.95)
```

Welch Two Sample t-test data: na.exclude(totalNewA) and na.exclude(totalNewB);

t = 4.024, df = 85.319, p-value = 6.166e-05 (0.00006166)

alternative hypothesis: true difference in means is greater than 0; 95 percent confidence interval: 3.572153

Inf sample estimates: mean of x mean of y 39.51020 33.42222

Tests for normality

```
> ad.test(totalNewA) Anderson-Darling normality test; data: totalNewA; A = 0.5425, p-value = 0.1555
```

```
> ad.test(totalNewB) Anderson-Darling normality test; data: totalNewB;
```

```
A = 0.4684, p-value = 0.2379
```

```
>
```

```
wilcox.test(na.exclude(totalNewA),na.exclude(totalNewB),alternative="greater",  
paired=FALSE,conf.level=0.95)
```

Wilcoxon rank sum test with continuity correction; data: na.exclude(totalNewA)
and na.exclude(totalNewB)

```
W = 1576, p-value = 0.0001689
```

alternative hypothesis: true location shift is greater than 0

Test for Instrument Reliability: Cronbach's Alpha

```
cronbach(NEWA) $Alpha; [1] 0.8864911; $N [1] 50
```

```
cronbach(NEWB) $Alpha; [1] 0.9110575; $N [1] 45
```