Validating a Theoretical Model to Measure the Business Success of Microinsurance (MI) in South Africa

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ABSTRACT The objective of the present study was to validate a theoretical model to measure business success of Microinsurance in South Africa. The empirical process of validation is based on literature research. The model was tested amongst 400 employees from four insurance companies offering Microinsurance (MI). 261 questionnaires were filled (a response rate of 62.25%). The validation process aimed to validate the variables that measure each of the business success influences; assess the sampling adequacy, test the applicability of the data for multivariate statistical analysis; determine the importance of each of the MI's business success influences; and test the reliability of each of the business success influences. All these objectives were successfully met. This culminated in the final result, namely the model to measure business success of MI and was proven statistically to be a valid and reliable model that can be used to measure the business success of MI in SA. The research is of value to the Government, Microfinance institutions, Microinsurers, Insurers, NGOs, academics and researchers.

INTRODUCTION

In a developing country like South Africa, many South Africans remain excluded from the formal financial services (National Treasury of South Africa 2011). For this reason the National Treasury has prioritized access to financial services as an important objective in the sector's reform. The challenge of inclusion is proving to be more difficult in the insurance sector, more specifically, in the low-income insurance sector. Microinsurance referred to insurance that is accessed by the low-income population (also known as the mass market), provided by a number of different providers and managed in accordance with generally accepted insurance practices. It forms part of broader insurance market, distinguished by particular low-market market segment focus (National Treasury of South Africa 2011).

According to a study made by the Association for Savings and Investment South Africa on the Insurance Gap, approximately 61% of the low-income households do not have any life/disability insurance to safeguard them against hardship (ASISA 2013). Resultantly, an "insurance gap" consisting of low-income households (those earning less than R3000 a month and belonging to the Living Standard Measure one

to five (LSM 1-5) groups realizes almost 20 million households (ASISA 2013). The 2013 insurance gap, which is the difference between existing life and disability cover and the actual insurance need of South African low-income earners, widened to a staggering R24 trillion compared to R18.4 trillion in 2010 and R10 trillion in 2007 (Dempsey 2013). As a result of large insurance gap identified, National Treasury with other Governmental departments have encouraged insurers and other registered players like MFIs and banks to offer MI products and expand the low income market to reduce the insurance gap. However, a number of challenges have been identified when offering MI products and services (ASISA 2013); premiums are too low and transaction costs too high to reach the low-income market and to maintain a profitable relationship.

Role players face pressure on profitability and the continued development in the low income insurance is uncertain. However, uncertainties also exist how to define business success and how to measure it in the MI industry of SA. The emergence of expanding the low-income market has led to a growing interest of MI and some studies on MI. However, there is limited research done in identifying the business success influences in the MI sector of SA. In this regard, business success can only be managed

once the influences have been researched and identified. Thus, here lies the problem as investigated in the research. A point of departure, however, is to determine the factors that affect business success in the MI industry by scientific measurement thereof. Currently, there is no applied and validated business success measurement model for the MI industry. This research thus aims to scientifically resolve the issue and provide the MI industry with a validated theoretical model to use with confidence to measure their business success.

Objectives

The primary objective of this study was to validate a model dealing with the variables that determine business success for the microinsurance firms and industry. Following that, the secondary objectives are to identify the variables influencing business success of MI, statistically test the data applicability using the exploratory factor analysis; determine the importance and test the reliability of the business success influences of MI.

Literature Review

Trust

Before a relationship can exist, both parties must mutually perceive that the relationship exists (Tobacman et al. 2011). Relationships, therefore, comprise a series of transactions which build an awareness regarding a shared relationship through trust. Higher levels of trust and commitment in turn are associated with higher levels of customer retention, and this leads to increased organizational profitability (Morgan and Hunt 1994). Trust is, therefore, a primary determinant of relationship commitment (Cacares and Paparoidamis 2007). Benamati et al. (2009) state that trust is the willingness of a party to be vulnerable to or dependent on the actions of another party in situations of risk. The trusting relationship between a customer and an organization is associated with overall positive outcomes, and trust in the organisation should increase the benefit derived from transacting with the organisation (Botha and van Rensburg 2010).

However, according to Microinsurance Network (2010), the typical microinsurance customer believes that premiums paid are wasted if a claim is not lodged and no payouts received. In addition, the market often perceives insurers as quick to take their money, but slow to settle the claim. Morsink (2012) after conducting her fields work on microinsurance in India, Kenya, the Philippines and Ethiopia, further, adds that people's confidence in insurance as a product is key to inducing them to take out a policy, and that microinsurance can actually help reduce poverty. Therefore, engaging trust has been central to efforts by the financial services industry especially the insurance sector to win products for their markets (Matul et al. 2013). Cole et al. (2011) highlighted evidence to show that building trust enhances the take up of an insurance product. Further, Dong et al. (2009) identified trust in the management of the community micoinsurance scheme as an important factor influencing households' probability of enrolling and insurance take up. Therefore, trust is a critical factor in fostering optimal relationships between a firm and its customers and enhances organizational profitability (Read 2009; Nguyen and Mutum 2012).

Communication

From time immemorial, trust and communication go hand in hand together and have been vital and essential in all spheres of life. However, sources have revealed that many low-income households show little awareness or no knowledge at all about the low-income cover terms and conditions due to lack of communication (Microinsurance Network 2010). Dempsey (2013) concurs by stating that one of the greatest challenges in the low-income cover market is to explain and thus communicate the benefits of the MI product and services to the low-income households. Therefore, the exchange of information, thus communication is vital for successful firm-client relationships (Barnes 1994:563). Communication is necessary during the interactions and success for a firm-client relationship (Donaldson and OToole 2007:150). Therefore, communication is an important construct for the lifeblood and success of all firms (Van Riel and Fombrun 2007: 1).

