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Full Length Research Paper

Grooming those microfinance fails to accommodate in: System needs major overhauling

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Microfinance is claimed to be a strong poverty elevation mechanism. Prof Dr. Yunus of Bangladesh is said to be the inventor of the system. But presently, attempts are being made to credit the great Rabindranath Tagore with the idea. However, throughout the world Yunus' model is on excessive try to wipe out poverty from the globe. Whatever is the result, the irony is that the system is being sliced between breeder of menace (capitalism) and proletariat rules (socialism/communism) whereas, the mentor simply wanted to show how the have-nots can be brought into financial system. Capitalism claps for its success, but with some ulterior motive that has forced Yunus to talk against micro-sharks and socialism is the sole loser in the game. But the core issue is poverty elevation and for that, the system needs neutralization of the dog fight of the two isms (socialism/communism). Further, the system has inherent quality that needs to be overhauling so that even those elements still resting outside the orbit of micro financial system can be accommodated. While it registers success, the mankind will see a different world.

Key words: Microfinance, Poverty elevation mechanism, Capitalism, Socialism

INTRODUCTION

Microfinance is widely talked about throughout the world. Through the remote part of Bangladesh, it kicked off its journey and gradually flew through the kingdom of light hovering clouds to spread its message. And the target group easily understood and promptly absorbed its mesmerizing effect. This way credibility of the system was established within comparatively short span of time. In a World Bank estimate of about 160 million from the developing countries at present take assistance through microfinance. (Microfinance) However, credit goes to the Bengali economist Dr. Mohammed Yunus who invented in his factory the idea and threw it with a note that it

would effectively absorb the shock of poverty and empower the have-nots to lift their own status at least economically. (About)

It was all along the highest desire to alleviate poverty from the globe. Many attempts were made in the past in this direction on government as well as public levels, but no high grade positive result was achieved. A look into the distant past, gives credence to the fact that the rage of poverty had somehow been managed one way or the other. Gradually, with the advent of industrial revolution the class factor took viable roots that ultimately invited the menace. Lord Cornwallis' (Permanent Settlement 2014)

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had created a major rift between so-called blue blood and the peasants in this sub-continent. With passes of time when two world wars ensued, there had been a serious catastrophe. The events made the menace more acute. The advent of revolutionary philosophy is very important in this context. It raised hope for the oppressed class. But for one reason or the other it backfired. Majority of mankind faced miseries in a hard way. The fair sex from fragmented Union of Soviet Socialist Republics (USSR) was the direct victim of it. They had to spread their wings around the world in search of possible customers who could use their body. More to say about such miseries! Majority went below the poverty line; the whole world was groping into gloom. But the fact is that poverty is not caused by scarcity of food. Twice the number of calories needed for the mankind is produced in the world. The available food can feed double the existing number of people but one third of it is wasted. It is the system that creates poverty. Food production and distribution is in the hand of a particular brand of people who dance in the tune of capitalism. That's why poverty exists. Hapless people become hopeless. (Nistor 2013) But it is the darkness that follows the light; it is natural that in the belly of hopelessness is born the rays of hope. That hope came up in the form of microfinance, a torch bearer for the neglected segment of the society which was and still is kept outside the orbit of modern banking system for one reason or the other.

But it is not that Dr. Yunus was the first person to work on it. If eye balls are moved on history one can find the Nobel Laureate Rabindranath Tagore (1913) who had the credit to commence microcredit over a century ago. From Kaligram Krishi Bank and Shilaidaha Estate account statements, it is known that out of his philanthropic activities Tagore brought forward idea of free of charge and minus collateral micro-credit to the poor village farmers when he established the bank named Kaligram Krishi Bank at Naogaon district in the year 1905. (Majumdar) According to the concept the borrowers were fragmented into groups, and each group had five members. Interestingly but nobody knows whether it was a co-incidence or Dr. Yunus' five-client group was the replica of Tagore's, which Yunus attempted intentionally to keep out of public knowledge.

Further, there appeared credit unions and lending co-operatives. They have been at work for over hundreds of years. In the fifties and onwards micro-finance institutions (MFIs) were established to grant agricultural credit on subsidized rates to the small farmers on the hope of enhanced income and better yield. Both governments and donors were involved in it. Next came Micro-enterprise credit which made the poor women its target group. It allowed funds for small business and income generation. On that pattern Non-governmental Organizations (NGO) emerged. But Dr. Yunus' modern micro-finance showed a new dimension and left behind all as it

is said.

In recognition of his concept the United Nations marked the year 2005 as International Year of Microcredit (Bank). Today it holds so much importance that it has become bait to any international loan/ grant.

Microfinance and its clients

Microfinance means financial support of various natures like credit, saving, payment, remittances etc for the poor and low income people minus the destitute and those who provide the services are known as MFIs (Micro-finance Institutions). It may be granted to individuals or a group. But the amount involved in this connection is always meager. Why is the amount peanut? The reason may be that he/she who never counts accumulated amount will be in trauma having loan of a big amount. What will he do with the amount? And if he is given at all the way out he will be in constant fear of losing it in transaction. Yet again, will he be able to provide necessary amount to open an account and who will assist him in transaction matter?

On such background it is easy to conclude micro-credit service is not feasible for them. But who will deny them when they are already enjoying the service though in a different way. Since ages there remains a practice of private lending in the subcontinent. The lenders provided the poor service with high interest without any collateral. Names of Muslim Pathans and Hindu Marwaris are referred to in this connection. Not only that the poor form groups but also collect money from the members of the group/s for keeping in safe hand though sometimes the safe-hand turns into rogue and leaves no stone unturned to pocket fraudulently their savings. The amount so collected is given to members turn by turn. Further, they buy gold, jewelry, animals, buildings etc as investment. In case of need they can be turned into cash. They buy commodities and sell them with margin when demand is high. All these are transactions one way or the other. So, there is no reason why they should not be allowed to use micro-credit.

Initially microfinance crawled into a simple loan giving mechanism but it gradually turned into a movement. In the process borrowers' savings were emphasized upon. And an incentive of comparatively big amount of loan was given to those who ensured timely repayment. Micro-finance has no conformity with modern banking system as the former's credit has no collateral. Further, unlike unlimited bank loan its loan amount is very limited. But its recovery ratio is more than 95% (Feiner et al 2014) whereas commercial banks' is 63%. (Mondal 2014) Though, lacks dependable data of poverty affected people, the main target of the programme is to accommodate those belonging to the upper as well as lower sides of the dividing line of poverty. In urban areas, they are

often self employed, house based entrepreneurs and others while in rural areas they are involved in small income-generating activities but in no way the customers are farmers. In majority cases the target group is the fair sex.

But only recently on the land of Dr. Yunus, attempt has been made to include farmers as clients of the micro-finance. The Governor of Bangladesh Bank Atiur Rahman is on high hope that Dr. Yunus' concept will be replaced by Tagore's ideas. (Jacob)

Microfinance in Pakistan perspective

Thirty to fifty million people in Pakistan live below the poverty line. Above half the adult population are illiterates. Primary healthcare facilities are not available to nearly half of the population. Discrimination against women is rampant. (Haq, 2000) To change the destiny of the poverty stricken people NGOs in bulk took up the challenges. In an account, the number of such organizations is between 8000 and 16000 or even more if unregistered NGOs are counted. Their influence is enormous though some of their bad influence cannot be ruled out. Their strategies are counter-productive for Pakistan. (Sukhanver, 2010) Beside NGOs Pakistan Government too adopted various short term and long term steps. The Pakistan Poverty Alleviation Fund (PPAF) may be mentioned in this connection. It was set up in the year 1997 in line with Palli Karma-Sahayak Foundation (PKSF) of Bangladesh. Its target was both urban and rural poor communities. Its purpose was to give flip to their income. It is a private, non-profit and limited company. Various organizations work under its patronage. The parent body and the World Bank contribute to its project. (Financing)

At the start, PPAF signed accord with 5 followers. Later their number increased. They are said to be extending assistance directly to the underprivileged so that they can find ways to enhance income, improve community physical infrastructure and help the women get economic uplift. (Yusuf et al., 2014) It is said that the fund has its own evaluation mechanism to assess its programs. It gets feedback from its own sources. According to Gallup Pakistan survey 2005 in which 3000 households were taken as a sample. Among the sample 1500 were borrowers. The survey results show PPAF micro-credit condensed the overall poverty level by 3.07 percentage points. However, it admitted extremely deprived borrowers' poverty status slightly went up (Yusuf et al., 2014).

A peep into the global financial crisis depicts that the microfinance institutions were hit hard. The lending growth was constrained because borrowing opportunities were shrunk. Profitability graph came down. And the low income customers were charged with high rate of interest. Despite the adverse situation worldwide, the

micro-finance is still the only hope for the poor. Therefore, Pakistan has no other alternative but to take steps to make the system viable. But the major problem is that the Pakistani borrowers are charged with the interest of 22 to 24% (Aazmi (2012)) while Bangladeshi borrowers get loan at flat rate of 11/12%. (Grameen) It may be termed as denial of major benefits to the Pakistani poor. It surely overburdens the target group. But why is it so? An investigation shows that expenditure of the micro-finance institutions in Pakistan is very high. The employees are recruited on high salary with necessary perks. Office decoration is given preference while borrowers' interest is kept on low ebb. Further the source of capital for micro-finance institutions are commercial banks, PPAF Fund and foreign source. The commercial banks lend at the rate of 13 to 15pc while PPAF 10 to 11pc. (Is microcredit working?) And with the foreign funds many 'ifs and buts' are attached. A close look gives impression that these institutions are being run on the existing banking system.

In Pakistan, the Bangladeshi institutions like Association for Social Advancement (ASA) and BRAC (Bangladesh Rural Advancement Committee) BRAC are in operation. They are conducting their operation successfully. In the year 2011, ASA claims to have net income Rs. 140 million. (ASA chief) Interestingly only 8 to 10 persons from Bangladesh are running the show. The rest are employed from local sources. Interestingly, local employees have been showing their class in their performance. The question now is how do the local employees give their maximum labor to the project when it is generally said that the Pakistani workforce are not ready to give their labor properly. The fact is that it all depends on how the institution runs the affairs. A small room is used by the ASA's operational head in Pakistan. The man in the helm of affairs, hardly sit in his office at Pakistan Employees Cooperative Housing Society (PECHS). He regularly visits various sub-offices to overview the performances. Sometimes, he even goes to the lower level operation areas to directly talk to the target group members. All the employees are seen strictly maintaining official timings and other decorum of the institution. If one is seen negligent to his duty he is dealt with sternly.

One morning the former head of ASA Pakistan Mr. Mosharraf Hossain, asked his driver to get ready for a tour into the interior of Sindh. For no purpose he took me with him. He ordered the vehicle to stop on various points. On one point which was a narrow lane filled with filth, he talked to a group of women who looked extremely poor. During the discussion, he marked an elderly woman managing the transaction all along on behalf of the group members and the latter were all dependent on her. Immediately he broke the tradition and asked all the members to physically meet the officer to deal directly. His action was aimed at making all aware of the transaction and thereby developing their individual quality. On another point the person in-charge of the section was not

available in office while his petty cash was lying open. Even the account book maintenance was not proper. Immediately, the person in-charge was called on cell-phone and asked to accompany the boss to Head office in Karachi only to face music but in no way the door of mental reformation was shut in his case. This way every day Mr. Mosharraf was seen moving hither and thither with the sole purpose of seeing his organization running in proper manner.

While floods left a devastating effect on the economy in Pakistan, local NGOs made it a point for proving their loss in the transaction. But it was ASA which showed no such loss, rather profit. (According) Thus, ASA has left behind mark of instance for others but alas, Mr. Mosharraf had to pay price for his sincere work. However, the fact remains that the success of ASA Pakistan is considered to be the triumph of Pakistan and it is bait to acquire foreign aid for the microfinance projects.

Search for mechanism to accommodate the poor

Historical account shows there was a long hunt for an alternative to the Adam Smith's economic theory based on demand and supply. Initially, Adam's effort turned into a good mechanism that could help establish a logical link between two persons. Gradually it was held to be a system in which more people found a way to interact. With the passes of time, one society came closer to another on economic count and thus a nation learned how to use the economic barometer to make progress. This barometer is known as capitalistic theory. According to this theory, country's trade and industry will be in the command of private owners rather than the state. In other words it means free market. (Capitalism) The economic matter should go on its own pace. There must not be any interference in its ongoing process from any quarter particularly the government(s). The reason given is that any hindrance will only derail the process from its journey towards its logical end and thereby the desired result will not be attained. It means it was assumed as a perfect system.

Probably, the initiator of this theory never realized the dangerous turn of his theory that has threatened the existence of the mankind today. It is proved that within womb, the system brews discrepancy among mankind. Poverty germinates within the system. (US 2005) Therefore, the grand majority of mankind is its victim. (Engler 2014) It is said only microscopic minority who never give their physical labor pick the benefit for making their own destiny while the rest who give toil are made to play the role of servers. (Tabor) This led some humanistic souls to look for an alternative and the substitute came out with a bang from the work of none but Karl Marx and Angles.

Karl Marx's theory was proved to be scientific steps for quick advancement of its practical use were taken. It

showed its success which travelled through the Siberian winter and reached various warm points in the globe. But within the turn of the century, the power of the have-nots lost the ground for one reason or the other. The process of change suddenly moved on reverse gear. And over its demise the capitalism revamped with more crude form. And at last the modern micro-finance appeared like the leviathan which proved to be nailed in the last coffin of communist system. In other words this aspect is the eventual mode of excellent capitalism. (Armitstead)

Interestingly like Adam, Dr. Yunus too seems to be not aware of negative consequences of his system. Probably, he did not study why the time machine idea was finally discarded by the greatest scientist Einstein. Yunus was in fact concerned with the fate of the have-nots and thereby on a lookout for a way out for them. He said, "We created microcredit to fight the loan sharks." (MacFarquhar) He came to the conclusion that the existing modern economic system would never accommodate them within the system for changing their fate. So, he put emphasis on a different system. In search of the new one, he had to come down on the ground level for testing its vitality as well as viability. And when he found a ray of hope he threw his system to a group of top bankers who judged it as a sheer madness. But Dr. Yunus was hell-bent not to give in. He continued his efforts. However, he got a leap forward when a foreign journalist picked his case and the outside world evaluated it as positive. On ground he launched the Grameen Bank (rural bank) project to prove his microfinance system's practicability. It looked workable. Soon the message spread like a wildfire and finally it reached the corridor of the world body.

The need not to mention that the world body's key control is in the hands of those who believe in Adam Smith's *laissez faire* economic theory, but not on the hands of Das Capital followers. So whatever comes in conflict with the standard the world body ultimately discards it. In other words, the body is very much choosy in policy making and implementations. Though with the advent of the New World Order everything came within the control of the capitalists, one pinching point remained the cause of discomfort for people in the helm of affair. They had the bitter experience of how the have-nots were enticed to the left lining politics and how the capitalistic barometer was hit hard. The world saw how the mighty Americans were held hostage in Vietnam within the periphery of diehard revolutionary dwarf! How half of Europe crossed the limit of evolutionary myth by conversion into revolutionary deology! So with the fall of USSR, the capitalist block left no stone unturned to tighten the belt so that rebirth of revolutionary process was effectively tackled. But they were aware the tunnel through which the vast majority whose priority was not given preference, might crawl to put up challenge with renewed vigour, remained open. So, they were on the lookout for an effective mechanism to shut entrance of

the subway. Consciously or by sheer chance, Dr Yunus truly provided them the clue. In his microfinance mechanism they found the so-called solution as it somehow engaged the have-nots in a process without any sacrifice on the part of capitalistic heavyweight.

That's why they all praise it and emphasized on its wider implementation. They are not ready to hear anything against it as the first ruling of microfinance is *Don't criticize microfinance*. (Sinclair 2014) They linked the microfinance system with the loan and grant to the needy states. It means one has to implement the system before getting monetary help.

Scanning of capitalism and microfinance

In fact, microfinance is in no way the solution of the problem. (Microfinance) It is just an eye wash. It may be a mechanism to stab communism that challenged the crude capitalism in a hard way but it is not an answer to sky high economic gap between haves and have-nots. The early research reports gave hints that microfinance was ensuring extra-income and more consumption, and that was bringing the borrowers out of the net of poverty. But later it proved to be an assumption.

