



**Universitatea Babeș-Bolyai**  
**Faculty of Economics and Business Administration**  
Doctoral School

## **Doctoral Thesis**

**THE CORRELATION BETWEEN CUSTOMERS'  
SATISFACTION FROM THE QUALITY OF SERVICE  
AND THEIR LOYALTY TO NISKO/ARDAN GROUP OF  
COMPANIES**

**Long Abstract**

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## **Abstract**

### **THE CORRELATION BETWEEN CUSTOMERS' SATISFACTION FROM THE QUALITY OF SERVICE AND THEIR LOYALTY TO NISKO/ARDAN GROUP OF COMPANIES**

Benzion Iakov Ofir

This study examined the correlation between customer satisfaction from quality of service and loyalty in the Israeli hi-tech industry. The conceptual framework of this research pertains to five interrelated areas: customer satisfaction, quality of service (QoS), customer loyalty and customer characteristics. Hence, the market segments examined in this study are: military oriented companies, R&D centers, the operators and service providers. The research drew on theoretical research literature that includes the tools for managing satisfaction and loyalty as well as quality of service and customers characteristics.

The research addressed the following major questions:

1. How do different attitudes of customer satisfaction influence customer loyalty?
  - a. How is loyalty perceived in military oriented companies comparing to other market segments?
2. How do different characteristics of customers influence the correlations between customer satisfaction from the quality of service and their loyalty?

The study employed a mixed methods research which combined qualitative with quantitative methods, and was conducted in two phases. Phase One used qualitative data collection tools, including semi-structured interviews performed with 18 top managers from the Israeli hi-tech industry. Then, in Phase-Two, a closed-ended questionnaire was filled-in by 106 employees from different market segments: military, R&D and the operators and service providers. Finally, a measurement of the correlations between customer satisfaction from quality of service and loyalty was conducted.

The findings showed that improving customers' satisfaction from quality of service impact customer loyalty. More specifically, the evidence presented in this research reinforces the view that quality products and services influence positively on customer satisfaction and increases customers' loyalty.

On the conceptual level, the findings of this research allowed the construction of a new business management model called Satisfaction-Loyalty-Management (SLM), which draws on several customer satisfaction and quality of service models and adopts the perceptions of satisfaction and loyalty management program modules. In light of the high significance of management processes, the study indicates a definite need to strengthen the transition from the status of 'low sales performance' to 'high sales performance' by management developed skills and qualities. Hence, combining the development of managerial satisfaction and loyalty creates a synergy which promotes the business goal of increasing the firm profits and financial situation. Furthermore, the new SLM business management model proposed in this study can create a reality whereby managers in the Israeli hi-tech industry and worldwide can promote customers satisfaction, quality products and services and eventually have loyal customers who continue purchasing goods from suppliers.

# **INTRODUCTION**

## **Research Goals**

### **Primary research goal**

The main goal of this research is to develop a new business management model, which can help the NISKO-ARDAN Group to increase their sales performance and to build strategic plans for future activities. The research shall use customers recommendations, the content analysis of the research concepts were used in this study, and the existing literature and models.

### **Secondary research goals**

1. To research the correlations between customers satisfaction from quality of service and loyalty in the Israeli hi-tech industry.
2. To characterize the differences between types of customers from different companies with their correlations to the satisfaction from quality of service and their loyalty.

## **Research aims and focuses**

Nisko/Ardan Group is an Israeli leader in the electric, electronic, communication and hi-tech sectors. (<http://www.niskoardan.com/>, 25/10/13); the group acts as a distributor, vendor, projects integrator and manufacturer of components, products, systems and services. The group is interested to use this study as an elevator to find out what are the main reasons and ways to establish customer satisfaction and loyalty. Furthermore, the group is interested in increasing customer satisfaction and loyalty.