Financial Literacy

Although communication can be lacking, it is widely believed that low-income households

do not understand insurance, for this reason they do not buy or renew (Matul et al. 2013). Platteau and Uggarte (2013) add that people with a low level of understanding are less likely to renew, in fact below a certain level, nobody renewed the policy. One of the biggest challenges is to explain the concept and benefits of microinsurance to the low-income households. Insurance literacy is currently recognized as one of the most important hurdles to overcome. Educating the clients on the benefits of insurance is an indispensible ingredient to the success of any marketing actions undertaken by a microinsurance provider. In addition, the low-income households are generally faced with little awareness and lack of financial education (Microinsurance Network 2010). Awareness of microinsurance among the illiterate and low income level market should be instilled (Gaurav et al. 2011). Further, McCord at al. (2012) concurred that training has a positive impact on the purchase of agriculture insurance that South Africa does not have in its consortium of microinsurance products. The latest data from an annual study of South African financial habits and attitudes revealed that there are still high levels of no knowledge of key financial terms (FinScope South Africa 2013). This has been supported by an earlier article released on 26 July 2011 by President Zuma; "SA must rise to literacy challenge" (Zuma 2011). Further, according to International Labour Organization (2012) and South African Insurance Association (2010), consumers are less exposed to insurance. Although South Africa boasts an 88% basic literacy level, a relatively low growth in financial knowledge for e.g. MI is of some concern. Therefore, there is a great need for greater financial literacy in the area. Education in microinsurance aims to help low-income individuals make better risk management purposes and more likely to be an indispensable ingredient to the success of any MI provider (ILO 2012).

Marketing

An important identification aspect of the business success influences of MI relates to its marketing function. The American Marketing Association 2013 defines marketing as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, cli-

ents, partners and society at large" (AMA 2013). Since MI is service-related, the extension of the traditional 4Ps of marketing to the 7Ps (product, price, promotion and place, processes, people and physical evidence) for services marketing as supported by various authors, such as Kotler et al. (2010: 66-67), Boshoff and Du Plessis (2009:9-10) and Brink and Berndt (2008: 17), are taken into account.

Product

The term product includes both physical products as well as services offered to satisfy identified consumer needs (Kotler and Armstrong 2013). In the context of the present study, MI is both a product and a service allocated to low-income individuals. Product decisions are the most important managerial decisions in a firm, seeing the design of need satisfying products has a direct influence on the business success of the firm (Archer et al. 1997: 37). In SA, the most prevalent form of MI is funeral cover followed by credit life insurance (Houggard and Chamberlain 2011). According to Churchill et al. (2012), in a study on pathways towards greater impact on better MI models, products and services for MFIs", the starting point for designing products is the needs and preferences of the target market. The microinsurance product, for instance, a Zimele-compliant product should thus be customised to meet the needs of the low-income earners and to develop as well as to retain consumers.

Price

The purpose of price is to "quantify and express value of the product or service in a market exchange" according to Archer et al. (1997: 53). Research has shown that price has a direct influence on the market share, product positioning, customer loyalty and competitiveness of a firm, hence business success and therefore a very important factor in the marketing mix (Kotler and Armstrong 2013).

While microfinance model based on micro lending can survive with a few clients, the same cannot be said for insurance because it hampers with the basic Law of Large Numbers. Since the premium charged is minimal, it is important that the law of large numbers prevails for the microinsurer to be able to pay up the transaction and administration costs and makes profits. The costs

of insurers to reach the low-income earners in South Africa in the most remote places; villages, suburbs and locations were high, while their premiums to recover these costs have been low (ASISA 2013). The small policies increase the transactional costs of microinsurance products, and put pressure on the price of the policies. According to a research report by (Angove and Tande 2011), Old Mutual South Africa was facing a challenge that a number policies sold by of burial societies were lapsing as premiums were too expensive. A microinsurer must, thus, charge an affordable price to the low-income earners compared to its competitors based on the protection and benefit that the insurer provides to ensure business success.

Place (Distribution)

Place under the marketing mix involves all firm activities that make the product available to the targeted consumer (Kotler and Armstrong 2013). The distribution strategy by insurers in marketing the Zimele microinsurance funeral cover in South Africa is, generally done through insurance brokers and agents (ASISA 2009). However, distribution of these products could be a challenge, particularly in the remote areas not serviced by the industry (ASISA 2009). According to (Joubert and Mafu 2007), undertaking the traditional distribution channel for instance, direct selling the MI products was going to be problematic for the small insurer who has not secured a well-established infrastructure and an extensive footprint nationally. Achieving scale through cost effective and innovative methods of distribution is a challenge facing MI providers in low premium environments to entail profits according to (Smit et al. 2010).

Promotion

Promotions (persuasive communications) are only one of the marketer's activities (Kotler and Armstrong 2013). Promotional strategies include all means through which a firm communicates the benefits and values of its products and services, and persuades targeted consumers to buy them Lee and Kotler (2012). For the purpose of promoting microinsurance in South Africa, the insurance industry does not have a uniform and coordinated branding or promotion to position the Zimele products for its audience (ASISA 2009). The FinMark Trust in 2009, which studies the awareness and usage of financial products in South Africa, found that the recognition of the brand was negligible. This was the main reason behind the lack of Zimele visibility on the market. Designing appropriate promotion strategies for the low-income earners should be the main focus for insurers to enhance business success (Joubert and Mafu 2007).