Recent analysis could not prove it. (Rosenberg 2009) There was no evidence poverty was conquered. But fight is on against it. At least the poor have gotten a toy which they can play with. The data available is that the patience of the downtrodden is not yet exhausted. They value the system and are on the belief that it will change their destiny. The proof is that whenever there is a new offer of microcredit people throng in numbers. No proper advertisement is needed. It means they want to avail new opportunity surely on belief that it will have a positive consequence. But why? The reason is that the intending borrowers had no previous idea about borrowings. They cannot even think of an angel who can come to them with a silver plate. They are accustomed to be neglected. So, an offer to them has changed the whole complexion. Further, media hype has direct impact on them. They, therefore, love the system like a hapless drowning sailor finding a ray of hope seeing a floating straw in the water. They find no other alternative.

An industrialist (capitalist) borrows money from another source and at the same time a microfinance agent (poor) too takes the fund from another source. But why does the use of funds gives different result to them? Why is the former allowed to pocket huge profit whereas the latter earns only a bare minimum needed for survival? Does it mean it is done to maintain class system? Does inherent contradiction exist in the system? Further, interest rate on the borrowed funds is different for those belonging to the upper ladder of the society and for those who are hand-to-mouth. Even a Bangladeshi court raised the issue of high markup rate (Jacob, 2013). The Awami League

government there made the issue a ploy to remove Dr. Yunus from Grameen Bank management. The question is what's the logic behind heavily charging interest from the people from the lower echelon of the society when the source of lending is the same? Argument may be cited on the question of operational cost in favor of heavy interest rate. But there are ways to cut the cost if rational approach is made. But who will tread the path? After all there is a fear a blind may spread prick on the way of others if he is shown the way. Further, when 60% of the lending for industrialists turns into bad loan there appears no question of heavy operational cost. How absurd the logic is! Morality demands downtrodden should be allowed relaxation on the question of interest so that they can come up fast to catch the ladder of progress. But the scenario is just the reverse. Does it not mean lack of sincerity on the part of the lenders who dance on the tune of capitalism?

It is argued that the downtrodden have strode a long way through the microfinance. There may be some truth in it. In one account those who took help from the microfinance were in better off position than those who lacked that assistance. Members of BRAC have boosted their fund users' expenditure capability by 28pc and asset by 112pc whereas, the Grameen Bank clients have enlarged their income barometer by 43pc in comparison with those of the assistance opportunity. (About) The account may be right or may be wrong. Instances from Nigeria and Mexico give painful state of the clients of microfinance. In some cases the per year interest charge touches 125pc mark. (Macfarquhar) Yet for argument's sake if at all it is right, does it mean the goal has been achieved? Have the poor touched the height? If yes, it means the poor have got their due. In other words they are not allowed to see beyond the limit. Here comes the cat out of the bag. If any system allows the poor moving fast to cross the boundary then the day is not far off when rich-poor gap will be shrunk. The capitalist block is very much aware of it. That's why they have allowed the downtrodden to have the oat, not the fresh meal. They must not dig their own grave, anyway.

Further, if for argument's sake, the march of the downtrodden still goes on, then will the microfinance create an atmosphere in which the poor will be able to compete with the rival haves? Has the system required viability as well as vitality to absorb the shock that comes from the side of the haves? Surely not. In fact it is like a wheel chair specially made for the lame. The disabled may be seated on the highly sophisticated chair but he will never be cured of his inability. It leaves impression that the system of capitalism gives only lip service to the solution of the problem. It is in no way sincere to rationalize the system. In fact, capitalism relies on division of the masses on class basis. In equal/equitable distribution of wealth it finds its own death. So, whatever guarantees maintenance of the status quo and at the same time

allows presentation of a piece of bone before the hungry dog is the ultimate choice of the system. At least in microfinance such a signal is present as it somehow has regulated the downtrodden within barometer of a system like carrot and stick game.

Microfinance and dialectical process

According to Dr. Yunus, interest rate on microcredit should vary between 10 and 15%. Beyond that line is considered as Red Zone. Ones who demand mark-up beyond that ratio will be marked as interest sharks. (Macfarquhar) But critics assert it as a simple idea. Operating cost involved in micro financing differs from country to country because of various negative factors. The argument cannot be set aside as a senseless assertion. But when the ratio touches more than 100 marks in any country such an argument looks absurd. There are reports of huge interest rate levied on microcredit. It means interest sharks are there and an element works behind it.

In fact, nothing is static; everything is on motion. Problems arise; ideas develop. Problems of the poor came up and Dr. Yunus found out a solution. It caught the attention worldwide. It is a positive aspect of the system (thesis). But the system is not static. It is in motion. Negative element cropped up from within (anti-thesis). The big business is the torch bearer of that element. Those who initially turned down Yunus' idea as madness all of a sudden discovered in it a new taste. It was sweet. It was like a game-riskless of course. So, they jumped up into the fry pan; invested a big chunk of funds and earned huge profit at the cost of the poor and the poorest. There appears much hullabaloo against the practice. (Karmani) Initially sporadic dissent voice was heard but nobody cared. Even people with microfinance background started feeling uneasy on the behavior of the renowned bankers and the intermediaries. On their censure, the critics were kept outside the orbit of any seminar on microfinance. In those seminars they intended to show only the positive side of microcredit. (The dark side 2012) Yet criticism did not stop. Gradually the barometer of bitter tone is widening. In that tone it is said, Dr. Yunus is portrayed as the good Shepherd but his flock go berserk. (Ibid)

There appeared certain criticisms that link the wrong practices of the big business. They consider them as the blow to capitalism. They describe microfinance as the savior of capitalism and regret the system that infused necessary blood to the vein of capitalism which suddenly faces severe onslaught. They want rational capitalism but find the gloom around, thereby arresting the ongoing wrong course. They fear continuous failure of capitalism to feed the world poorest may turn the clock in favor of

communism. Communism or no-communism the platform can't remain vacant. It is for sure something new must get birth out of the clash between the thesis and the anti-thesis. It means the two elements will be synthesized. This way dialectical process will complete its round. Microfinance will appear in new format. Who knows if the new brand of microfinance may part ways its link with capitalism!

CONCLUSION

Through micro help to the basket weavers, Dr. Yunus showed the way and Grameen Bank came to fore. This enticed the financiers in Geneva and Washington to invest and thus initially they earned reasonable profit allowing poverty to wither. But the later development has failed to leave evidence poverty has been reduced. (Effectiveness) There are reports that 200pc interest rate are being charged for a tiny loan in the name of microfinance. The reason is that the holy men are not in the helm of affairs of microfinance. The sector has been seized by the exploiters who instead of helping the poorest segment of the society have misused the sector for their own business. They amassed huge profit. Deutsche Bank, Standard Chartered Bank, Citybank and the like are named among the ultimate beneficiaries. (Armitstead 2012) So, it is wise to keep the big sharks (modern banking) away from the microfinance system so far operation is concerned. The investment from their side will only derail the whole system.

It will be wise enough to rationalize the yearly income of the MFIs through distribution among the loner body and the borrowers on the basis of percentage decided through regulations. One NGO in Pakistan is reported to have earned 25pc of its investment. (ASA) So, there is no reason why others cannot do the same. The share of the borrowers in the distributed amount will be deposited in saving account on which they (borrowers) will be allowed interest. Money from that saving account will be invested to accommodate new borrowers. This way the poor will be eligible for two-way income. At the same time new fund will be generated from within. This way, gradually microfinance will move towards independence.

Further all the commercial banks should contribute a chunk of fund proportionately, as is determined by the top bank of the country, from their hefty yearly income to a fund maintained by the top bank to be used for microfinance. Against that chunk of money no interest will be paid to the parent banks. And that money will be channeled as interest free loan to the micro-credit organizations. At this stage, strong and properly punishable laws must be enacted to deal with the persons misusing the fund. The creditors will be allowed to charge minimum interest from the poor agents of the microfinance system. This way the high interest rate in the existing

microfinance system will be marginal. Further, following the interest free loan to the MFIs it will be rational to make a provision to bring within the fold the most neglected segment of population who are still outside the microfinance radius even if they have to include in debit pool. It is, of course, difficult but not impossible. Already two NGOs in Bangladesh have already made a try. One of them created a fund out of profit and distributed it among the people like beggars. Taka 1000 per head was fixed. The result was not so discouraging. Only twenty percent amount went into bad debt. It means the recovery rate was 80pc. (Discussion) The result indicates that this segment can be accommodated into the fabric. Though it will be difficult to include them in the entrepreneurship criteria, their physical power can be utilized to justify their inclusion in the system. Initially, less number of such people will be added to the program as a test case and gradually more of such cases can be included in the program. After all it is the responsibility of the society, not the individuals alone, to feed the pauper.

Commercial banks may raise eyebrows on the idea and argue that maximization of fund is one of the main targets of every commercial bank. So, under what ground would their income be slashed? Surely the argument bears weight. Further it would have been weightier if the commercial banks could have evolved an effective mechanism towards bad debt scheme. It would surely ensure further maximization of income. But the reality is just the opposite. The bad debt scheme has happily been accepted. But why is it so? Is it because the rich people are eligible to such a benefit? Probably the capitalistic lesson is not to allow the big shots to turn pauper and the pauper to go rich. That's why the possible raising of eyebrows on the question of contribution to the micro-finance fund.

But in reality on such contribution the commercial banks would not face monetary crunch. Only what is needed is to tight the belt around the loan defaulters and to take lessons from the microfinance system as to how to recover the invested money. Meanwhile, much water has drifted down the river Indus. Even the promoters of capitalism have realized the need of microfinance at least for the safety of the free market system. (Armitstead) Microfinance system needs rationalization. And for that it needs charity. Charity can come only from the moneyed, not from the pauper. Without proper microfinance the downtrodden section of the society would not be brought into the modern economic barometer. Yet, if they are not brought within the barometer who knows if history would not repeat itself. The downtrodden section may prove to be a threat and can be used against capitalism again. One can remember once this neglected class rose up and established communism in Russia and elsewhere. Yet again this section took active part in falling down communist government in Poland. What's a magic in the force of the downtrodden!

Conflict of Interests

The authors have not declared any conflict of interests.

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Full Length Research Paper

An investigation of online review helpfulness based on movie reviews

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This paper aims to propose a conceptual model to investigate the determinants of review helpfulness for movie reviews based on uncertainty reduction theory and review quality framework. Model of customer review helpfulness is built based on review quality framework. Movie reviews from IMDB (<http://imdb.com>) are collected. The proposed hypotheses are tested with logistic and multiple linear regressions. The results show that review extremity, review length, review timeliness, and review reputation have significant effects on the helpfulness of movie review. In addition, in extreme reviews, positive reviews are more helpful to customers than negative reviews. This study provides an in-depth understanding of what makes movie reviews helpful for customers. The findings have implications for research on information quality in electronic commerce, and provide online retailers with suggestions for developing reviews guidelines and designing recommendation system.

Key words: Online review, review helpfulness, movie review, uncertainty reduction theory.

INTRODUCTION

As a new type of word-of-mouth information, online consumer review is playing an increasingly important role in consumers' purchase decisions (Chen and Xie, 2008; Cheung et al., 2008). Online user reviews are regarded as digitalized word of mouth (Dellarocas, 2003) and found to be influential on product sales and consumer decision-making (Duan et al., 2008; Lee et al., 2011). The researches about online reviews are increasingly available in recent years (Chen et al., 2008; Chen et al., 2004; Chevalier and Mayzlin 2006; Clemons et al., 2006; Ghose et al., 2007; Hu et al., 2008). Researchers have studied the impact of online reviews on the product sales and researches have shown that customer reviews have a positive influence on sales. Online product reviews contains amount of emotional information and customers'

opinions to the products and these opinion information are important for customers to make purchasing decision. In order to understand the word of mouth of product and compare the word of mouth between different brands, Pang et al. (2002) and Turney (2002) studied the issue of sentiment analysis and opinion mining using different methods; while Liu et al. (2005) and Popescu and Etzioni (2005) considered this issue in details and extracted customer's opinion on each product feature and presented the review summary in form of feature-opinion.

This review summary is helpful for customer to judge and compare different products from the point view of product feature and for seller to master the customer's opinion on products in time.

However, as the availability of customer's reviews

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becomes widespread, the strategic focus shifts from the mere presence of customer reviews to the reviews evaluation and use of the reviews (Susan and David, 2010). In the literatures of informatics, information has strong linked with uncertainty (Nelson, 1970), and high-quality information can reduce the uncertainty for customers in purchasing decision. In order to reduce the product quality uncertainty, customers often need to seek perceived helpful reviews about the product. Unfortunately, there are a large number of reviews for a product, and it is difficult for customers to evaluate the helpfulness of reviews. Therefore, it is very important for online retail sites to provide and recommend more helpful reviews, which provide greater potential value to customers. Presently, most online retailers provides review "helpfulness" vote mechanism to help customers to recognize helpful reviews. However, the helpful votes are not a useful measure for evaluating recent reviews because the helpful votes are accumulated over a long period of time, and hence cannot be used for review placement in a short-term time (Ghose et al., 2007). It is necessary for online retailer to analysis what constitutes a helpful review and to design a more effective review recommend system.

What makes an online review helpful to customers and how to classify helpful reviews and unhelpful reviews have attracted more and more researchers in recent years. However, most researches are from computer science field and these researches have not provided enough theoretical foundation for how factors impact on the helpfulness of reviews. Based on the information economics, Susan and David (2010) develop and test a model of customer review helpfulness. In a model, Susan and David (2010) analyze the effects of review extremity and review depth on the helpfulness of review.

This study indicated that the product type (search goods and experience goods) affect the perceived helpfulness of the review. Although the authors studied this issue effectively and drew meaningful conclusions, they only considered the review extremity and review depth in the research model. Some factors that might influence the review helpfulness are not concluded in the model. For example, according to the persuasive communication theory, communicators high in expertise and trustworthiness tend to be more persuasive than communicators with low standing on these factors (Ajzen 1992). So, the source characteristics might influence the perceived helpfulness of reviews. Additionally, Susan and David (2010)'s research shows that customers have different perception of the helpfulness of reviews between search goods and experience goods; thus, it is necessary to develop and test a full research model for single product type.

Based on the discussion above, this study focuses on an experienced goods-movie, and attempts to look at factors that impact on the helpfulness of online movie reviews. Employing the prior studies about the review

quality, we develop and test a theoretical model. The model incorporates five major factors, namely: review extremity, review objectivity, review length, review timeliness, and reviewer reputation. Drawing on the uncertainty reduction theory, we will examine the effects of five factors on the helpfulness of movie review.

THEORETICAL FRAMEWORK AND HYPOTHESIS

Uncertainty reduction theory (Berger and Calabrese, 2006) provides a relevant foundation to address the role of online customer reviews in the consumer decision process. Customers often lack enough knowledge of a product or of the outcomes of consuming that product. In order to reduce the purchasing risk associated with the uncertainty and maximize the outcome value, they will seek information on product quality and seller quality. Consumers can reduce the quality of uncertainty by drilling down to obtain more details about these information (Hu et al., 2008). For search goods, it is relatively easy to obtain information on product quality prior to interaction with the product. Consumers can learn about the value of the products by trying to understand the returns policy and product warranty. However, for experience goods, it is relatively difficult and costly to obtain information on product quality prior to interaction with the product. Consumers still need to actively seek other information, such as online reviews to reduce the high purchasing uncertainty. According to the uncertainty reduction theory, the reviews that can reduce the purchase uncertainty are perceived helpful for customers. In this paper, we investigate what make helpful reviews through analyzing how different factors help consumer to reduce the product quality uncertainties.

Barbara and Peter (2005) defined perceived helpfulness as composed of two dimensions: content quality and source quality, as shown in Figure 1.

As mentioned above, Chen and Tseng (2010) developed a review quality framework and employed an effective information quality framework. The review quality framework comprised nine dimensions. The experiment for the performance of the IQ dimensions indicated that some dimensions are not effective in discriminating review quality. Therefore, we choose the top-5 effective dimensions in this paper, namely, believability, objectivity, reputation, timeliness, appropriate amount of information. According to each dimension in the Figure 1, we define the following detailed factors of review quality framework.

Source quality

We use the reputation dimension to evaluate the source quality. The reputation is the extent to which the author of a review is trusted or highly regarded (Chen and Tseng, 2010). In this paper, we measure this dimension based

Table 1. Descriptive statistics for dataset.

Number of movies	Number of reviews	Number of reviewer	Average reviews of reviewer
200	2328	2163	69.59

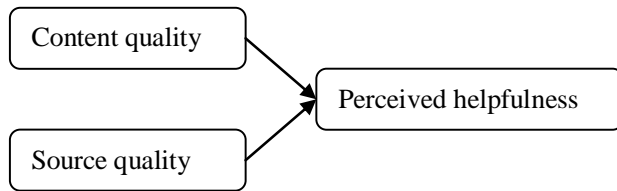


Figure 1. Model of perceived helpfulness (Barbara and Peter, 2005).

on the number of reviews written by the reviewer and the quality of these reviews.

Content quality

We use the dimensions of Believability, Objectivity, Timeliness, and Appropriate Amount of Information to evaluate quality of the review content. Believability is the extent to which an online review is regarded as valuable to the receivers. In this paper, we measure Believability based on the review extremity. Objectivity is the extent to which an online review is biased (Chen and Tseng, 2010). In this paper, we measure Objectivity based on the sentimental inclination of the review. Timeliness is the extent to which the review is timely and up-to-date. We measure the timeliness based on the interval between the current review and the first review of the product. Appropriate amount of information is the extent to which the volume of information in a review is sufficient for decision-making. We measure the dimension based on the length of the review.

According to the above explanation of the each dimension, we developed our research model as shown in Figure 2. In the following hypotheses, we will analyze the effect of each factor on the helpfulness of online review.

Hypotheses

Rating extremity and review helpfulness

Different from the seller-created product information and third-party product review, the online consumer reviews are posted by users based on their personal experiences (Chen and Xie, 2008). In most of the review websites, the customers’ rating for product ranges from one star to five

stars. The rating represents the subjective attitude of customer to the product; one star expresses the extremely negative attitude to the product, while the five stars express the extremely positive attitude to the product. Both of the two ratings represent an extremely rating for the product; the other middle ratings represent the moderate rating. The valence of consumer product reviews may serve as a proxy for underlying product quality, especially for experience products such as books and movies that are difficult for consumers to evaluate prior to purchase (Senecal and Nantel, 2004). The prior researches showed that review valence influences the customers’ perception of the review value. The extent to which customers focus on product reviews may be affected by the review valence, and these difference further impacts on the helpfulness of reviews. Researchers showed that there are more extreme reviews than moderate reviews on Amazon.com and other sites (Dellarocas et al., 2005), because people are more likely to engage in interpersonal communication when they have very positive and very negative experiences (Anderson, 1998). Reviews providing clearly positive evaluations help consumers make a purchase they will value, while clearly negative evaluations help consumers avoid a purchase they may otherwise regret. So, we think that whether positive or negative, extreme reviews should be judged as more helpful because they have clear implications for reducing perceived uncertainties during purchase decision. In contrast, moderate reviews are relatively uninformative because they contain ambiguous information (relative to extreme reviews) and therefore do not provide a clear guide for customers’ perception of the product quality. Therefore, we hypothesize:

H1: Reviews extremity positively influences the helpfulness of online reviews. Movie reviews with extreme ratings are more helpful than movie reviews with moderate ratings.

Review subjectivity and Review helpfulness

The subjective emotions contain positive and emotions negative emotions. Typically, e-WOM product review is written to either recommend or discourage others from buying the product (Sen and Dawn, 2007). Previous researches demonstrated that the two emotions have different impact on consumers’ purchasing decision and consumers pay more attention to negative information than to positive information (Herr et al., 1991). In

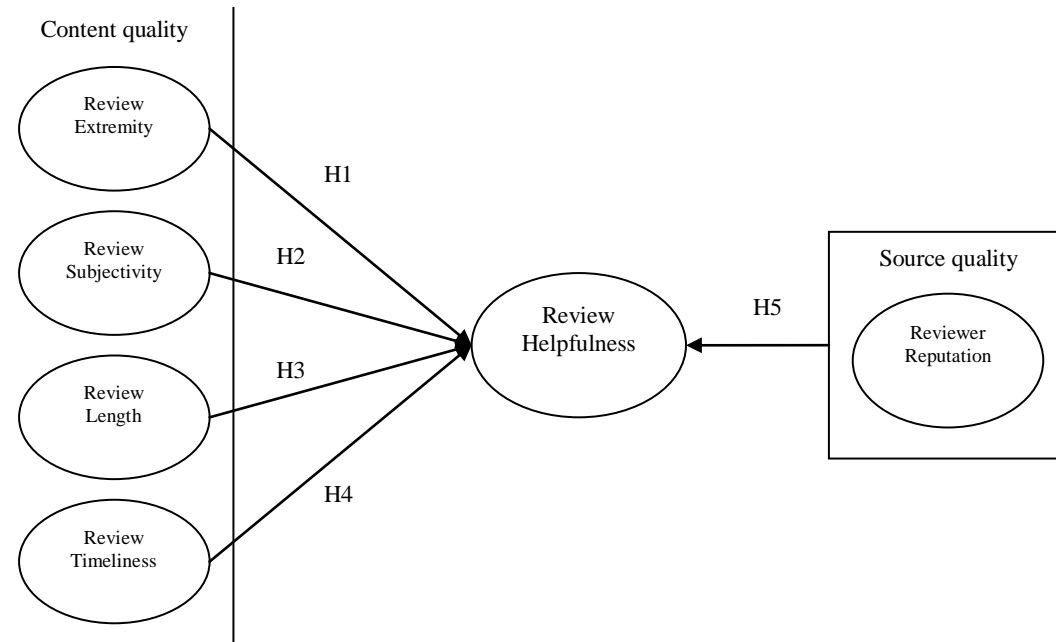


Figure 2. Model of customers' review helpfulness.

traditional WOM literatures, many researchers indicated that negative WOM influenced the consumers' decision more than positive WOM. When a person gave an opinion about a product, negative ones may be more credible than positive ones. They explained the reasons for the observation. For example, the findings of impression formation in psychological field (Skowronskij, 1989), in the process of evaluating product for specific people give higher weight to negative information about evaluated product than positive information. This is because of people have different response strength in facing negative or positive information; and negative information contributes more to the final impression than positive information. In retailing field, Ahluwalia et al. (2000) found that consumers usually think that negative information is more diagnostic than positive information, so they depend on the negative information in making purchasing decision.

However, recent researchers draw different conclusions from prior studies. For example, product type (utilitarian product and hedonic product) moderates the effect of review valence and readers exhibit a negativity bias for utilitarian product reviews only (Sen and Dawn, 2007). For hedonic product reviews, customers are more likely to trust positive opinions. They applied the attribution theory paradigm (Curren, 1987; Mizerski, 1982) to explain the inferences made by readers about the reviewer's motivations in posting the review. According to the attribution theory paradigm, consumers are more likely to infer that the reviewer's negative reviews about a hedonic product were motivated by personal reasons unrelated to the product's quality. Thus, people think that the negative

reviews about a hedonic product are lack of trust, and thus the effect of negative reviews on the uncertainty reduction during purchasing making is reduced. Affective confirmation hypothesis (Adaval, 2001) also offers support for this conclusion. The author found that customers gave greater weight to attribute information when this information was consistent with their mood than when it was inconsistent with their mood. When reading product reviews for hedonic products consumers likely anticipate a positive mood because they are looking forward to choosing a product that will make them feel good. According to the affective confirmation hypothesis, the effect of negative reviews on the customers' decision making is reduced as it is inconsistent with their anticipated mood (Adaval, 2001; Pham, 1998). Therefore, we hypothesize:

H2: The positive inclination of reviews has positive impact on the helpfulness of reviews for experience goods. The positive movie reviews are more helpful for customers than negative movie reviews.

Review length and review helpfulness

Consumers are often lack of full information on product quality when they make purchase decisions. In order to reduce the purchase uncertainty, consumers need to seek online consumer reviews about the product quality before making purchase decisions (Chen and Xie, 2008). Information from a non-marketer has been shown to be especially credible (Herr et al., 1991). However, seeking

information is costly and time consuming, and there are trade-offs between the perceived costs and benefits of additional search (Stigler, 1961). Research showed that the amount of information is especially beneficial to the consumer if the information can be obtained without additional search costs (Johnson and Payne, 1985) and information length can increase information diagnostically. Differ from the reviews for search goods, which contain factual information about the product's objective attributes, the movie review contains mainly personal subjective information such as opinions, feelings; thus, longer movie reviews contain more subjective information in the reviews. So the additional subjective information in long reviews will provide more suggestions for the consumers and reduce the perceived uncertainty during purchase decision process. Therefore, we hypothesize

H3: Review length has positive effect on the helpfulness of the movie review.

Review timeliness and review helpfulness

According to the definition in IQ theory, timeliness represents how timely and up-to-date the information is. In many IQ dimension frameworks, the timeliness generally is categorized as context factor, which highlights the requirement that IQ must be considered within the context of the task at hand (Ballou and Pazer, 1985; Delone and Mclean, 1992; Jarke and Vassiliou, 1997; Wang and Strong, 1996; Zmud, 1978). Therefore, the high quality information must be timely for our task. According to Nelson (1974), search goods are those for which consumers have the ability to obtain information on product quality prior to purchase, while experience goods are products that require sampling or purchase in order to evaluate product quality. It is difficult to evaluate the quality of the experience goods based on objective standard and the quality of experience goods only be obtained through customers' experiences. Research shows that a quarter of a motion picture's total revenue comes from the first two weeks (Dellarocas et al., 2004). During this period of film showing movie fans have high expectations and are highly eager for the movie reviews. Therefore, WOM activities are the most active during a movie pre-release and opening week (Liu, 2006). Some previous studies showed that product reviews written early tend to get more user attention on e-commerce website (Jindal and Liu, 2008; Liu et al., 2007). In information search contexts the research showed that rapid response to information queries enhanced the perceived value of information because the speed of response may signal the information provider is knowledgeable (Weiss et al., 2006). From the uncertainty reduction theory perspective, the earlier published movie reviews are more valuable for audiences to reduce the film watching uncertainties. Therefore, we hypothesize:

H4: Review timeliness has a positive effect on the

helpfulness of the movie review. The earlier published movie reviews are more helpful.

Reviewers' reputation and review helpfulness

Product reviews embody the consumers' subjective perception to the products, especially reviews for the experience products. To some degree, online reviews are not verifiable and may not be objective and credible to potential customers (Hu et al., 2008). The customers perhaps cannot obtain the credible evaluation only by reading the review content. In order to improve the credibility of the reviews customers need to focus on the author of the review. Credibility of information is often positively related to the trustworthiness of the information source (Wilson and Sherrell, 1993). User reputation refers to the extent to which the user is able to provide trustworthy information (Bristor, 1990). Information source credibility is generically recognized to play a role for the effectiveness of communication (Hovland and Weiss, 1951) and to influence consumers' perceptions and attitudes towards objects (Frewer et al., 1998). The reviews published by different authors have different influence on the customers. The reviews written by reviewers with better quality reputations have greater impact on the customers' purchase decisions (Hu et al., 2008). According to the uncertainty reduction theories, reviews from high reputation writer will help decrease a product's quality uncertainty. From the perspective of information receiver, the information from highly reputation writer is more trusted or highly regarded (Bristor, 1990). The information provider's depth of knowledge positively influences the information receiver's perceived value of the provider's information (Weiss et al., 2006). These findings show that consumers will give more weight to the reviews from high reputation writer when they make a purchase decision. Therefore, we hypothesize:

H5: Reviewers' reputation has positive effect on the helpfulness of review. The reviews from high quality reviewers are more helpful than those from low quality reviewers.

RESEARCH METHODOLOGY

Data collection

For validating the hypotheses in this paper we collect the movie reviews from IMDB.com. IMDB.com is the largest online movie review website with over 57 million visitors each month (Noi et al., 2010), in which the users are from all over the world (<http://www.alexa.com/>).

We developed a c# program to collect the movie reviews and reviewer information from IMDB.com. Firstly, we randomly selected 200 movies from IMDB.com using a random counter on the movie identification number; we expect that 200 movies is a well representation of the movies across the websites. Secondly, we

Table 2. Descriptive statistics for dataset.

Variable	Mean	SD	Min	Max
Rating	7.08	2.98	1	10
Extremity	0.87	0.33	0	1
Word Count	278.55	192.49	33	1277
Elapsed Days	509.76	817.69	0	3809
Reviewers' reputation %	29.53	30.79	0	1
All votes	178.74	212.68	51	1747
Helpfulness %	53.35	20.41	1.56	1

collected all reviews from the selected movies. For studying the impact of reviewer-based features on helpfulness, we also retrieved all past reviews for each reviewer, and collected the related information for each of the past reviews.

For raising the robustness of our research, we filtered the movie reviews through the following processes. Because some reviews written recently have not been rated fully, we only preserve reviews written ten days ago. For observing the rating's influence we eliminate the reviews not rating for the movie. To ensure the model robustness we only keep the reviews with more than 10 votes. The details about the final dataset are in Table 1.

Variables

We can operationalize the variables of our model using the collected data. As defined usually in the previous papers, we define the percentage of people who thought the review helpful as the dependant variable (Helpfulness %). This was derived by dividing the number of people who voted the review helpful by the total votes.

The explanatory variables are from factors in the research model including review extremity, review subjectivity, review length, review timeliness, and reviewer reputation. We construct a dummy variable to measure the review extremity (Extremity). The ratings in IMDB.com range from 1 star to 10 stars. Specifically, ratings of 5 and 6 were classified as moderate reviews while ratings nearer the endpoints of the scale (1, 2, 3, 4, 7, 8, 9, 10) were classified as extreme reviews. We also ran our analysis with another specification of extreme reviews where ratings in the middle of the scale (4, 5, 6, and 7) were classified as moderate reviews while other ratings were classified as extreme reviews. The results were identical to our current results, and are hence omitted for brevity. We construct another dummy variable to measure the review subjectivity (Subjectivity). Ratings of 1, 2, 3 and 4 were classified as negative reviews while ratings of 7, 8, 9, and 10 were classified as positive reviews. Review length is measured by the words count of the review (Word Count). In past researches the review timeliness was measured usually by the difference between the date of review and the release date of the product (Ghose and Ipeirotis, 2006), but in movie review website there are some reviews published before the movie is released (Liu, 2006), which leads to the interval of the date of review and the release date of the movie meaningless. Thus, we measure the variable with the interval days (Elapsed days) between the current review and the first review of the movie because we only care for the impact of the different published dates on the helpfulness of reviews. We measure the reviewer reputation using the average helpfulness of the past reviews written by the reviewer (Reviewers' reputation). It is noteworthy that the reviewers' reputation changes with time because we just consider the past reviews for each point in time in measuring the variable. The descriptive statistics for the variables are included in Table 2.

Empirical model

For testing the H1, we included the dummy variable Extremity to the model. Extremity equals to 1 for the extremity reviews and equals to 0 for the moderate reviews. For the hypotheses from H3 to H5, the modeling processes are same. We included the corresponding variables into the model. Since the dependent variable is a percentage, this could hide some potentially important information (Susan and David, 2010). We included the total number of votes on each review's helpfulness as a control variable (All votes). The first empirical model is:

$$\text{Helpfulness\%} = \beta_1 \text{Extremity} + \beta_2 \text{WordCount} + \beta_3 \text{Elpseddays} + \beta_4 \text{Rating} + \beta_5 \text{ReviewerReputation} + \beta_6 \text{AllVotes} + \varepsilon \quad (1)$$

For test the H2, we build the second regression model. We included the dummy variable Subjectivity to the model. Subjectivity equals to 1 for the positive reviews and equals to 0 for the negative reviews. The second empirical model is:

$$\text{Helpfulness\%} = \beta_1 \text{Subjectivity} + \beta_2 \text{WordCount} + \beta_3 \text{Elpseddays} + \beta_4 \text{Rating} + \beta_5 \text{ReviewerReputation} + \beta_6 \text{AllVotes} + \varepsilon \quad (2)$$

RESULTS

The results of the regression analysis for model 1 are included in Table 3. As indicated in Table 3, the model 1 fitted the data quite well, with a highly significant likelihood ratio ($p=0.000$), and an adjusted R2 of 0.423.