Physical Evidence

Physical evidence referred to the physical surroundings in which the service is delivered and where the firm and customer interact (Kotler and Armstrong 2013). The problems for insurers are the high costs of covering the needs of the rural poor since there are no systematic methods to reach informal workers, poor people cannot afford the full cost of insurance and there are insufficient government resources to cover recurring expenditure. One of the main reasons for the increased costs is that microinsurance is "difficult" to distribute due to the lack of infrastructure. Sources reveal that the low-income earners are not easily accessible and always busy during business peak hours (ASISA 2009). Therefore, they are hardly to be found and marketed for microinsurance products and services. To give effect to that, Old Mutual SA uses Soccer clubs, cooperatives and church groups to gather the low income households for the microinsurance products and services. Therefore, the more convenient and accessible a microinsurer is, the more successful the firm is likely to be (Joubert and Mafu 2007).

People

People consisted of all the human actors who play a part in service delivery and in so doing, influence the buyer's perceptions (Kotler and Armstrong 2013). These are the service enterprise's personnel, the customer and other customers in the service environment. The cues include the way the actors are dressed, their personal appearance together with their business cards, their attitudes and behaviours (Lee and Kotler 2012). In the microinsurance industry, the human actors are the employees, agents, service providers and the clients are the low-income earners. These influence the customer's perceptions of the service, portrays an impressive professional marketing image, hence success of the microinsurer (MI Network 2010).

Processes

A process includes the actual procedures, mechanisms and flow of activities by which the service is delivered (Kotler and Armstrong 2013). All provide customers with evidence on which to judge the service (Lee and Kotler 2012). The success in the process of the microinsurance policy related to the efficient time of the negotiation between the microinsurance service provider and the client from start until the policy issue (MI Network 2010).

Technology

There has been some concern among microinsurers over the cost of moving from manual processes to automated ones (Microinsurance Network 2010). A manual approach does not establish a sustainable and scalable foundation for expansion as it does not provide the ability to optimize processes and build economies of scale. An insurer unable to reach large numbers of policyholders places itself in a precarious position (Microinsurance Network 2010). Technology maximizes its use in the microinsurance product delivery (Churchill et al. 2012). An inventory of information technologies such as cell phones and internet that are or could be applicable in the extension of insurance services to low-income households are important for the up-and- running of the microinsurance sector (Gerelle and Berende 2008).

Culture

On element of an organisation which a manager needs to understand is the organisation culture (Hofstede et al. 2010). Organisational culture can be defined as the combination of knowledge, beliefs, values, behaviours and practices that influence the manner in which members of a group link think and act (Hofstede et al. 2010). Schein's concept of organisation culture provides a process for uncovering characteristics that may be somewhat hidden and complex (Schein 2010). This discovery process is most effective when each and every member of staff is fully committed to it (Schein 2010). In the MI sector, every employee should be dedicated in providing the microinsurance services to the low-income households (ILO 2013). Thus, culture must be created and nurtured throughout the whole firm according to a recent study done on "leveraging culture to promote viability in MI by ILO (2013).

Human Resources Training and Development

The need for skill development has never been greater at present especially in this era of globalization (United Nation Development Programme 2013). One of the most important skills challenges facing businesses relates to the ability to meet up to the expectations of clients. However, this is not an easy task since each and every client is different and has diverse needs and wants. Considering the emergence of the MI market, most of the microinsurers do not have enough adequate insurance background in the field (Janzen and Carter 2013). Since the microinsurance service providers are unlikely to find people with MI experience, microinsurers should regularly upgrade staff skills according to the Human Development recent report (UNDP 2013) Staff should be competent to explain, sell the product to the low-income earners (Microinsurance Network 2009).

Microcredit-microinsurance Link

Credit life cover relates to insurance that covers the outstanding principal and interest of a loan on the death of a borrower and is being used by providers as a support to their core business (Wipf et al. 2011). Typically, individuals with very little income experience great difficulty in taking advantage of things like savings opportunities and insurance products. Often, low incomes go hand-in-hand with a lack of collateral and credit, making it difficult for the poor to obtain loans, invest, and enjoy insurance protection. Microfinance seeks to eliminate this problem by getting recourse to microinsurance (Njoroge 2008). Often, microfinance services are aimed at helping people start their own businesses, creating the opportunity for increased income and greater financial independence. Offering micro-credit without microinsurance can be bad financial behavior as it is the poor who suffer of such bad product design (Wipf et al. 2011).

Microinsurance Regulatory Framework

It is obvious that from the above challenges, very little has been done in the field of microinsurance in South Africa. Further, there is no "Microinsurance Act" available in South Africa although there is a discussion paper under re-

view. Research shows that more than two third of funeral cover are sold by informal burial societies that are not licensed by Financial Advisory and Intermediary Services Act (FAIS) and, therefore, is classified as an illegal business (National Treasury of South Africa 2011). The greater drive towards consumer protection embodied in the FAIS Act increases the per transaction cost of intermediating financial services, creating a disincentive to serve the lower-income. Concerns about the potential consumer abuse in the low income market, combined with government's commitment under the charter to remove regulatory barriers to market development have prompted the National treasury to reconsider the insurance regulatory framework in South Africa (National Treasury of South Africa 2011). Further, in 2007 the ILO together with the Bill and Melinda Gates Foundation has formed the Microinsurance Innovation Facility (MIF) for giving grants to developing countries including South Africa to develop further the MI industry. However, the absence of a coherent regulatory regime of microinsurance in place hinders the further development of the MI market in South Africa while there is a population of approximately 61% of low-income market which are still untapped (National Treasury of SA 2011). Thus, a Microinsurance Act is urgently needed for the development and welfare of MI in SA.