To test the H1, we examined the terms of Extremity. As shown in the Table 3, the Extremity (0.0011) was statistically significant; the positive coefficient of Extremity (0.0312) showed that the extreme reviews are more helpful than moderate reviews. Therefore, we support H1. In hypothesis 3, we expect the length of review has positive effect on the helpfulness of the review. From Table 3, we found that the word count has a significant relationship with the helpfulness. The positive coefficient of Word count (0.0242) showed that the H3 is supported.

To test the H3.1, we examined the coefficient of the Elapsed Days in Table 3. The Elapsed Days (0.000) was statistically significant. The Elapsed Days of the review has negative (-0.0100) effect on the helpfulness of the review, which indicated that earlier reviews were more helpful for customers. Therefore, the H4 is supported.

The results also provided strong support for H5, which hypothesizes that the reviewer reputation influences the helpfulness of the reviews. This support is indicated by the significant term Reviewers' reputation (0.0000) in the model. The positive coefficient of Reviewers' reputation (0.0789) showed that the reviewers' reputation has a positive effect on the review helpfulness. From Table 3, we found that the All votes does not have a significant relationship with the helpfulness.

To examine the relationship of the review subjectivity with the helpfulness of the review, we split the data into two subsamples, extreme reviews and moderate reviews. The analysis of the model 2 from the extreme reviews is shown in Table 4. The analysis of the model indicates a

Table 3. Regression output for full sample.

Variable	Coefficient	Standard error	t-value	Sig.
(Constant)	0.3831	0.0272	14.089	0.0000
Extremity	0.0312	0.0217	0.4378	0.0011
Word Count	0.0242	0.0932	0.5822	0.0134
Elapsed Days	-0.0100	0.0000	-5.9136	0.0000
Reviewer Reputation	0.0789	0.0137	5.7513	0.0000
All Votes	0.4476	0.0319	14.2123	0.4273

F=112.167, sig. =0.000, R²=0.423.

Table 4. Regression output for extreme reviews.

Variable	Coefficient	Standard error	t-value	Sig.
(Constant)	0.3408	0.0453	7.5139	0.0000
Subjectivity	0.0161	0.0219	0.5734	0.0018
Word Count	1.6765	0.4584	3.7763	0.0102
Elapsed Days	-0.2311	0.0000	-6.2003	0.0200
Reviewer Reputation	0.1002	0.0190	5.3499	0.0000
All Votes	1.2626	0.0702	18.0175	0.0567

F=162.7727; sig. =0.000, R²=0.417.

good fit, with a highly significant likelihood ratio ($p=0.000$), and an adjusted R² of 0.417. We support H2 (Table 4).

DISCUSSION

The results of the study show that content-related factors and reviewer-related factors both influence the review helpfulness. In content-related factors, review extremity, review subjectivity, review length, and review timeliness have significant effects on the helpfulness of reviews for experience goods. In reviewer-related factors, the reviewers' reputation measured with the past performance of a reviewer positively affects the review helpfulness. As a result, our findings contribute to the literature on information quality within the context of online reviews and deepen our understanding to the perceived helpfulness of reviews for experience goods.

From a theoretical perspective, this research adopted uncertainty reduction theory and review quality framework to build a theoretical framework and to understand the factors affecting the perceived helpfulness of reviews for a special experience goods-movie. Specifically, our study provides an interesting contrast to the findings of Susan and David (2010) that for experience goods, reviews with extreme ratings are less helpful than reviews with moderate ratings. In contrast, we found that for movie reviews, reviews with extreme ratings are more helpful than reviews with moderate ratings. The prior study for book reviews (Forman et al., 2008) also drawn

same conclusions as our findings. These conflicting findings indicate that review extremity not only has different impact on the helpfulness of reviews across different product types (experience goods and search goods), but also has different impact on the helpfulness of reviews in different experience goods. Therefore, we think that the simple categorization of search and experience goods in studying the perceived helpfulness of reviews might omit some potential factors. As Susan and David (2010) said, products can be described as existing along a continuum from pure search goods to pure experience goods. Although, mp3 player and movie both are experience goods, the extent to which they belong to experience goods is different. Mp3 player involves a mix of search and experience attributes, and some important attributes such as capacity, supported standard can be obtained by customers prior to purchase, while movie is closer to the pure experience goods than mp3 player. Subjective taste plays a more important role in evaluating the movie quality, and users expect to read a personalized, highly subjective reviews, describing the quality of the movie that are not described by the product objective description. Adopting more concise product categorization might deepen our understanding to this issue. Further, our results indicate that the two different extreme reviews, that is, positive extreme reviews and negative extreme reviews have asymmetry impact on the perceived helpfulness of reviews: positive reviews are more helpful than negative reviews for experience goods. This finding is consistent with the prior research of Sen and Dawn

(2007), who found that readers of hedonic product reviews are more likely to attribute the negative opinions expressed to the reviewer's internal (or non-product related) reasons, and therefore the negative reviews are less useful.

Based on Hypothesis 2, we find that an increase in the review length has a positive and statistically impact on review helpfulness for movie. Our findings support the notion that the added information of reviews can help the decision process by increasing the consumer's confidence in the decision. For experience goods, longer reviews often include more subjective feeling and more subjective evaluation about the product. This added information can increase the perceived helpfulness of reviews. This conclusion is consistent with the results of Susan and David (2010)'s research.

We also find that the timeliness of review influences the helpfulness of movie reviews. The earlier published movie reviews are more helpful to customers. This finding is consistent with the notion that the speed of information response can effectively enhance the perceived value of information (Weiss et al., 2006). Specifically, during the early period of film showing, the movie reviews are more helpful for movie fans in reducing the watching uncertainties.

In addition, the reviewer-related features also increased the helpfulness of the product review. Specifically, we found that the past history of a reviewer is an effective predictor for the helpfulness of the future reviews written by the same reviewer. The high reputation reviewers are more likely to generate helpful reviews in future. This is consistent with prior research, such as Forman (2008), who found that social information about reviewer is likely to be an important predictor of consumers' buying decisions. Facing with an overload of information in the form of numerous reviews from numerous reviewers, community members choose information using source characteristics as a convenient and efficient heuristic device. In information processing literature, the prior research also has drawn same conclusions. People evaluate message by an interactive combination of message source and message content (Pornpitakpan, 2004), in particular, message content is weighted by the credibility or expertise of the message source (Gilly et al., 1998; Hass 1981).

Prior research has indicated that the consumer reviews increase both the usefulness and social presence of the website (Kumar and Benbasat, 2006). The presence of consumer reviews can increase the customer perception of the website. Further, researchers found that the perceived helpful reviews have greater value to online retailers, such as increased sales (Chen et al., 2008; Chevalier and Mayzlin, 2006; Clemons et al., 2006; Ghose and Ipeirotis, 2006). On the basis of these findings, this paper studies the determinants to the perceived helpfulness of online customer reviews. The results deepen our understanding of how the online reviews reduce quality uncertainty during purchase process. The

findings also have practical implications for online retailers. Firstly, online retailers can guide users to write more helpful reviews for experience goods using the findings of this study. For example, the reviewers should provide clearly evaluations that either positive or negative for the experience goods. Reviewers should be encouraged to write reviews as much earlier as possible. The length of reviews is also important for experience goods; thus, retailers should encourage the customers to provide reviews as much length as possible. Secondly, the findings in this study can be used by online retailers to design an effective reviews recommendation system. The recommendation system has become a necessary part in many websites, including social networks, retail websites. Recommending the valuable reviews can help consumers to make a better decision more easily. The presence of recommendation system also increases the perceived usefulness of the websites (Kumar and Benbasat, 2006). This study shows that the review valence, review length, review timeliness, and reviewer reputation have significant related with the helpfulness of the reviews. Online retailers can build helpfulness model with these factors to predict the helpfulness of reviews as earlier and recommend most helpful reviews to customers as earlier as possible. Thirdly, our study also shows that not only the content-related factors, but also the reviewer-related factors affect the perceived helpfulness of the reviews. Therefore, providing convenient ways to obtain the reviewer information can aid the consumers' judgments of reviews. In fact, on many sites such as Amazon, information about the reviewer is highly salient, and more voluminous than information on the products they review.

Conclusion

The perceived helpful reviews reduce the purchase uncertainties and improve the customer perception of the websites. This paper contributes to electronic commerce research and literature by studying the determinants to the helpfulness of online movie reviews. Drawing on the uncertainty reduction theory and information quality framework, we build a theoretical model. According to the findings, content-related factors (review extremity, review subjectivity, review length, and review timeliness) and reviewer-related factor (reviewer reputation) are influential on the review helpfulness for experience goods. The study has implications for research on information quality in electronic commerce, and provides suggestions for reviews recommendation and reputation system designing for online retailers.

As with any study, there are some limitations to the present study, and these limitations present opportunities for future research. Firstly, our research only focuses on an experience goods—movie reviews, and it is yet unknown whether our findings hold in other experience goods. In future we could gather more online reviews

from other experience goods to confirm our results. Secondly, although this research studies the effect of the reviewer expertise on the review helpfulness, the research model could also be extended to include other possible reviewer-related factors, such as reviewers' exposure. Different from the reviewer expertise, reviewers' exposure refers to the exposure of a reviewer in the online community. According to the analyst fore-cast literature, consumers may pay more attention to reviews written by higher exposed reviewer. Prior research showed that reviews written by higher exposed reviewer have greater impact on the product sales (Hu et al., 2008), which might be because the reviews issued by these reviewers reduce perceived uncertainties. Future studies could apply the related theory to study the role of reviewers' exposure in the review helpfulness. Finally, although we consider the impact of review subjectivity on the helpfulness of the reviews, the review subjectivity only is measured with the limited magnitude of star rating. The content of review expresses reviewer's attitude to the product in detailed manner. Future research could apply the emotion analysis and opinion mining technique to investigate the comprehensive subjectivity in reviews. Thus quantitative analysis for the review subjectivity may provide more insights into perceived helpfulness of reviews.

Conflict of interest

The authors have not declared any conflict of interests.

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Full Length Research Paper

The effects of participative leadership on organisational commitment: Comparing its effects on two gender groups among bank clerks.

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The present study examined the effects of participative leadership on organisational commitment: comparing its effects on two gender groups among bank clerks. Study data was collected from a sample of 70 bank clerks in Alice and King William's Town, using a participative leadership questionnaire adopted from Arnold et al. (2000); and Mowday et al. (1979) organisational commitment questionnaire. Participative leadership was measured as a unitary concept while organisational commitment (oc) was measured in the following four ways: as an acceptance of the organisation's values and goals (values); as loyalty to the organisation (loyalty); as preparedness to expend extra effort for the organisations benefit (effort); and as a combination of the three component scores (total oc). The results indicated that participative leadership has different effects among two gender groups, and that it has positive effects on organisational commitment. For males only, participative leadership was found to be significantly having a positive effect on value; and for females only, it was significantly having a positive effect on effort. Furthermore, participative leadership was found to be significantly having a positive effect on total organisational commitment for both gender groups.

Keywords: Participative leadership; gender; organisational commitment; loyalty; value; effort; bank clerk.

INTRODUCTION

Participative leadership is defined as the process of making joint decisions or at least sharing influence in decision making by the superior and his or her subordinates (Somech, 2005). It is not relatively a new concept because it has a rich and varied history. It began to flourish in the 1980s in the guise of management policy initiatives inspired by the new excellence movement and rise of human resources management (Beardwell and Holden, 1997). It has many potential benefits. It is likely

to increase the quality of the decisions (Scully et al., 1995); to contribute to the quality of employees' work lives (Somech, 2002); to promote employees' motivation to work (Armenakis et al., 1993; Locke and Latham, 1990; Yammarino and Naughton, 1992) and to increase employee satisfaction and organisational commitment (Smylie, Lazarus and Brownlee-Congers, 1996).

Moreover, in team situations, using a participative leadership style is important because it leads to

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high levels of team outcomes (Sagie et al., 2002), and solicits different ideas from team members (Katzenbach and Smith, 1993). These scholars reflect a widely shared notion that participative leadership has a great utility in organisational and team effectiveness. It values the employee more than it does to the job, and such leadership behaviour is likely to engender increased organisational commitment among employees (Bass, 1981). The work attitudes of male workers favours a directive way of leading with the focus on performance whilst that of female workers on the other hand, favours a participative way of leading with the focus on subordinate's commitment (Werner et al., 2007). These different attitudes toward work are the characteristic of gender (Heilman et al., 1995). The understanding of gender as an important feature of work behaviour has become increasingly important in African organisations than ever before (Ijeoma, 2010). With the advent of women in organizations, the study of organisational behaviour has extended to encompass the male and female work behaviour (Deal and Stevenson, 1998). However, there are relatively few written significant variations between men and women (Kunkel and Burleson, 1999).

Problem statement

The massive corporate failures at the beginning of this twenty-first century have been linked to poor leadership (Fincham and Rhodes, 2005). More common-place human outcomes of poor leadership include employee stress, disenchantment, lack of creativity, cynicism, high employee turnover, and low productivity. Poor leadership destroys the human spirit essential to ensure work effectiveness (Fincham and Rhodes, 2005). Organizations today are moving toward more democratic structures, which allow employees to influence the decisions made because of concern for quality and the requirement of a high degree of commitment by employees to their work (Somech, 2010). The impact of a participative leadership style on organisational commitment has been previously noted (Yiing and Ahmad, 2009; Dolatabadi and Safa, 2010; Tain-Fung Wu et al., 2006).

Although, the previous studies exist, they have been general (Mc Neese-Smith, 1997). The impact of participative leadership behaviour on the attitudes of male and female subordinates is not clearly specified. Scholars are of the assertion that gender may influence the attitudes of subordinates on a manager's leadership style and their resultant commitment to an organisation (Neal et al., 2005). The work attitudes of male subordinates favour directive leadership with the focus on performance whilst that of female subordinates on the other hand, favour participative leadership with the focus on their commitment (Werner et al., 2007). Those who support organisational change, argue that participative leadership is the preferred style for attaining organisational

improvement (Somech, 2005). As such, it has been considered as the best leadership practice in the current business environment in South Africa because it promotes high levels of team outcomes (Sagie et al., 2002). The present study seeks to further investigate the effects of participative leadership on organisational commitment: comparing its effect on two gender groups among bank clerks in Alice and King Williams Town.

Objectives of the study

1. To determine the effect of participative leadership on organisational commitment: comparing its effects on two gender groups.
2. To determine the effects of participative leadership on organisational commitment among bank clerks

The significance of the study

The present study of the effects of participative leadership on organisational commitment: comparing its effect on two gender groups is of paramount importance because it was conducted in a geographically outlying area of Alice and King Williams towns where studies such as this one are very limited. It therefore, provides another dimension for understanding the impact participative leadership on organisational commitment. The present study also intends to expand the available knowledge on the effects of participative leadership on organisational commitment. Organisational managers often use similar strategies when dealing with subordinates of different gender groups. Some scholars are of the assertion that the work attitudes of male subordinates favour directive behaviour with the focus on performance, and that of female subordinates favour participative leadership with the focus on their commitment (Werner et al, 2007). As such, different leadership approaches need to be employed by managers when dealing with male and female subordinates. The present study therefore, helps organisations to acknowledge the value of diversity in management in today's organisations. Male and female subordinates have different attitudes toward their work as a consequent of a leadership approach used in an organisation. Furthermore, it helps to enlighten organisations on how participative leadership can preclude or reinforce employee positive attitudes toward their work.

THEORETICAL FRAMEWORK

Motivational model

The motivational model states that increasing the level of participation in decision making may increase performance through increased motivation (Sashkin, 1976). Previous scholars suggest that participative behaviour of superiors have an important role in providing sub-

ordinates with the experience of intrinsic motivation, feelings of self-worth and a sense of self-determination (Deci et al., 1989). This type of leadership behaviour promotes a feeling of “psychological ownership” of subordinates (Sashkin, 1976); increase subordinates’ feelings of believing in themselves and control, and reduce their sense of powerlessness (Arnold et al., 2000). Other scholars suggest that participative leadership behaviour may promote the feeling of empowerment among subordinates (Ahearne et al., 2005; Leach et al., 2003).