METHODOLOGY

The methodology used focused on the fifteen above factors identified from literature to bring the theoretical validated model in context. This research identified the measuring criteria pertaining to each one of the factors. These criteria form the basis of the measuring instrument of the independent variables that is the questionnaire distributed to 400 employees from four prominent microinsurers, Old Mutual South Africa, Sanlam, Safrican and Metropolitan insurance firms in Durban, Cape Town, and Johannesburg. The theoretical model was empirically validated using the exploratory factor analysis, Kaiser-Meyer-Olkin, Bartlett's test of sphericity. Further, to determine the reliability of the identified factors of MI, the Cronbach alpha coefficient was used and variance explained to indicate the importance of the variable.

RESULTS

The model to measure business success is shown in Figure 1.

Table 1 shows the KMO measure of sampling adequacy, Bartletts Test of Sphericity, the Cronbach Alpha reliability coefficients and the variance explained by the factors while Table 2 shows the results of the factor analysis.

Product

The factor analysis identified three factors for product. All the statements loaded well on the three factors respectively. The cumulative variance for the three factors amounts to 75.5%. However, the third factor generated a less satisfactory reliability coefficient value and therefore deleted as well as the related questionnaire items.

Price

Two factors were extracted. The statements for both factors loaded heavily onto the respective factor. Factor one generated a very reliable coefficient whereas factor 2 returned a less satisfactory value and was, therefore, deleted as well as the related questionnaire items. The cumulative variance for the two factors amount to 82.2%

Place

The factor analysis identified three factors that were extracted. Factor 1 returned a very favourable correlation coefficient of 0.866 which is higher than the required 0.7, hence showing very reliable and internal consistency. Both reliability coefficient values for factor 2 and 3 were less satisfactory and, therefore, deleted as well as the related questionnaire items.

Promotion

All items loaded onto one factor one. This confirms that promotion is indeed a construct of business success of MI. The factor explains a variance of 75.4% and returns a good reliability coefficient of 0.966

Trust

The factor analysis identified two factors that were extracted. Both factors returned a very favorable correlation coefficient and a cumulative variance of 83.1%
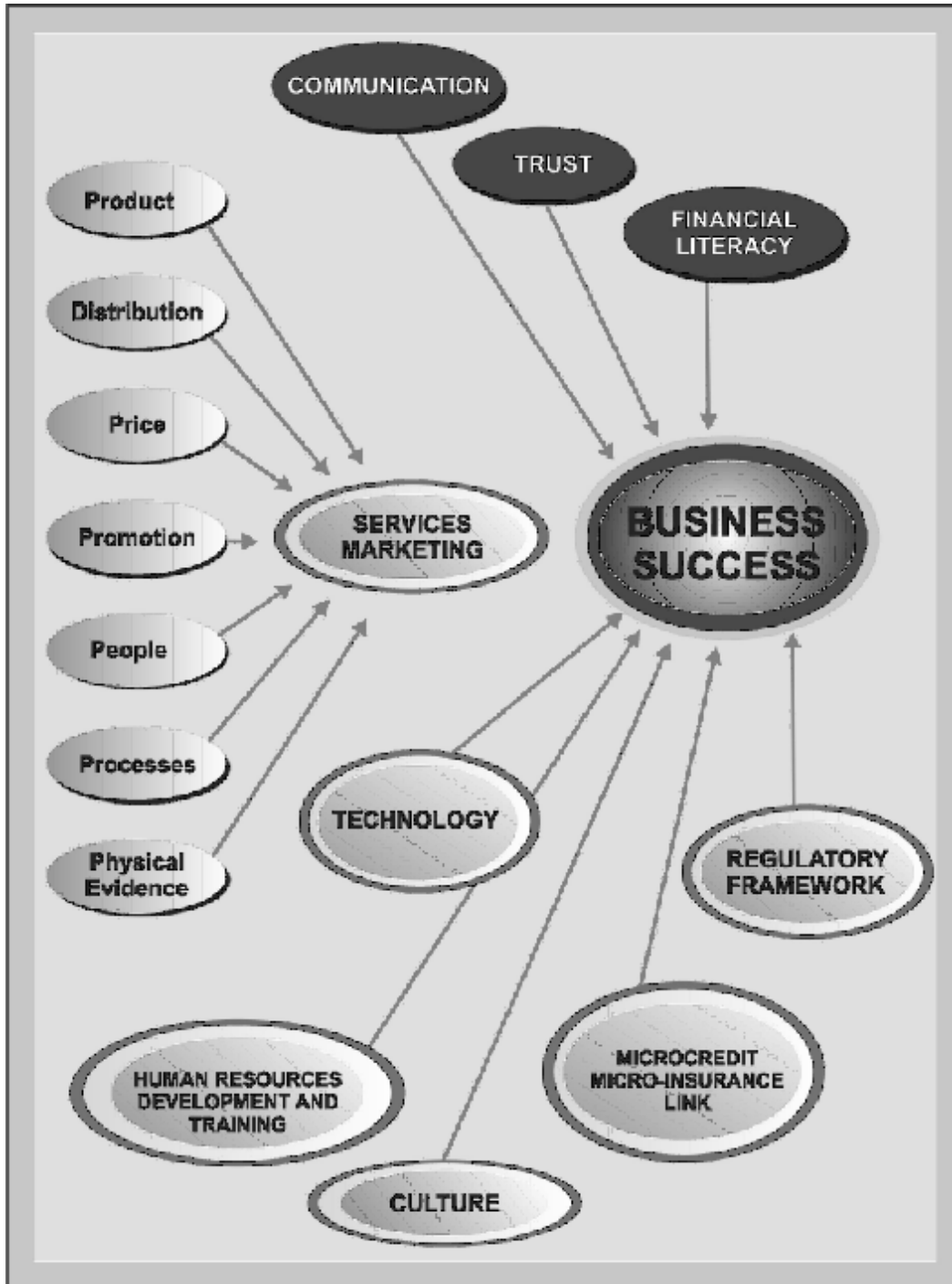
Fig. 1. A theoretical model to measure business success

Table 1: KMO, Bartlett's Test, reliability and variance explained

Variable	Subfactor	KMO	Bartlett	Cronbach alpha	Variance explained (%)
Product (B1)	Information	0.697	0.000	0.835	42.1
	Comparison of design and features		0.000	0.654	18.6
	Feedback timing		0.000	0.392	14.8
Price(B2)	Affordability	0.801	0.000	0.949	64.7
	Positive approach to affordable pricing		0.000	0.542	17.5
Place (B3)	Medium	0.483	0.000	0.866	30.4
	Distribution methods			-1.327	26.7
	Implementation				13.2
Promotion (B4)				0.966	75.4
Trust (B5)	Creation of trust			0.892	67.1
	Reassurance			0.941	16.0
Communication(B6)	Efficient explanation			0.952	71.4
	Mechanism				20.5
Technology (B7)	Customized automated system	0.742	0.000	0.891	58.5
	Optimal use				17.2
Culture (B8)		0.828	0.000	0.986	96.2
MicroCredit - MI Link (B9)				0.912	85.4
MI Regulatory(B10)		0.592	0.000		58.0
Financial Literacy (B11)		0.778	0.000	0.964	93.5
Physical Evidence (B12)		0.505	0.000	0.898	66.6
HR Training and Development (B13)		0.686	0.000	0.924	87.7
Processes (B14)		0.632	0.000	-1.061	57.7
People (B15)				0.995	98.9
Business Success (2 Years) - C	Achieved targets			0.880	48.9
	Growth			0.865	32.7
Business Success (General) - D	Improved system	0.853			59.1
	Investment in people				11.1
	Collateral security			-0.053	8.8

Communication

The factor analysis identified two factors. The statements for both factors loaded heavily onto the respective factor. Factor 1 returned very reliable coefficient. Cronbach Alpha coefficient for factor 2 cannot be calculated and has been discarded since there is no internal consistency and reliability as well as the related questionnaire items. Both factors returned a cumulative variance of 91.9% which obviously exceeds from far, 60% - regarded to be a good fit data (Field 2007:640).

Technology

The factor analysis identified two factors. Statements for both factors loaded heavily onto the respective factor. Factor 1 returned very reliable coefficient of 0.891. Cronbach Alpha coefficient for factor 2 cannot be calculated and has been discarded since there is no internal consistency and reliability as well as the related ques-

tionnaire items. Both factors returned a cumulative variance of 75.7%.

Culture

All the four items loaded heavily on factor one. This confirmed that culture is indeed a construct of business success of MI. The factor explains a variance of 96.2% and returns a good reliability coefficient of 0.986.

Microcredit - Microinsurance Link

All the three items loaded heavily onto one factor. This confirms that Microcredit - MI Link is indeed a construct of business success of MI. The factor explains a variance of 85.4% and returns a good reliability coefficient of 0.912.

MI Regulatory Framework

Three items loaded onto one factor. Cronbach Alpha coefficient cannot be calculated and

Table 2: Factor analysis

Information	Factor loadings	Comparison of design and features	Factor loadings	Feedback timing	Factor loadings
B1.10	0.861	B1.8	0.849	B1.2	0.781
B1.4	0.829	B1.6	0.743	B1.9	0.771
B1.3	0.827	B1.7	0.691	B1.1	0.699
B1.5	0.811				
Affordability	*Factor loadings*	*Positive approach to pricing*	*Factor loadings*	*Medium*	*Factor loadings*
B2.6	0.970	B2.8	0.841	B3.1	0.966
B2.7	0.944	B2.2	0.819	B3.3	0.795
B2.5	0.932			B3.5	0.965
B2.4	0.908				
		Implementation	*Factor loadings*	*Reassurance*	*Factor loadings*
B2.1	0.890	B3.9	0.744	B5.6	0.946
B2.3	0.805	B3.6	0.739	B5.5	0.912
Distribution methods	*Factor loadings*	*Promotion*	*Factor loadings*	*Promotion*	*Factor loadings*
B3.4	-0.870	B4.8	0.974	B4.4	0.936
B3.7	0.766	B4.7	0.968	B4.3	0.862
B3.8	0.750	B4.1	0.966	B4.6	0.808
B3.2	0.598	B4.2	0.955	B4.5	
Creation of trust	*Factor loadings*	*Customised automated system*	*Factor loadings*	*Efficient explanation*	*Factor loadings*
B5.2	0.901	B7.4	0.864	B6.1	0.982
B5.3	0.837	B7.5	0.850	B6.3	0.982
B5.4	0.813	B7.1	0.839	B6.5	0.959
B5.7	0.736	B7.2	0.795	B6.4	0.844
B5.1	0.813				
Microcredit-MI link	*Factor loading*	*MI Regulatory framework*	*Factor loading*	*Financial literacy*	*Factor loading*
B9.3	0.971	B10.3	0.844	B11.1	0.972
B9.2	0.971	B10.2	-0.735	B11.3	0.966
B9.1	0.824	B10.1	0.699	B11.2	0.962
Physical evidence	*Factor loadings*	*HR Training and development*	*Factor loadings*	*Processes*	*Factor loadings*
B12.3	0.989	B13.3	0.970	B14.2	-0.805
B12.2	0.989	B13.1	0.957	B14.3	0.770
B12.1		B13.2	0.879	B14.1	0.701
People	*Factor loadings*	*Achieved targets*	*Factor loadings*	*Growth*	*Factor loadings*
B15.1	0.998	C4	0.924	C8	0.858
B15.3	0.998	C3	0.888	C7	0.857
B15.2	0.990	C5	0.886	C9	0.850
Optimal use	*Factor loadings*	C1	0.852	*Collateral security*	*Factor loadings*
B7.3	0.886	C2	0.785	D4	-0.674
Improved system	*Factor loadings*	*Improved system*	*Factor loadings*	*Investment in people*	*Factor loadings*
D15	0.886	D3	0.760	D13	0.901
D5	0.871	D9	0.724	D10	0.898
D14	0.853	D8	0.723	D2	0.782
D6	0.830			D11	0.704
D7	0.795				
D1	0.788				

* Shading used to differentiate the different construct

has been discarded since there is no internal consistency and reliability as well as the related questionnaire items.