This feeling of empowerment or psychological empowerment has been understood as a form of intrinsic motivation to perform the job and is shown in four cognitive dimensions: meaning, impact, competence and self-determination (Huang et al., 2010). Previous studies show that participative leadership behaviour leads to increased work outcomes by inducing intrinsic motivation and psychological empowerment. As such, intrinsic motivation mediates the relationship between the participative behaviour of managers and the organizational commitment of employees (Eby et al., 1999). Furthermore, other scholars show that psychological empowerment may mediate the relationship between participative environment and work attitudes (Careless, 2004; Seibert et al., 2004). When subordinates take part in intrinsically motivating work, they may discover that the performance of their work is more benefiting, and consequently, they are motivated to put more effort to achieve their work objectives (Organ et al., 2006).

Exchange-based model

The exchange-based model for explaining the positive relationship between participative leadership behaviour and organisational commitment focuses on a two-way relationship between leaders and subordinates. It proposes that when subordinates are treated well by their leaders, they may return the favour by putting extra effort to contribute to their organizations (Blau, 1964; Moorman, 1991; Organ, 1988). The level of subordinates’ trust in their leaders is used to show the quality of the two-way exchange relationship between leaders and subordinates (Lavelle et al., 2007). Participative leadership behaviour may lead subordinates to feel that their leaders treat them justly (Jung and Avolio, 2000), considerably (Dirks and Ferrin, 2002), with respect and dignity (Bijlsma and van de Bunt, 2003), found the level of trust is high in leaders. With a high level of trust in leaders, subordinates may expend more effort to accomplish work tasks (Huang et al., 2010).

LITERATURE REVIEW

Organisational commitment

The term organizational commitment has been conceptualised in many different ways. It has been

conceptualised as an employee attitude and a set of behavioural intentions (Steers, 1977). It is therefore, defined as the relative strength of an individual’s identification with and involvement in a particular organisation (Mowday et al., 1979). Other scholars view it as the degree to which an individual identifies and is involved with his or her organisation and or is unwilling to leave it (Klein et al., 2009). This concept of organisational commitment is therefore, concerned with the degree to which people identifies with their organisations and they want to remain with them. Meyer and Allen (1997) perceived organizational commitment as something that involves the employees’ relationship with their organization, how they influence employees’ behaviour, well-being, and contributions to organizational effectiveness.

The concept has drawn more attention recently from managers because of new developments in employment practices that have come from the global employment market place and more alternatives for skilled employees in a global market (Sullivan and Arthur, 2006). It is an important variable to consider in the current work situation when an organization’s goal is to maintain a stable workforce on whose continued membership with it can add more value (Mowday et al., 1982). Organisational commitment is therefore very important for organizations because of their need to retain highly qualified employees. Employees which are highly committed to an organisation use more personal resources when they perform the job for an organization and will remain with it by not looking for alternative employment engagements (Bret et al., 1995). The present study looks at Mowday et al (1979)’s three components of organisational commitment as follows:

1. Loyalty is a strong desire to maintain membership in the organisation.
2. Effort is the willingness to exert considerable energy on behalf of the organisation.
3. Value is a strong belief in and acceptance of the organisation’s goals and values.

When organisational commitment is conceptualised in this manner, it stands for something more than mere passive loyalty to an organisation. But it involves an active relationship with the organisation, such that employees are strongly willing to give something of them in order to contribute to the organisation’s well being (Mowday et al., 1979). The stronger an employee can understand the core values and goals of an organization, the higher the level of their commitment (Porter et al., 1974).

Gender and organisational commitment

Gender is perceived as a “relational demographic variable” by different scholars (Murphy and Ensher, 1999; Tsui, et al., 1992). Thus, demographic variable is used to

describe the differences in the characteristics of leaders and subordinates (Tsui and O'Reilly, 1989). Scholars have explained gender relative to the organisation the individual belongs to as antecedents of individual outcomes such as satisfaction, commitment and performance (Joshi et al., 2011). Gender difference in the organisation is one of the most often researched components of relational demography. However, it has been considered most of the times in relation to perceptions about peers and work groups, and not about leadership behaviour (Joshi et al., 2011). The studies that focused on differences in terms of gender, the results have been inconsistent. Those that were using the theory of relational demography had sought to open up the complex effects of gender differences among subordinates (Riordan, 2000; Tsui and Gutek, 1999). These scholars are of the opinion that when subordinates are not the same as their leaders in terms of gender they feel less socially integrated and committed to their organization.

The similarity attraction theory suggests that a subordinate's similarity to a manager leads to liking and attraction which leads to many positive work outcomes such as satisfaction and commitment (Joshi et al, 2011). In some studies, subordinates gender differences to that of a leader has been negatively linked to outcomes such as job satisfaction and organizational commitment (Liao et al., 2004). Furthermore, in one study, gender differences had positive and negative outcomes (Bacharach and Bamberger, 2004). The studies focusing on the relationship between subordinates gender and commitment to leadership have been overlooked (Pohl and Paillé, 2011). These studies however, suggest an influence of gender on attitudes toward a leadership style (Neal et al., 2005). Accordingly, it may influence the subordinates' perception of a manager's leadership style as well as their organizational commitment. It can influence work behaviour and attitudes through interpersonal attraction. It is also associated with the underlying work behaviour and attitudes (Jackson, 1996). Thus, gender increases affection, attraction (Meglino et al., 1989) and trust (Mayer, 1995). This will influence a leader's willingness to allow the subordinates to participate in decision making (Epitropaki and Martin, 1999; Yukl, 2002; Yukl and Fu, 1999).

Gender has therefore, been a significant influence in a leader's decision to allow the subordinates to participate in decision making and their resultant commitment to an organisation. Women and men are not the same in the type of behavioural attributes they use in developing trust in their leaders (Johnson and Swap, 1982). Schein (1975) further argued that subordinates prefer leader behaviours that are congruent with the stereotypes of the subordinate's own gender. In this regard, male subordinates would prefer directive leadership while female subordinates on the other side would prefer a participative style (Werner et al., 2007). Subordinates are satisfied and committed to an organisation with a participative style

of leadership from leaders of the opposite sex (Rosen and Jerdee, 1973). Tsui and Gutek (1999) are also of the view that gender difference has a negative effect on subordinate commitment to the organisation. However, the effect is higher on men than on women. These arguments therefore, lead to the following hypothesis:

H₁: Participative leadership has different effects on organisational commitment among two gender groups.

Participative leadership and organisational commitment

Participative leaders increase employees' performance by using the motivational mechanism of organisational commitment (Sashkin, 1976). The motivational factor of commitment on the participation-performance relationship confirms the motivational theories that emphasise identification and self-control as key motivational forces (Somech, 2005). They provide subordinates with an opportunity to be involved in and exert influence on the decision making process (Somech, 2005). Consequently, active participation promotes involvement and commitment, because subordinates develop a greater trust in and rise to a higher level of acceptance of information identified by them (Armenakis et al., 1993; Fullan, 1997). This participation has been found to promote commitment to decisions that are made and to increase willingness to carry them out in their work with customers.

Although, the effect of participation in decision making on organisational commitment is not high, it is generally positive (Sagie et al., 2002). Some scholars argue that a decision is only as good as its implementation and those who participate in making it are usually highly committed to make it fruitful (Robbins et al., 2008). Commitment is heightened if there is a feeling of ownership among subordinates in the sense of believing that they are truly accepted by the superiors as important stakeholders in the organisation. This concept of ownership extends to participation in decision making. The employees should therefore, participate in making those decisions and feel that their ideas have been honoured, and that they have contributed to the success of the organisation (Armstrong, 2009). The organisational commitment of subordinates increases only if the leader clarifies the values and goals of the organisation, and behaves in a participative manner (Suar et al., 2006). Furthermore, enabling subordinates to participate is a leadership behaviour that gives them energy and confidence, develops relationships based on mutual trust, and provides employees with discretion to make decisions. These leadership behaviours are important to productive and satisfied employees with great organisational commitment (Chiok Foong Loke, 2001).

Leaders should allow subordinates to participate in developing goals and strategies, and the satisfaction obtained from achieving those goals has been found to

lead to organisational commitment (Beardwell and Holdern, 1997). Those subordinates who perceive their leaders as adopting participative leadership behaviour are more committed to their organizations, more satisfied with their jobs and maintain high performance levels (Yousef, 2000). Therefore, the ability of leaders to correctly use a participative style motivates subordinates to commit themselves to the organization. Yiing and Ahmad (2009) also found that participative leadership style is significantly and positively related with organizational commitment. Other scholars also revealed that this leadership style has a positive effect on the commitment of subordinates to the quality of service, shared values and the clarity of the employees' functions (Dolatabadi and Safa, 2010). Tain-Fung et al. (2006) also found that participative leadership behaviour leads to increased organizational commitment in service organisations. Furthermore, other scholars argue that this leadership behaviour influences the job performance of subordinates by creating very high levels of trust (Huang et al., 2010). These empirical imperatives therefore, give the way to the following hypothesis:

H₂: Participative leadership has a positive effect on organisational commitment among bank clerks

METHODOLOGY

Sample and procedure

The research population constituted of 100 bank clerks from the small towns of Alice and King Williams. The whole population participated in the present study because it was small enough to be used without being sampled. In these towns, five different banks were available for the present study. These banks were Standard Bank, First National Bank, Capitec Bank, African Bank and Post Office Bank. To collect research data, permission was obtained by the researcher from the top managers of all the five banks used in present study. All the bank clerks were asked by the researcher to participate in the present study voluntarily. As such, all the bank clerks were given enough time to complete the questionnaires. Of the 100 bank clerks that were available for the present study, only 70 bank clerks responded to this study. Among them, 72.9% were females and 27.1% were males. Their mean age was 30.613 years and their mean tenure was 4.611 years. With regards to their education level, 7.1% of the bank clerks had completed grade ten; 50.1% had a metric certificate and 4.3% had a national certificate. Also, 37.1% had a degree and 1.4% had an honours degree. Furthermore, in terms of their employers, 20.0% of the bank clerks were from Standard bank; 22.9% were from the First national bank; 28.6% were from the Capitec bank; 17.1% were from the African bank and lastly, 11.4% were from the Post office bank. For reasons of confidentiality and anonymity, the names of the bank clerks were not assessed so that their responses could not be assigned to specific individuals.

Research Context

The respondents

The present study focused on bank clerks because of their highly

important value in the success of banks today. They are directly responsible for customer service, service quality and customer satisfaction. All these responsibilities are very crucial for a good performance (Hartline et al., 2003). The bank clerks who are committed to their jobs share the organisation's customer-oriented values, have low levels of their job stress and give their maximum level of the quality of service (Hartline et al., 2000; Singh 2000). The behaviour of managers or leaders is the significant measure in determining the success of banks. An organisation using inappropriate leadership style is not able to transform the resources that they put in the organisation into a competitive advantage (Drucker, 1993). An appropriate leadership style has a great influence on the behaviour and attitude of bank clerks which include their adoption of the bank's strategy and value. It is therefore related to organizational commitment and subordinates work performance (Ehrhart, 2004). While different leadership styles have the ability to influence behaviour and attitude of bank clerks in different ways, a manager or leader must use an appropriate leadership style.

INSTRUMENTS

Participative leadership: To assess the extent at which a leader displayed a participative leadership style, a scale adapted from Arnold et al. (2000) was used. Participative leadership questionnaire included six items that measures the extent of involvement in various decisions. The sample items are, "my supervisor encourages work group members to express their ideas or suggestions," and "my supervisor uses our work group's suggestions to make decisions that affect us". The reliability level of alpha was .812. The respondents used a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5).

Organizational commitment: To measure bank clerks' organizational commitment, the researcher adapted Mowday et al.'s (1979) organizational commitment questionnaire (OCQ) specifically to the bank setting. This instrument includes 15 items and refers to the strength of an individual's identification with and involvement in a particular organization. Sample items are, "I talk about this bank to my friends as a great bank to work for," and "I feel very little loyalty to this bank" (reverse coded). The reliability level of alpha was .831. The respondents used a 7-point Likert-type scale ranging from strongly disagree (1) to 7 strongly agree (7).

RESULTS

Table 1 below shows the descriptive statistics and correlations of the study's variables. The internal consistency estimates for participative leadership and organisational commitment were found to be within an acceptable level. Organisational commitment was measured as loyalty, value, effort and total organisational commitment. As shown in table 1 below, there are differences in organisational commitment levels between the two gender groups as a result of participative leadership behaviour. For loyalty, both gender groups show different and insignificant effects. Thus, hypothesis one (H₁) is confirmed. With regards to value, both gender groups show different effects. However, for males group only ($r = .583$; $p \leq .009$), there is a positive and significant effect. This therefore, means that (H₂) was accepted. Furthermore, for effort, both gender groups show different effects. However, for females group only ($r = .422$; $p \leq$

Table 1. Reliabilities and correlations for the Study's Variables for different gender groups.

Variables	R	1	2	3	4	5
Females						
1) Participative leadership	.812					
2) Organisational Commitment	.831	0.231 0.103**				
3) Loyalty	-	0.129 0.366	0.670			
4) Value	-	0.111 0.438	0.867 0.000	0.610		
5) Effort	-	0.422 0.002*	0.682 0.000	0.443 0.001	0.604 0.000	
Males						
2) Organisational Commitment	-	0.461 0.018**	-			
3) Loyalty	-	0.080 0.746	0.479 0.038			
4) Value	-	0.583 0.009*	0.787 0.000	0.295 0.220		
5) Effort	-	0.157 0.522	0.086 0.726	0.376 0.113	0.125 0.611	

* $p < .05$. ** $p < .001$.

.002), there is a positive and significant effect confirming hypothesis two (H_2). Finally, both gender groups show different effects of participative leadership on total organisational commitment ($r = .283$; $p \leq .018^M$; $r = .231$; $p \leq .103^F$).

These results are positive and significant for both gender groups. They therefore, also confirm both hypotheses.

DISCUSSION

In general, the value of different leadership styles on the behaviour and attitudes of different gender groups and their resultant on organisational commitment have been understudied (Pohl and Paillé, 2011). In closing this gap, the present study has focused on the effects of participative leadership on organisational commitment: comparing its effects on two gender groups. The results showed that participative leadership has different effects among the two gender groups of bank clerks.

First, for subordinate's loyalty to the organisation, participative leadership behaviour had different and insignificant effects on both males and females. Subordinates gender difference is negatively associated with organizational commitment (Liao et al., 2004). Al-Ajmi (2006) found that there is no significant relationship between participative leadership and loyalty among males and female subordinates. However, these results

are uncommon because a previous study indicated that participative leadership leads to subordinates loyalty to the organisation (Bass, 1981). The results of the present study therefore, suggest that the presence of subordinates' loyalty has nothing to do with the presence of participative leadership behaviour. Second, for value (strong belief in and acceptance of the organisation's goals and values), participative leadership behaviour had different effects among both gender groups.

However, the effect was significant for male subordinates only. They are more willing to be with the organisation's goals and values because they think the organization has a great deal of meaning to them (Meyer et al., 1993). For instance, Baird et al. (1998); Dodd-McCue and Wright (1996); Kaldenberg et al. (1995) showed that there is a greater organisational commitment among men than among women. The meta-analysis studies also revealed that there is greater organisational commitment by women than men (Matthieu and Zajec, 1990). The findings of the present study also indicated that males and females are committed to an organisation differently. Thus, the meaning of organizational commitment to males is mainly associated with the performance of tasks and issues involving time frames or objectives. This meaning associated with males is consistent with the existing objectivistic measures of organizational commitment. It reinforces the argument that existing measures are male-oriented and therefore, are not supporting women's organisational experiences (Singh and

Vinnicombe, 2000a). For an organisation to increase a strong belief in and acceptance of the organisation's goals and values among male subordinates, participative leadership is highly recommended.