Financial Literacy

The factor analysis identified only one factor and all statements loaded heavily on the factor. The factor explains a cumulative variance of 93.5% and returns a good reliability coefficient

of 0.964. This confirms that financial literacy is indeed a construct of business success of MI.

Physical Evidence

All the three items loaded heavily onto one factor. The factor explains a variance of 66.6% and returns a good reliability coefficient of 0.898. This confirms that physical evidence is indeed a construct of business success of MI
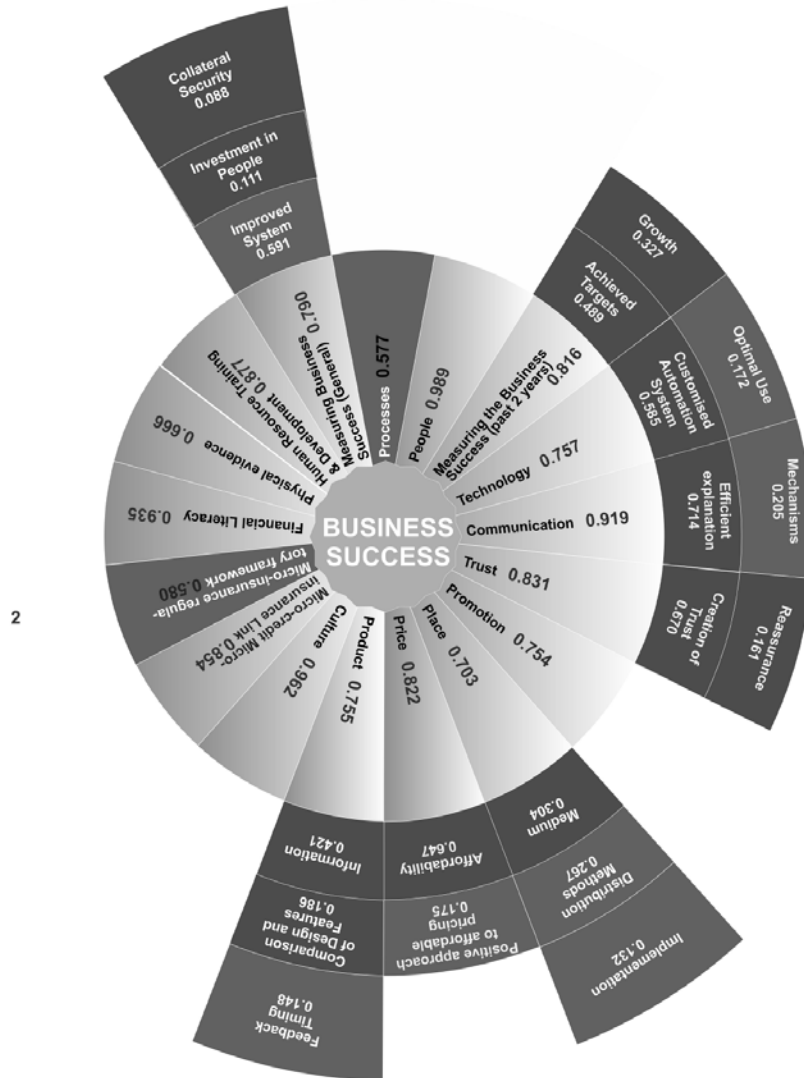

Fig. 2. Validated theoretical model to measure business success in the microinsurance industry of South Africa

HR Training and Development

All the three items loaded heavily onto one factor. This confirms that HR Training and Development is indeed a construct of business success of MI. The factor explained a variance of 87.7% and returns a good reliability coefficient of 0.924.

Processes

Three items loaded onto one factor. Cronbach Alpha coefficient amount to -1.061 and has been discarded since there is no internal consistency and reliability as well as the related items.

People

The factor analysis identified only one factor and three items loaded heavily onto the factor. This confirms that people is indeed a construct of business success of MI. The factor explained a variance of 98.9% and returns a good reliability coefficient of 0.995.

Measuring the Business Success of Microinsurance over the Past Two Years

The factor analysis identified two factors that were extracted. Both factors returned a very favorable correlation coefficient and a cumulative variance of 81.6%

Measuring the Business Success of Microinsurance in General

The factor analysis identified three factors that were extracted. The three factors generate a cumulative variance of 79%. Both factor 1 and 2 have returned an excellent reliable coefficient However, Factor 3 generated a negative correlation coefficient showing unreliable internal consistency and has been discarded as well as the related questionnaire items.

Validated Theoretical Model

Figure 2 shows the Validated Theoretical model. The analyses to validate the theoretical model show that the original theoretical model (see Fig. 1) contains not only the variables, but also additional sub-variables that need to be considered. In addition, the validation analyses also identified a number of questions in the questionnaire that should be omitted from the questionnaire. These questions did not load onto a specific factor or they had low factor loadings (below the 0.40 factor loading set in this study).