Third, for effort (the willingness to exert considerable energy on behalf of the organisation), participative leadership behaviour still had different effects on both males and females subordinates. But for females only, the effect of participative leadership was significant. For instance, Wahn (1998) found that woman subordinates have higher levels of commitment compared to men ones. They show organisational commitment in terms of their passion, consensus, and service to the organisation, enabling and strengthening the capabilities of others, sacrifice and personal fulfilment (Franzway's, 2000). Participative leadership behaviour is recommended if organisations need to motivate female subordinates to expend considerable energy for the organisation.

Last but not least, for total organisational commitment, participative leadership behaviour had different effects among both gender groups. The effects were significant for both gender groups. However, the effect was higher on men than on women (Tsui and Gutek, 1999). They have strong identification with and involvement in their organisation (Mowday et al., 1979). Participation promotes involvement and commitment because subordinates develop a greater trust in and rise to a higher level of acceptance of information identified by them (Armenakis et al., 1993; Fullan, 1997). This participation has been found to promote commitment to decisions that are made and to increase willingness to carry them out in their work with customers. The present study therefore revealed that organisations should use participative leadership if they want subordinates to be highly committed and perform in their organisations (Somech, 2005).

MANAGERIAL IMPLICATIONS

In general, the present study highlights the utility of participative leadership in enhancing organisational commitment among subordinates of different gender (Dolatabadi and Safa, 2010). While participative leadership behaviour leads to different effects on organisational commitment, it is a very effective leadership style for male subordinates with regards to their belief in and acceptance of the organisation's goals and values. The present study therefore, recommends that organisations should employ a participative leadership style if they are to increase their subordinate's belief in and acceptance of the organisation's goals and values. Also, if organisations need to increase effort among female subordinates, participative leadership behaviour should be employed by the organisation's managers. Subordinates are satisfied and committed to an organisation with a participative style from leaders of a different gender (Rosen and Jerdee,

1973). Organisational managers should identify the needs of different subordinates with regards to their gender when dealing with them. Finally, the present study generally recommends that organisational managers should invest in participative leadership training programmes so as to help themselves increase organisational commitment among their subordinates. Active participation in decision making fosters involvement and commitment because subordinates have trust in and rise to a higher level of acceptance of the ideas and knowledge found by them (Armenakis et al, 1993).

Limitations and future research directions

The present study was limited to certain banks because of the researcher's challenge to get access to other banks. Some bank managers seemed suspicious of the motives of the researcher even though it was explained to them. Moreover, their policies did not allow external researchers to conduct research in their bank premises. The questionnaire used in the present study measured participative leadership as perceived by subordinates. Thus, there was no section where managers could also describe their levels of participative leadership behaviours. Furthermore, other scales of organisational commitment different from Mowday et al. (1979) should also be used in future research for triangulation purposes. For instance, the scales which were developed by Allen and Meyer (1990) that measures organisational commitment in terms of continuance, affective and normative could be used.

The future research should also investigate whether leadership moderates the relationship between gender and organisational commitment.

CONCLUSION

The present study investigated the effects of participative leadership on organisational commitment: comparing its effects among two gender groups in banks. The findings provided important foundations for understanding subordinates' attitudes toward managers' leadership behaviour in the banking environment. They also indicated how participative leadership behaviour can influence males and females employee's performance in service organisations. Furthermore, they showed how participative leadership behaviour has different effects on male and female subordinates with regards to their commitment in organisations. A manager's leadership style creates a culture in the organization that can foster subordinates' commitment to the services delivered.

Conflict of Interests

The authors have not declared any conflict of interests.

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Full Length Research Paper

Demand forecasting process evaluation: Multiple cases studies at 15 companies in Brazil

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The purpose of this article is to evaluate what practices of the demand forecasting process are adopted by companies. The methodology used was multiple case studies. The identification of the practices was conducted by sending a questionnaire with 20 questions to 15 large companies in southern Brazil. The practices were divided into four dimensions of the analysis: functional integration, application, systems and forecasting errors. The results demonstrate that of the 20 practices analyzed, only 35% of them had a satisfactory performance. Because it is a diagnostics tool, the managers can constantly verify the strong points and opportunities for improvement referring to the demand forecasting process. The method allows measuring the four dimensions in a simple manner; evaluating if the demand forecast is conducted with computers; if the administration of the process is conducted in a collaborative manner; if different company areas defined the forecast in conjunction; if the concerns of each department are considered; if awards are granted in the forecasting process; if the forecast is used in a strategic manner by the company, as in the definition of goals; if priorities are established by product for realizing more precise forecasts; the qualitative and quantitative techniques used; if there is training for the staff involved in the forecasting; if there is a connection with the company's other information systems; if the forecasts are publicized within the company; if the error is evaluated and if there are problems caused by forecasting errors and other factors.

Key words: Brazilian companies, demand forecasting, practices, multiple case studies.

INTRODUCTION

Forecasting demand is of fundamental importance to the competitiveness of a productive system. Answering questions such as "how much," "when" and "what" to produce or buy, guides professionals from various segments to improve their forecasting techniques and allows organizations to anticipate their positions to protect themselves from future events (Barbosa and Chaves, 2012). Tubino (2009) emphasizes that demand forecasting is the basis for strategic planning of

production, sales and finances at any company. Strategic planning uses the forecasted demand to define a company's market position, determine what equipment to invest in, what labor to seek and other factors. Generally, the sales or marketing department is responsible for conducting a forecast, although it is being extended to Planning and Production Control (PPC). This study will also examine if companies have a specific sector responsible for forecasting and how different areas are

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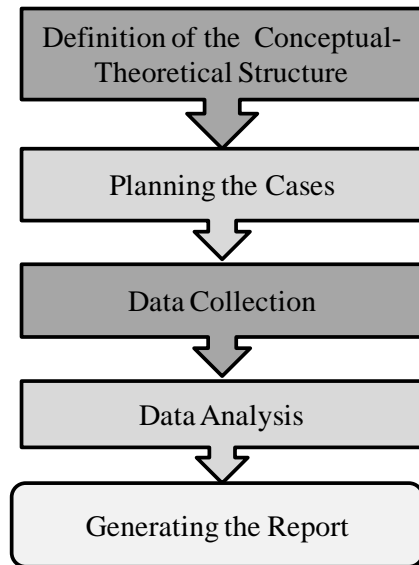


Figure 1. Research steps. Source: adapted by Forza (2002), Croom (2005), Souza (2005) and Miguel, Leal & Silva (2011).

integrated for forecasting.

The authors Fildes et al. (2003) emphasize that studies about demand forecasting need to focus less on methods and more on management practices, apply the lessons learned from the forecasting methods studied, examine competitive models, review practical investigations and keep things simple. This affirmation also applies to this study. In practice, it has been observed that companies, especially textile companies, have tested more than 3 techniques for forecasting demand and many losses are related to not knowing how to manage demand, which winds up having an impact on the amount of remainders from a collection and thus the need to offer promotional sales to “relieve production,” balance cash flow and manage stocks, in addition to other impacts such as those on product design and the various areas that are related to forecasting demand.

This study will use the term “practices” as a synonym for “best practices” and “good practices.” The basic principle of the concept of best practice is that operations, concepts and techniques must be driven by competitive benchmarks and models of business excellence to improve the competitiveness of an organization, through the development of people, processes and technology (Laugeni, 2005). Thus, regardless of the sector a company is in, forecasting demand can present common problems related to the use of unsuitable techniques and poor management.

The purpose of this article is to investigate how companies manage demand forecasting and what practices are applied at large companies in Brazil. The paper first introduces the work by presenting a contextualization of

the problem, the objectives and justifications. Section 2 presents the method used – a multiple case study of 15 companies in Brazil. Section 3 describes some concepts about the theme found in the literature. Section 4 presents the diagnostic tool developed. Section 5 displays the results of the questionnaire issued to 15 companies. The conclusions indicate the trends identified and how the companies are progressing in the use of best practices for demand management. The references used are presented at the end.

METHODOLOGY

The decision to use a multiple case study, was made because of the opportunity it creates to develop new theories and increase understanding about real and contemporary events (Souza, 2005). The steps of the research follow the structure recommended by Forza (2002), Croom (2005), Souza (2005) and Miguel et al. (2011). Figure 1.

1. Definition of the conceptual-Theoretical structure – This refers to the bibliographic research conducted in the ISI Web of Knowledge data base using the terms “demand management,” “benchmarking” and “performance indicators”. Miguel (2011), adds that in this step there is an initial attempt to “translate” a theoretical command into an empiric demand. The works of Fildes et al. (2003, 2009), Smith and Mentzer (2010) and Kalschmidt (2012) are those that come closest to and are related to this study. The review of the literature in section 3 will present these studies in detail.
2. Planning the cases – This phase included the preparation of a questionnaire, the selection of the units of analyses, contacts with the companies and the scheduling of the application of the questionnaire. Eisenhardt (1989) suggested that from 4 to 10 cases can be sufficient. The adoption of multiple cases allows achieving a greater degree of generalization of the results, although perhaps the evaluation of each one of the cases is done less deeply and it also consumes more resources (Souza, 2005; Miguel, Leal and Silva, 2011). The questionnaire in this study has 20 questions and is found in Appendix A.
3. Data collection – The 15 companies selected were defined because they meet the criteria of large companies, which are those with gross annual income greater than US\$150 million. A first contact was made by telephone to explain the study and obtain the email of the person responsible for forecasting demand at each company. The questionnaires were issued between November 2012 and March 2013.
4. Data analysis – This step, which is described in more detail in section 4, presents the preliminary results of issuing the questionnaire at 15 companies in Santa Catarina state, Brazil. The graphs indicate if the demand forecast is conducted by computer; if management is conducted in a collaborative manner; if different departments define the forecast in conjunction; if any restrictions are considered; if rewards are offered in the forecast process; if the company uses the forecast in a strategic manner, as in the preparation of goals; if priorities are set for products for which more precise forecasts will be realized; what are the qualitative and quantitative techniques used, if there is specialized training for the employees involved in forecasting; if there is connection among the company’s information systems; if the forecasts are publicized within the company; if the error is evaluated and other factors.
5. Generating a report – This phase can be understood as the conclusion of the practices adopted and trends of the companies evaluated. Each company will also receive the report with the individualized and general responses.

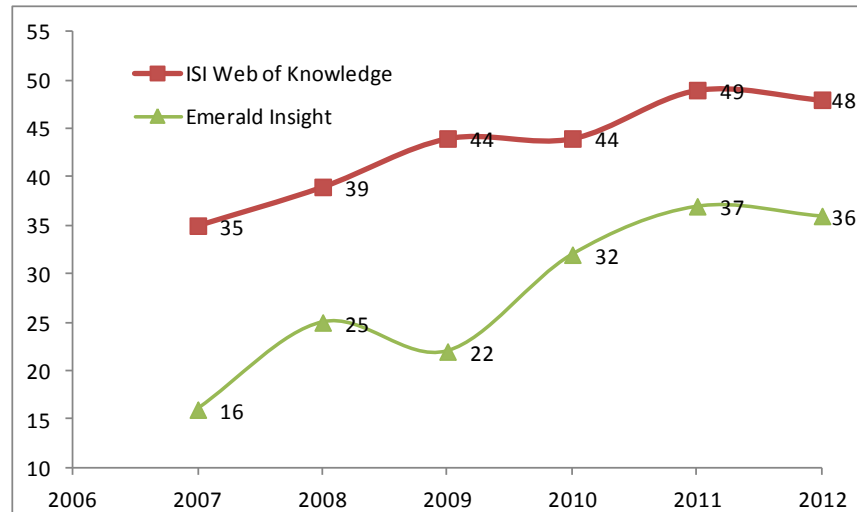


Figure 2. Quantity of articles referring to demand forecasting

REVIEW OF THE LITERATURE ABOUT DEMAND FORECASTING

According to Fildes et al. (2003), there are three main problems in developing valid models to explain the practice of forecasting. The first is the lack of proper training of the researchers, who are highly concerned with the techniques, but do not give proper attention to the integration of information in the forecasting process. The second is related to the data, where two problems are observed: the indicators and the access. Companies are hesitant to provide the necessary information and maintain a very traditional system of performance evaluation, the research can thus become difficult and expensive at many organizations. Finally, the lack of incentives, where the researcher proposes new techniques and methods that need to become public in the academic environment, however, this is not always possible because at times companies do not allow the conclusion of the studies or omit information.

The authors Fildes et al. (2003), attribute a lack of commitment to the forecasting process to a lack of an organizational structure. Some companies believe that the consequences of incorrect forecasts present limitations for their branches of their business. In this study, the section on Functional Integration will examine these questions. There are gaps concerning the understanding of behavioral factors that are associated to the management of demand at corporations. Questioning exists about if forecasting should be conducted by a separate functional department or area and what standards should be applied. In any case, it is important to have a multidisciplinary approach (Fildes et al., 2003).

In 2003, the authors Fildes et al. (2003), noted that there had been few studies about the practice of forecasting, and most of them were surveys and case studies. According to Smith and Mentzer (2010), few studies have presented a theoretical basis to explain how factors and relationships can influence the application and development of forecasts. The structures proposed have considered the influence of the market on the environment, organization, support to management and information systems involved in the performance of demand. Forecasting has been treated as a separate department or an individual unit of analysis. There is a lack of models that have been tested in practice. Figure 2 shows a bibliometric study conducted in the Isi Web of Knowledge and Emerald Insight databases, highlighting that the theme "demand forecast" is prevalent. In the Emerald database,

using only the year filter (2007 to 2012), a total of 174 journal articles about the theme were identified. On the ISI database, beyond the year filter, the search was conducted in the fields of Operations Research Management Science, Management, Engineering Industrial, Engineering Manufacturing, Economics, Business, Planning Development, which resulted in 259 articles.

Kalchschmidt (2012), made a comparison of three approaches – universalist, contingent and configurational – at 500 companies. The universalist approach is applicable in any situation and can be considered a best practice. The contingent approach analyzes how practices change according to specific independent variables (for example, size of company and type of company). Finally, in the configurational approach an attempt was made to understand how a pattern of multiple independent variables is related with a dependent variable. Thus, the efforts are concentrated on the identification of "ideal types" that represent internal and external solutions which the companies consult to form the best practices. This study is aimed more towards the universalist theory, because the group of best practices used served businesses of various sectors, sizes and location.

The diagnostics tool

The authors Fildes et al. (2003), make the criticism that the stages of the method used by Moon et al. (2003) are not well defined, making it difficult to distinguish between one stage and another. Thus, studies are suggested to identify the impact of a forecast on a department compared to the entire organization. Another suggestion is to complete this structure with other existing forecasting methods. Based on this line of thinking used by the authors, the diagnostic tool developed consisted of a questionnaire with 20 objective questions analyzing the four dimensions suggested by Moon et al. (2003). The four dimensions are: functional integration, approach, systems and performance. Combined with these dimensions was the dimension forecasting errors and the performance dimension was excluded. Figure 3 summarizes the questionnaire with the dimensions and the objective of each question.

6. Functional integration dimension: Seeks to evaluate factors related to communication, coordination and collaboration of the forecast with the businesses' functional areas or departments such as marketing, production, finance and logistics.