DISCUSSION

Most of the factors' cumulative variance returned a 60% or higher regarded to be good fit of the data" (Shukia 2004). Only processes and Microinsurance Regulatory Framework returned 57.7% and 58%; very close to the 60% as stated above. Only factor loadings of 0.4 and higher (Field 2007: 668) were considered to validate the items that measure each of the MI's business success influences. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was utilized to ensure that the samples used were adequate. The KMO provides an index (between 0 and 1) of the proportion of variance among the variables that might be common variance (Darlington 2005: 58). A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors (Santos 1999). A KMO value of 0.6 should be present before factor analysis is considered (Matlab 2010). Values between 0.5 and 0.7 are mediocre and values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb (Field 2007: 735). Bartlett's test of sphericity was used to examine the hypothesis that the variables are uncorrelated in the population. In other words, the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r = 1$) but has no correlation with the other variables ($r = 0$). A value below 0.005 signifies that the data is suitable for multivariate statistical analysis such as exploratory factor analysis (Field 2007: 724). The Bartlett test of Sphericity and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy returned good values for most variables and as such the data was suitable to perform factor analyses (Wuensch 2009). The reliability of the data employed in this measuring instrument is high for most sub-factors and above the minimum requirements (reliability coefficient of 0.58 is satisfactory (Field 2007: 668). This has set the scene to continue with the validation of the questionnaire. The questionnaire that was used was validated (with adaptations) to be a valid research tool. The theoretical model originally developed now evolved into an

adapted and validated theoretical model is ready for application and to measure business success in the microinsurance industry.

CONCLUSION

All the objectives set to validate the model that measure business success of MI have been addressed. As a result it can be concluded that the model (Fig. 2) to measure business success is a valid and reliable one.

RECOMMENDATIONS

From the research, it is recommended that:
- The validated theoretical model is ready for application and is suitable for use in the microinsurance industry in South Africa as it was tested for validity and reliability.

REFERENCES

The American Marketing Association 2013. Marketing Definition. From <http://www. marketingpower. com/aboutama/pages/definitionofmarketing.aspx> (Retrieved on 18 March 2013).

Angove J, Tande N 2011. *A Business Case for Microinsurance: An Analysis for the Profitablility of Microinsurance for Five Insurance Companies*. Geneva: ILO.

Archer AA, Du Plessis PG, Lambrecht IJ, Oosthuizen H, Zungu ND 1997. *Exploring Business Economics*. Cape Town: National Book Printers.

Association for Savings and Investment South Africa 2013. Research and Publications. From <http://www.asisa.co.za/index.php/en/research-publications> (Retrieved on 12 March 2014).

Association for Savings and Investment South Africa 2009. Zimele Secure Your Future. From <http://www.asisa.co.za/index.php/financial-sector-charter/zimele.html> (Retrieved on 3 February 2010).

Barnes JG 1994. Close to the customer: But is it really a relationship? *Journal of Marketing Management*, 10(1994): 561-570.

Benamati J, Fuller MA, Serva A, Baroudi J 2009. Clarifying the Integration of Trust and TAM in E-Commerce Environments: Implications for Systems Design and Management. *IEEE Transactions on Engineering Management*, 57(3): 380-393. .

Gerelle E, Berende M 2008. Technology for Microinsurance. *Scoping Study Research Paper*, 68. Geneva: ILO.

Boshoff C, Du Plessis F 2009. *Services Marketing: A Contemporary Approach*. 4th Edition. Cape Town: Juta and Co.

Botha GJ, Van Rensburg AC 2010. Proposed business process improvement model with integrated customer experience management. *South African Journal of Industrial Engineering*, 2(1): 45-57.

Brink A, Berndt A 2008. *Relationship Marketing and Customer Relationship Management.* Lansdowne, Cape Town: Juta and Company.

Caceres RC, Paparoidamis NG 2007. Service quality, relationship satisfaction, trust, commitment and business-to-business loyalty. *European Journal of Marketing,* 41(7/8): 836-867.

Cai H, Chen Y, Fang H, Zhou L 2009. Microinsurance, Trust and Economic Development: Evidence from a Randomized Natural Field Experiment. *Working Paper* 15396, National Bureau of Economic Research, Boston, MA.

Churchill C, Matul M 2012. *Protecting the Poor: A Microinsurance Compendium.* Volume II. Geneva: International Labour Organisation.

Cole S, Stein D, Tobacman J 2011. What is a Rainfall Index Insurance Worth? A Comparison of Valuation Techniques. *Mimeo.* Boston, MA: Harvard Business School. From <http://personal.lse.ac.uk/stein/BDM_Paper9-27-2011.pdf> (Retrieved on 15 February 2014).

Darlington R 2004. Factor Analysis. From <http://www.psych.cornell.edu/darlington/factor.htm> (Retrieved on 4 May 2013).

Dempsey P 2013. SA Death and Disability Insurance Shortfall Increases to R24 Trillion in 2013. From<http://www.asisa.co.za/asisadocs/mediareleases/2013/20131113% 20SA% 20death%20and% 20 disability% 20insurance% 20shortfall%2 0increases% 20to%20 R24%20trillion% 20in% 202013.pdf.> (Retrieved on 3 February 2014).

Donaldson B, O'Toole T 2007. *Strategic Market Relationships*. 2nd Edition. England: John Wiley and Sons.

Dong H, De Allegri M, Gnawali D, Souares A, Sauerborn R 2009. Drop-out analysis of community-based health Insurance membership at Nouna, Berkina Faso. *Health Policy,* 92: 174-179.

Field A 2007. *Discovering Statistics Using SPSS*. 2nd Edition. London: Sage.

FinScope South Africa 2013. Making Financial Markets Work for the Poor. From<http://www. finmark. org.za/event/launch-of-the-finscope-south-africa-2013-survey-results> (Retrieved on 17 May 2014).