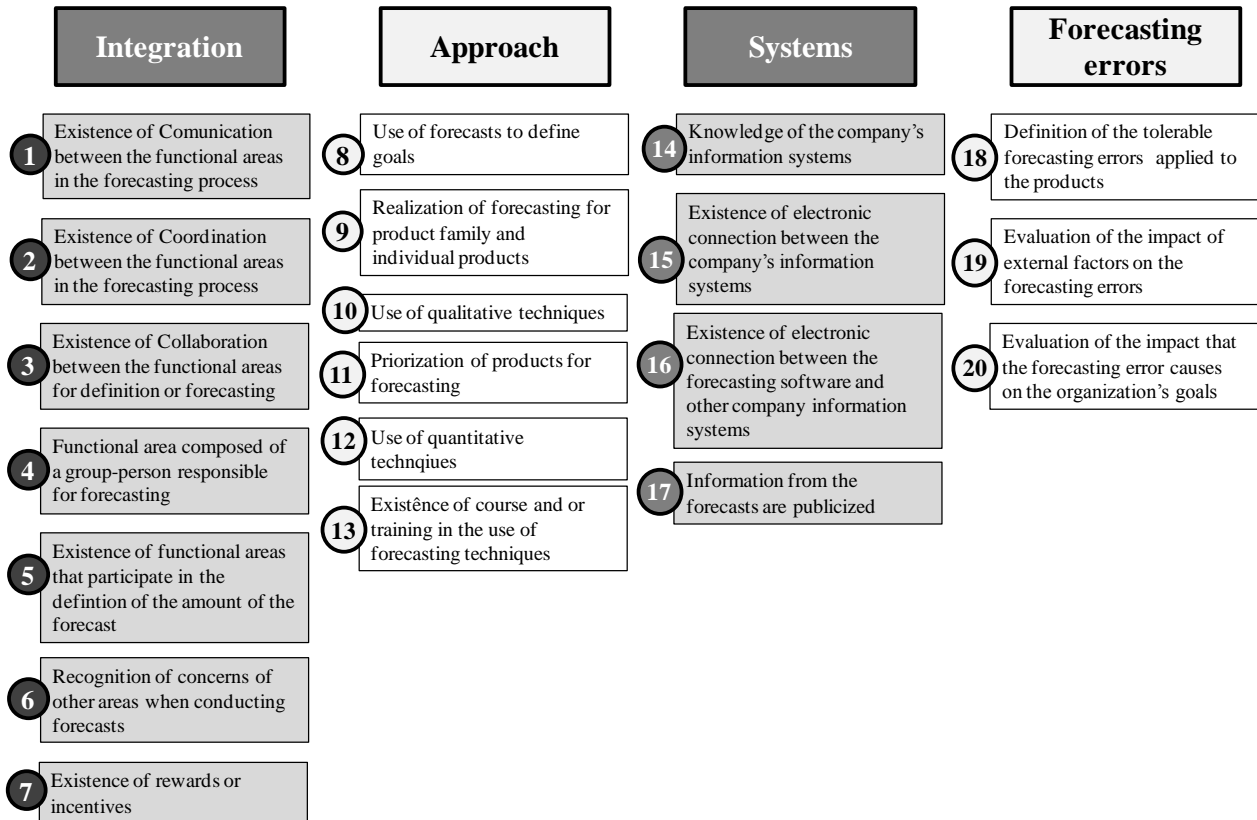


Figure 3. Dimensions of the method with the questions

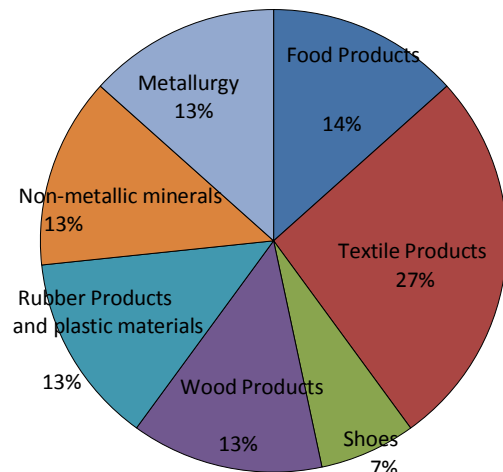


Figure 4. Economic sectors of the companies that responded to the study

7. Approach Dimension: Seeks to evaluate how demand is forecast, the forecasting techniques used and the relationship between the forecast and the organization's strategic planning.

8. Systems Dimension: Seeks to evaluate the existence of hardware and software for forecasting demand and its connection with the organization's other information systems. It also considers the

availability of reports and the degree of knowledge that people have about these systems.

9. Forecasting Error Dimension: Seeks to evaluate how the organization defines the forecasting errors, the impact of the errors on business operations and their relation with goals. The forecasting errors are characterized by the difference between the forecasted amounts and the real amount of demand in the period.

Andrade (2006), emphasized that the problem of demand faced by the textile companies is related to the behavioral characteristics and preferences of the market in which each company operates, which often winds up creating a greater concentration of demand in specific items. Among the demand indicators evaluated, which showed the worst result was the market analysis indicator. The purpose of this indicator is to evaluate how close or far the productive system is from the market. It was found that companies perceive that an approximation with the consumer market provides better knowledge of specific habits, preferences and behavior of their clients.

RESULTS

This section will present the preliminary results from the application of the questionnaire at 15 companies in Santa Catarina State. Figure 4 shows the economic sectors of each company. Thus, there is a diversity of 7 sectors, and the highest number of companies are in the textile sector (27%), followed by food products (14%) and wood

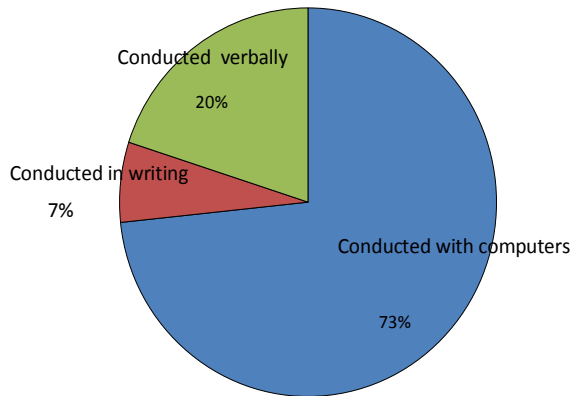


Figure 5. Responses about communication in the forecasting process.

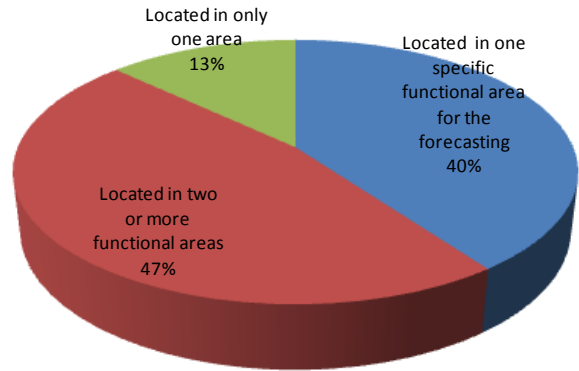


Figure 8. Responses about the location of forecasting management

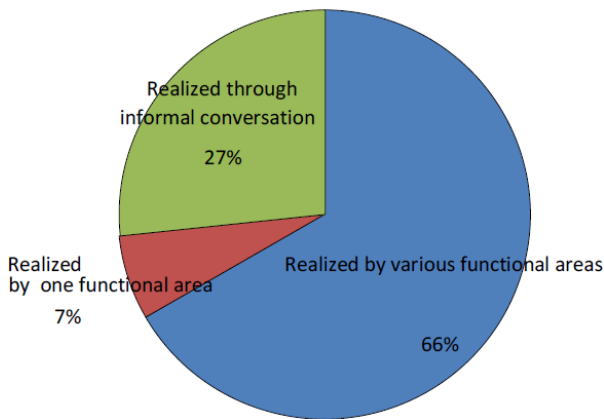


Figure 6. Management of the forecasting process among functional areas

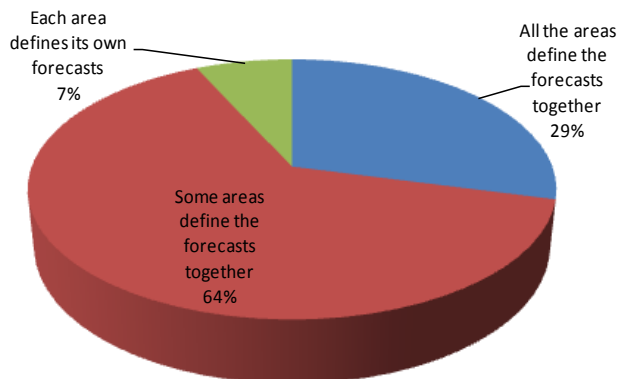


Figure 7. Collaboration of the functional areas in the forecasting process

manufacturers (7%).

Beginning with the Functional Integration Dimension, question 1 seeks to verify in what way communication takes place between the functional areas of the organization. Most of the respondents are on the right track, that is, they use computerized resources that facilitate the communication between areas. Figure 5, shows that the second best alternative – conducting in writing – was identified by 7% of the companies and 20% do so verbally, without records. The management of the forecasting process seeks to coordinate the activities undertaken to develop the forecast. Figure 6 shows that at 66% of the responding companies the management is conducted collaboratively between various functional areas of the organization; on an intermediary level, that is, it is conducted by one functional area (7%) and in 27% the process is conducted by means of informal conversations.

Figure 7, shows that some areas make a joint forecast (64%). But it was found that even if the forecast is conducted in collaboration, only some areas define the amount. The problem is that the area that decides often tends not to consider the concerns of the other departments. Only 29% of the respondents affirm that all the areas have equal influence in decisions about the forecasting process. Good practices suggest that there should be a specific location for demand forecasting, because this allows centralizing information and facilitates the visual management and integration of the staff. To verify this issue, Figure 8 illustrates that 40% of the companies evaluated forecasting took place his way, revealing that there is a specific staff that conducts the forecast. In most of the companies, (47%), the information is located in two or more departments, which can generate overlapping or conflicting documents and amounts forecast. In a more traditional situation, there is no specific department for forecasting and the person or group is located in only one department. This situation is found at 13% of the companies.

At the end of the forecasting process numerical values are generated that can support decisions in various

products, rubber and plastic material products, non-metallic products and metallurgy (13%) and finally shoe

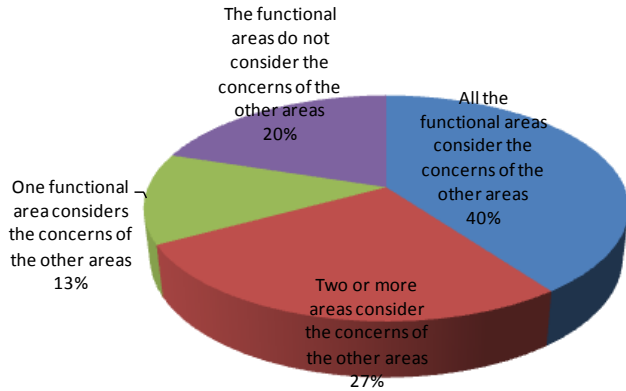


Figure 9. Responses about considering the concerns of functional areas

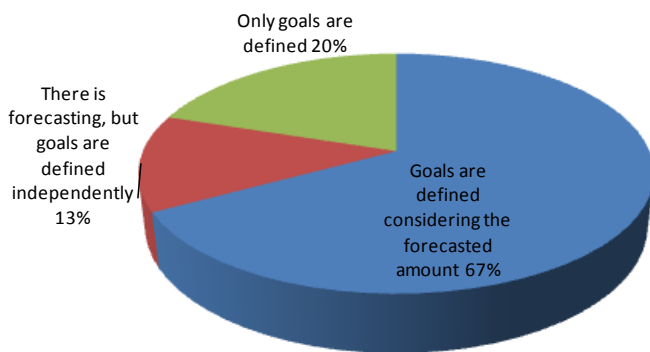


Figure 10. Responses concerning setting goals

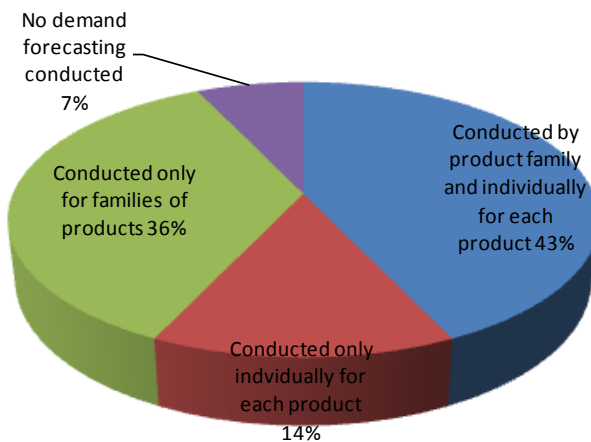


Figure 11. Forecasting by product families and individual product

functional areas work together and the amount forecasted is defined by consensus. An important issue during the forecasting process is to consider the concerns of each department. Thus, question 6 sought to verify if there is a concern for the internal client. Forty percent of the companies affirmed that all the functional areas consider the restrictions of the other areas to conduct their forecasts. A future detail of the study will indicate if this in fact took place (see Figure 9). At 27% of the respondents, two or more functional areas consider the restrictions of the other areas to conduct their forecasts (for example, marketing recognizes that its forecast can exceed production capacity and production recognizes that its forecast for purchasing raw material can compromise the financial area). At the extreme, the less efficient option, are 20% of the companies at which the concerns of their various functional areas are not considered.

According to Fildes et al. (2003), the incentives must be by team and not by individual. Social questions must also be considered in the forecasting process. Some studies demonstrate that many administrators prefer a less imprecise forecast with a motivational tool than those that do not consider the human factor. Thus, a bonus is often related to the motivational factor. However, when verifying this in question 7, it was noted that no company offered awards to staffs that made a correct forecast. The Approach Dimension, sought to evaluate the relationship of the goals to the forecast. Thus, in Figure 10, it is possible to perceive that 67% of the respondents goals are defined considering the amounts forecasted, indicating a positive relationship. Some organizations conduct demand forecasting by product family, while others conduct the forecast for each product individually. In this context, Figure 11 indicates that the ideal situation is found at 43% of the companies, that is, the forecast is conducted for the product family and also individually. This is an issue that is often related with the PPC, showing that there is integrated planning in the medium and short term.

The forecasts can be complemented by qualitative techniques, including the Delphi Method. However, this occurs at only 13% of the responding companies. Most companies (87%) indicated that they only use quantitative techniques to conduct demand forecasting. In companies at which there are many items to be administered, they decided to use an ABC type classification, for example, so that priority is given to the most important items. Thus, question 11 sought to determine if the companies give priority to some products for which they conduct more precise forecasts, accompanied by graphs, trends and seasonalities. Figure 12 indicated that this practice occurs in 53% of the responding companies. When seeking to conduct increasingly precise forecasts, the ideal is that the companies use sophisticated quantitative techniques (for example: dynamic regression models for medium and long term forecasts and time series models

areas, such as the quantity to be produced. From this perspective, it was found that the best practice was found at 73% of the responding companies – two or more

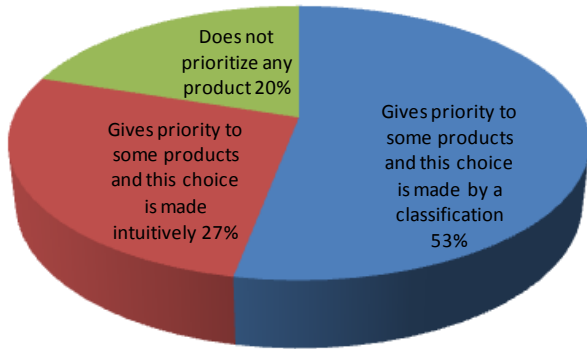


Figure 12. Responses about setting priorities for products in the forecasting

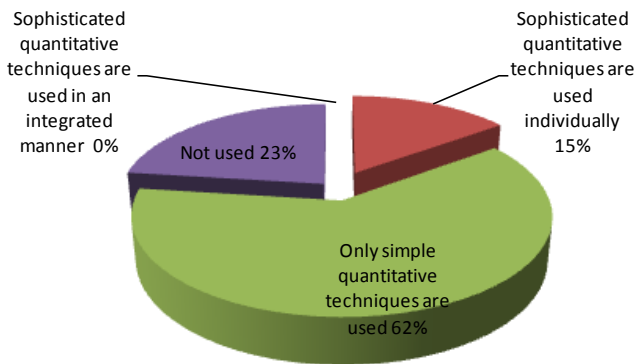


Figure 13. Use of simple or sophisticated quantitative techniques

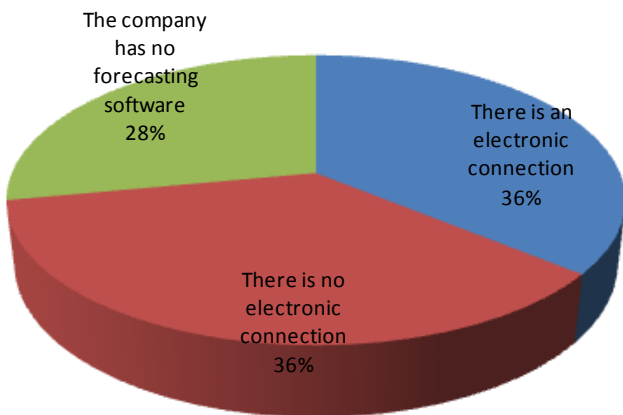


Figure 14. Existence of electronic connection between the forecasting software and other information systems

for short term forecasts), Nevertheless, none of the participating companies have this practice. In the study, 15% of the respondents indicate that they use more elaborate quantitative techniques, although individually.

Most (63%) only use simple quantitative techniques (see Figure 13).

The recognition of the forecasting techniques is not always clear. It is known that statistics and mathematics are problem areas in Brazilian education. Thus, in many cases the companies provide training and or courses to employees to assist in the preparation and accompaniment of the forecasting process. A managerial strategy that has been found in recent years is the Six Sigma, through which companies invest in the training of employees who are capable of using statistical tools to better control the process and generate benefits and gains in quality for the entire organization. This practice was verified in question 13, which found that 87% of the respondents had no type of training in the use of forecasting techniques. The trainings were classified in simple techniques (simple average, moving average, simple regression), time-series techniques (for example, exponential smoothing and ARIMA), and training in time series techniques, regression models and statistics.

The Systems Dimension sought to verify if the people in the organization know how to use the information systems. Thus, 64% of the respondents affirm that in their work units, in a general context, most of the people know how to use them. In contrast, 36% the option marked was “some people know how to use information systems.” The wide variety of Information Technology (IT) components can lead to problems of incompatibility between software and hardware, the inability to understand requirements and specifications in terms of speed, reliability, ergonomics, updating and low availability, thus causing waste (BAUCH, 2004). For this reason, it is suggested that the information systems of the organization be interlinked to facilitate the flow of communication. This total integration was found at 53% of the respondents. At the other 47%, there is partial interconnection among some areas.

Question 16 sought to identify in somewhat greater detail if there is interconnection between the software that generates the forecasts with the organization’s other information systems, such as management information systems (MIS), distribution resource planning (DRP) and manufacturing resource planning (MRP II). According to Figure 14, the responses were balanced between the ideal alternative – existence of connections between the software that generates the forecasts and the information systems (36%); and no connection between the software that generates the forecasts with the other information systems (36%). There were also cases in which there was no forecasting software at the organization (28%).

Concerning the form of publicizing the forecasting information, Figure 15 indicates that the ideal situation was found in 36% - the information is publicized in reports available via computer in real time. At most of the companies that responded, (43%), the information is only promoted in printed reports and in some periods of the year. The Forecasting Error Dimension has 3 related questions. One of them, displayed in Figure 16, allows

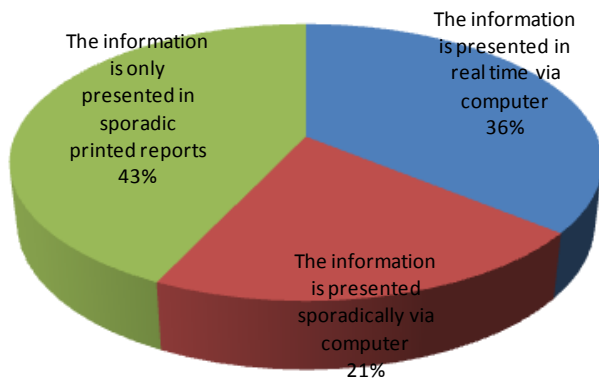


Figure 15. Forms of publicizing forecasts at companies

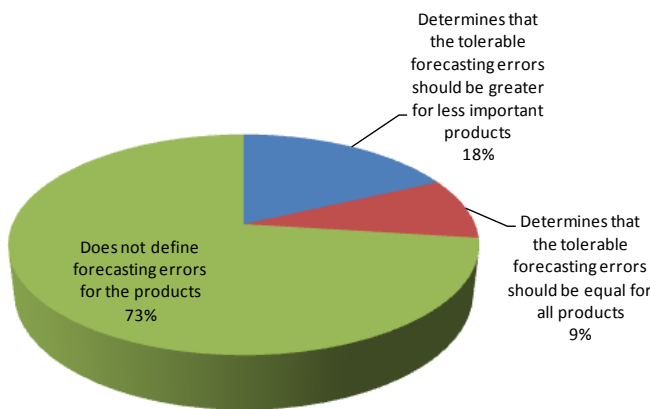


Figure 16. Responses about tolerance to forecasting errors

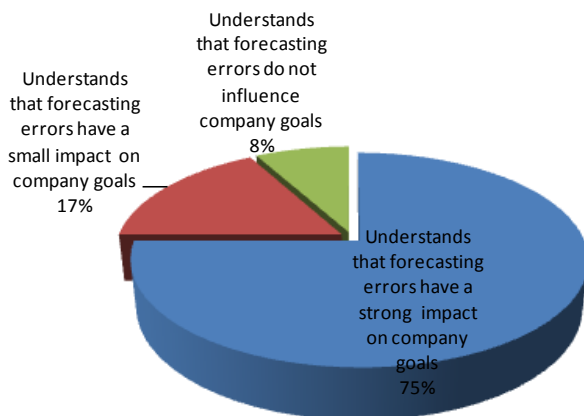


Figure 17. Responses about the impact of forecasting errors on company goals

observing that 73% of the responding companies do not define forecasting errors for the products. The ideal situation—in which the organization defines that the tolerable forecasting errors should be larger for less

important products and lower for more important products was found in 18% of the responses. Finally, in the intermediary situation, 9% of the respondents define that the errors are equal, regardless if the products are more or less important to the company.

There are external factors that affect demand, these include economic factors, government actions, consumer taste, product image, the actions of competitors and the availability and cost of complementary products (Pereira et al., 2006). In this context, 92% of the companies affirmed that outside factors affect the forecasting errors. Nevertheless, even though the majority of companies do not define forecasting errors, Figure 17 indicates that errors have a strong impact on the goals of the organization both when it forecasts more than what the market needs (excess products), and when it forecasts less (cost of lost sales). For 75% of the responding companies, forecasting error has a strong impact on organizational goals. Presenting the results of the 15 responding companies, section 6 will discuss in a global manner the final considerations, indicating in a macro manner the state of this demand forecasting process and the trends identified.

CONCLUSION

To summarize the results, Table 1 indicates the percentage of companies that conduct the best practice for each question. In red are the practices that had performance of lower than 60%. Of the 20 practices verified, 13 practices or 65% had a low performance. The positive points found were:

1. Communication between company departments is realized mainly by computer;
2. The management of the forecasting process is conducted collaboratively among the various areas;
3. A minimum of two areas are involved in the determination of the forecasted amounts;
4. Goals are defined considering the values of the forecasts;
5. Most of the staff knows how to use the information system;
6. The companies are aware that external factors affect forecasting errors;
7. There is an understanding that forecasting errors have a strong impact on the organization's goals.

Meanwhile, for the issues that can be improved, the following practices are suggested:

8. Functional integration dimension – Greater integration is needed between corporate departments for the joint definition of forecasts, considering the concerns of each department and the value of the internal client. The ideal is that each company has a specific functional department dedicated to demand forecasting. A system of

Table 1. Percentage of best practice for each question

Integration		Approach		Systems		Error	
QUESTION 1	73%	QUESTION 8	67%	QUESTION 14	64%	QUESTION 18	18%
QUESTION 2	66%	QUESTION 9	43%	QUESTION 15	53%	QUESTION 19	92%
QUESTION 3	27%	QUESTION 10	13%	QUESTION 16	36%	QUESTION 20	75%
QUESTION 4	40%	QUESTION 11	53%	QUESTION 17	36%		
QUESTION 5	73%	QUESTION 12	15%				
QUESTION 6	40%	QUESTION 13	0%				
QUESTION 7	0%						

rewards for those involved in the forecasting process is a strategy that motivates employees to achieve the goals in a collaborative manner.

9. Approach dimension – It is suggested that individual forecasts can be used for Class A products (the most important ones) and by family of the others, and to combine more sophisticated quantitative techniques with qualitative ones to improve the forecasts. None of the companies responded offer training in the use of forecasting techniques. Thus, educational programs about time series and statistical regression models are recommended.

10. Systems dimension – To improve in this dimension, total interconnection is necessary between the company information systems as well as integration between these systems with the software that generates the forecasts. As a complement, the visual management of these systems is suggested, whether in a physical or virtual manner, so that everyone can see the indicators and the status of the forecast and are able to plan in the medium and long term and also correct alterations that may occur over time.

11. Forecasting error dimension – It was perceived that in many companies evaluated no comparison is made between the real and forecasted demand. Thus, the establishment of indicators assists in the effective management of the forecast, and its control during the process as well. The use of indicators that measure the impact of the forecasting error is also essential for the company's success.

The purpose of the article was to sketch an initial view of how organizations are using demand management practices. The dimensions of the method proposed were indicated and the responses to the questionnaire presented. It was possible to perceive that demand management is a theme that deserves greater attention in the corporate environment. It is necessary to integrate people and begin to see demand management as a systemic and continually improving process.

Conflict of Interests

The authors have not declared any conflict of interests.

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APPENDIX



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Study of the Demand Forecasting Process at Corporations - QUESTIONNAIRE

Category Functional Integration – This set of questions is designed to understand factors related to collaboration, communication and coordination of the forecast with the functional areas of the business such as marketing, production, finance and logistics.

1. In the forecasting process, communication can take place between the functional areas of the organization (marketing, finance, production, logistics). Identify the alternative that best represents the profile of your organization:

- There is no communication between the functional areas.
- Communication between the areas is only verbal.
- Communication between the areas is mostly written, without the use of information systems.
- Communication between the areas is mainly conducted by information systems.
- Does not apply.

2. The management of the forecasting process seeks to coordinate the activities undertaken to generate the forecast. Identify the option that best represents the administration of the forecasting process at your organization:

- There is no administration.
- The administration is conducted by means of informal conversations.
- The administration is conducted by one functional area of the organization (ex.: the marketing department in an isolated manner).
- The administration is conducted in a collaborative manner among various functional areas of the organization.
- does not apply.

3. How do the functional areas collaborate and interact to define the forecasts for the organization. Identify the option that best represents your reality:

- Each area defines its forecast independently.
- Some areas define forecasts in conjunction.
- all the functional areas define the forecasts together.
- does not apply.

4. Considering the company's functional areas (marketing, finance, production and logistics...), where is the person or group responsible for the forecasting process located?

- No person or group is clearly identified as being responsible for forecasting.
- There is no specific functional area for forecasting and the person or group is located in only one area.
- There is no specific functional area for forecasting and the group is located in two or more functional areas.
- There is a specific functional area for forecasting where the group is located.
- Does not apply.

5. At the end of the forecasting process an amount is generated that can be used to base decisions in various areas (for ex.: quantities to be produced). At your organization, how many functional areas participate in determining this amount?

- One of the functional areas decides what will be the amount of the forecast.
- Two or more functional areas meet, although the forecasted amount is defined by only one functional area.
- Two or more functional areas meet and the amount of the forecast is defined in consensus.
- Does not apply.

6. Do the functional areas of the organization consider the concerns of the other areas when making their forecasts? Identify the option that best represents the reality of your organization:

- No, the functional areas do not consider the concerns of the other areas when making their forecasts.
- One functional area considers the concerns of the other areas when making its forecasts (ex.: marketing recognizes that its forecast can exceed the production capacity).
- Two or more functional areas consider the concerns of other areas when making the forecasts (for ex.: the marketing dept. recognizes that its forecast can go beyond the production capacity and the production dept. recognizes that its forecast for raw material purchases can compromise the financial area).
- All the functional areas consider the concerns of the other areas when making forecasts.
- Does not apply.

7. As a function of the quality of the forecast, is there any reward or incentive offered (for ex.: vacation, gift, etc.) for the people involved in the forecasting process? Identify the option that best represents the reality of your organization:

- No award is granted to those who make the forecasts.
- An award or incentive is issued to only one person involved in the forecasting process.
- Award or incentive is issued to a few professionals involved in the forecasting process.
- An award or incentive is issued to all the professionals involved in the forecasting process.
- Does not apply.

Category approach – The purpose of this group of questions is to understand how demand is forecast, the forecasting techniques used and the relationship between the forecast and the definition of goals.

8. How are the forecasts used in the definition of goals ? Identify the alternative that best represents the reality of your organization:

- Only goals are defined and there are no forecasts.
- There is a forecast, but the goals are defined independently.
- The goals are defined considering the forecasted amounts.
- Does not apply.

9. Some organizations forecast demand by family of products, while others make forecasts for each product individually. Identify the option that best represents the reality of your organization.

- No forecast is made of demand.
- The forecast is made only by families of products.
- The forecast is made only individually for each product.
- The forecast is made both by families and individually for each product.
- Does not apply.

10. In your organization is any organized qualitative forecasting technique used? (Ex. The Delphi Method)

- No organized qualitative techniques are used for forecasting.
- Yes, organized qualitative techniques are used for forecasting.
- Does not apply.

11. Does the organization give priority to some products for conducting more precise forecasts (more detailed accompaniment with graphs, study of trends and seasonality for example)?

- No, The organization treats the forecasts for all products equally.
- Yes, the organization gives priority to some products and this choice is made intuitively.
- Yes, the organization gives priority to some products and this choice is made through the use of an ABC classification for example.
- Does not apply.

12. Are quantitative forecasting techniques used?

- No quantitative techniques are used for the forecasts.

() Yes, only simple quantitative techniques are used (ex.: simple average of the past 3 months, simple regression).

() Yes, more sophisticated quantitative techniques are used individually (ex.: exponential smoothing models, ARIMA, multiple regression).

() Yes, sophisticated quantitative techniques are used in an integrated manner (for ex.: dynamic regression models for medium and long term forecasts and time series for short term forecasts).

() Does not apply.

13. At your organization, is some type of course and or training offered in the use of forecasting techniques?

() There is no training.

() There is only training in simple forecasting techniques (simple average, moving average, simple regression etc.).

() There is training in time series techniques such as exponential smoothing and ARIMA, for example.

() There is training in time series techniques, regression and statistical models.

() Does not apply.

Category systems – This set of questions is designed to understand the hardware and software combinations used to support forecasting, as well as the integration of forecasting with other corporate planning and management systems.

14. At your organization, do people know how to use information systems? Mark the option that best represents the reality of your organization.

() People do not know how to use information systems.

() Some people know how to use information systems.

() Most people know how to use information systems.

() Does not apply.

15. Concerning the connection between the information systems at your organization, can it be said that:

() There is no connection between the information systems.

() There is a partial connection between the organization's information systems (ex.: integration of the information systems of the functional areas of production and logistics).

() There is a total connection between the information systems at the organization (for ex.: there is an Integrated Management System - ERP).

() Does not apply.

16. Is there a connection between the software that generates the forecasts with the information systems of the organization, such as with managerial information systems (SIG), distribution resources planning (DRP) and Manufacturing resources planning (MRP II)?

() There is no forecasting software at the organization.

() There is no connection between the forecasting software and other information systems.

() Yes, there is a connection between the forecasting software and other information systems.

() Does not apply.

17. How are the information about forecasts publicized within the organization? Identify the option that best represents the reality of your organization.

() The information from the forecasts is not publicized.

() The information is publicized only in printed reports, in some periods.

() The information is publicized in reports available via computer in some periods.

() The information is publicized in reports via computer in real time.

() Does not apply.

Category forecasting errors – The purpose of this group of questions is to understand how the organization defines the forecasting errors, the impact of the forecasting errors on the business operations and their relationship with goals.

18. How are the tolerable forecasting errors for products defined?

- The organization does not define forecasting errors for products.
- The organization determines that the tolerable forecasting errors should be equal for all products.
- The organization determines that the tolerable forecasting errors must be greater for less important products and smaller for more important products.
- Does not apply.

19. How does the organization evaluate the impacts of external factors (ex.: economic situation, actions of competitors, suppliers, etc.) in the forecasting errors?

- Understands that external factors do not affect forecasting errors.
- Understands that external factors do affect forecasting errors.
- Does not apply.

20. Does the organization perceive the impact that a forecasting error can cause in the organizational goals (for ex.: profit, volume of stocks, etc.)?

- Understands that a forecasting error does not influence the goals of the organization.
- Understands that a forecasting error has little impact on the organization's goals.
- Understands that a forecasting error has a strong impact on the organization's goals.
- Does not apply.



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