Guarav S, Cole S, Tobacman J 2011. Marketing complex financial products in emerging markets: Evidence from rainfall insurance in India. *Journal of Marketing Research*, 48: 150-162.

Hofstede G, Hofstede GJ, Minkov M 2010. *Cultures and Organizations: Software of the Mind.* 3rd Edition. USA: McGraw-Hill.

Hougaard C, Chamberlain D 2011. Funeral Insurance. *Microinsurance Paper* No.10. Geneva: International Labour Organisation.

International Labour Organisation 2013. Leveraging Culture to Promote Viability. From <http://www. microinsurancefacility.org/emerging-insights/ei74> (Retrieved 17 May 2014).

ILO 2012. From<http://www.tribune.com.ng/news 2013/index.php/en/business-package/2012-10-29-11-36-27/insurance/item/4553-world-insurers-target-one-billion-micro-insurance-customers-by-2020> (Retrieved on 2 November 2012).

Janzen SA, Carter MR 2013. The Impact of Microinsurance on Asset Accumulation and Human Capital Investments: Evidence from Kenya. *Microinsurance Paper* No. 31.Geneva: ILO

Joubert G, Mafu T 2007. Insurers Need New Ways to Sell Cheap Products. From <http://www.lionlife.co.za/

news/archives/25-03-07.php> (Retrieved on 15 January 2011).

Kotler P, Armstrong G 2013. *Principles of Marketing*. 15th Edition. New Jersey: Prentice Hall.

Kotler P, Lee NR 2012. *Social Marketing*. 4th Edition. Washington: Sage Publications

Kotler P, Armstrong G, Tait M 2010. *Principles of marketing: Global and Southern African Perspectives*. 12th Edition. Cape Town: Pearson Education.

McCord M, Steinman R, Ingram M, Jaleran CT, Mateo M 2012. *Landscape of Microinsurance in Africa 2012*. Munich: Munich Re Foundation in association with the African Development Bank.

Matlab 2010. Kaiser-Meyer-Olkin Measure of Sampling Adequacy. Matlab Statistics Toolbox. From <http://webscripts.softpedia.com/script/Scientific-Engineering-Ruby/Statistics-and-Probability/matlab-kmo-35929.html> (Retrieved on 13 February 2013).

Matul M, Dalal A, De Bock O, Gelade W 2013. Why People Do Not Buy Microinsurance and What Can We Do About It. *Microinsurance Paper* No. 20. ISSN 2303-9191. Geneva: ILO.

Microinsurance Network 2010. Providing Insurance of Real Value to the Poor. From <http://www. microinsurancenetwork. org/file/Focus_12EN.pdf> (Retrieved on 17 August 2013).

Microinsurance Network 2009. Organisational Development. From <www.microinsurancenetwork.org> (Retrieved on 13 November 2013).

Morgan RM, Hunt SD 1994. The Commitment-Trust Theory of relationship marketing. *Journal of Marketing,* 58: 20-38.

Morsink K 2012. Confidence Among the Poor Vital for Success of Microinsurance.University of Twente. From <http://www.utwente.nl/veiligheid/en/news/thesis_defence_morsink.doc> (Retrieved on 27 August 2013).

National Treasury of South Africa 2011. The South African Microinsurance Regulatory Framework. From <microinsurance@treasury.gov.za> (Retrieved on 25 August 2013).

Njoroge C 2008. Micro-Finance Must Address Insurance Access. From <http://www.africanexecutive.com/modules/magazine/articles.php?article=3166> (Retrieved on 4 March 2011).

Nguyen B, Mutum DS 2012. A review of Customer Relationship Management: Successes, advances, pitfalls and futures. *Business Process Management Journal*, 18(3): 400-419.

Plateau JP, Uggarte D 2013. Understanding and Information Failures: Lessons from a Health Microinsurance Programs in India. *Research Paper* No. 29, Microinsurance Innovation Facility. Geneva: International Labour Organisation.

Read B 2009. Top tips to build and keep customer loyalty with CRM. *Customer Interaction Solutions,* 27(9): 26-28.

Santos JRA 1999. Cronbach's Alpha: A tool for assessing the reliability of scales. *Journal of Extension*, 37(2): 1-15.

Schein EH 2010. *Organizational Culture and Leadership*. San Francisco, CA: Wiley

Shukia P 2004. t-Test and Factor Analysis. University of Brighton. From <http://www.pauravshukla.com/marketing/research-methods/t-test-factor-analysis.pdf> (Retrieved on 12 April 2012).

Smit H, A, Chamberlain D, Hougaard C, Carlman J 2010. Making Financial Markets Work for the Poor. Reaching the Client. Update on Microinsurance Innovation in SA. From <http://www.cenfri.org> (Retrieved on 4 March 2013).

South African Insurance Association 2010. Publications. From <http://www.saia.co.za/info-center/publications. html> (Retrieved on 12 August 2013).

United Nations Development Programme 2013. Human Development Reports. From <http://hdr. undp. org/en/2013-report> (Retrieved on 5 May 2014).

Van Riel CBM, Fombrun CJ 2007. *Essentials of Corporate Communication*. Abingdon: Routledge.

Wuensch KL 2009. Factor Analysis with SPSS. From <www2.chass.ncsu.edu/garson/pa765/structur.htm> (Retrieved on 25 August 2011).

Wipf J, Garand D, 2010. *Performance Indicators for Microinsurance – A Handbook for Microinsurance Practitioners*. 2nd Edition. Luxembourg: Appui Au Développement Autonome.

Zuma J 2011. SA Must Rise to Literacy Challenge. From <http://www.southafrica.info/about/education> (Retrieved on 4 August 2011).