## **Gap in knowledge**

Extant literature discuss the relation between customer satisfaction and loyalty (Yi, 1990; Szymanski and Henard, 2001; Spiteri and Dion, 2004; Woo and Ennew, 2004; Russell- ennett et al., 2007), however, there is lack of research studies on the Israeli hi-tech industry with a focus on the following market segments: military, R&D and the operators and service providers. Although the literary resources indicate that there is a significant correlation between customer satisfaction and loyalty, this correlation was not investigated enough when dealing with different characteristics

of customers in the Israeli market. In addition, this study aims to create a business management model, which can allow a higher performance of the Nisko/Ardan Group. Finally, this research may attest similar markets around the world.

### **Research boundaries**

The research was undertaken within a community of top managers in the Israeli hi-tech industry working in the military, R&D and operators market segments. Phase-One of the research begins with semi-structured interviews, which were used with eighteen top managers from the mentioned market segments. Phase-Two, however, was conducted on a larger scale of employees while using a closed-ended questionnaire/survey, which was filled-in by a sample of 106 employees from variety of companies from the Israeli hi-tech industry.

### **Key Words**

Strategic Management, Total Quality Management, Quality of Service, Customer Satisfaction, Customer Loyalty, Customer Characteristics.

## **I. LITERATURE REVIEW**

The current research focuses on the correlation between customer satisfaction from quality of service and loyalty with the NISKO/ARDAN Group, which are operating in the Israeli hi-tech industry. Extant literature about customer satisfaction and customer loyalty has been evaluated.

The theoretical foundation of this research involves the following main components:

### **1. Customer satisfaction**

- a. Oliver (1980) defined satisfaction as a function of a cognitive comparison of expectations prior to consumption with the actual experience.
- b. **TQM**: The total quality management aims to achieve customer satisfaction through a set of criteria, such as strategic planning, effective leadership, people management, process management and customer focus in the organization. There is a relationship between TQM practices and customer satisfaction (Sit, 2009).

- c. **Strategic management**: a few researches support the idea that there is a positive relationship between customer satisfaction and corporate financial performance (Reichheld and Sasser, 1990; Rust and Zahorik, 1993; Anderson et al., 1997). Similarly, using the Swedish Customer Satisfaction Index concluded that “*firms that actually achieve high customer satisfaction also enjoy superior economic returns*” (Anderson et al., 1994:63).
- d. **Satisfaction – profitability link**: In the attempt to increase financial performance through customer satisfaction, companies often use some logic, which helped in creating the satisfaction–profit chain concept (Anderson and Mittal, 2000). The model contains a few stages that eventually result with organizational profitability. Increase with the attribute performance should lead to higher customer satisfaction, and higher satisfaction increases customers’ loyalty. Finally, customer's loyalty drives profitability.

## 2. **Customer loyalty**

- a. **Brand loyalty** Brand loyalty is: “*deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby, causing repetitive same brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior*” (Oliver ,1999:34).
- b. **Effects of customer loyalty** by Cox (2001) – the effect of customer loyalty is spread over three levels in the organization:
  1. Sales & Marketing approach: customer retention is much easy than achieving a new one.
  2. Cost approach: raising a new client involves high costs while keeping an existing customer requires a retention cost only.
  3. Profitability approach – if we discount the cost of raising a new customer and grow the customer's loyalty, it may bring higher profitability to the organization.
- c. In order to **keep customers**, there are four strategies offered in ascending order of the feasibility and effectiveness of economic viability (Peppers and Rogers, 1997).

1. Tribute to the customer - Once we identified a top tier client, we must deal with him as such and this will be by personal service, benefits, exclusive customer club membership and so on.
2. Buying Mutual - another way to improve customer retention is by buying customers loyalty. The meaning is to offer unique services based on customer loyalty, providing significant discounts or to offer gifts or attractive discounts to customers.
3. Product quality and customer satisfaction – product quality has no replacement. If the product is not with high quality, the customer will not return to purchase it even if the service was extremely good.
4. Singular and Cooperation - This is the highest level that can be reached in a cooperation with customer. In such a situation, the client shares his product design stages. In addition, customers define their requirements and in accordance with that approach, the supplier develops the required product.

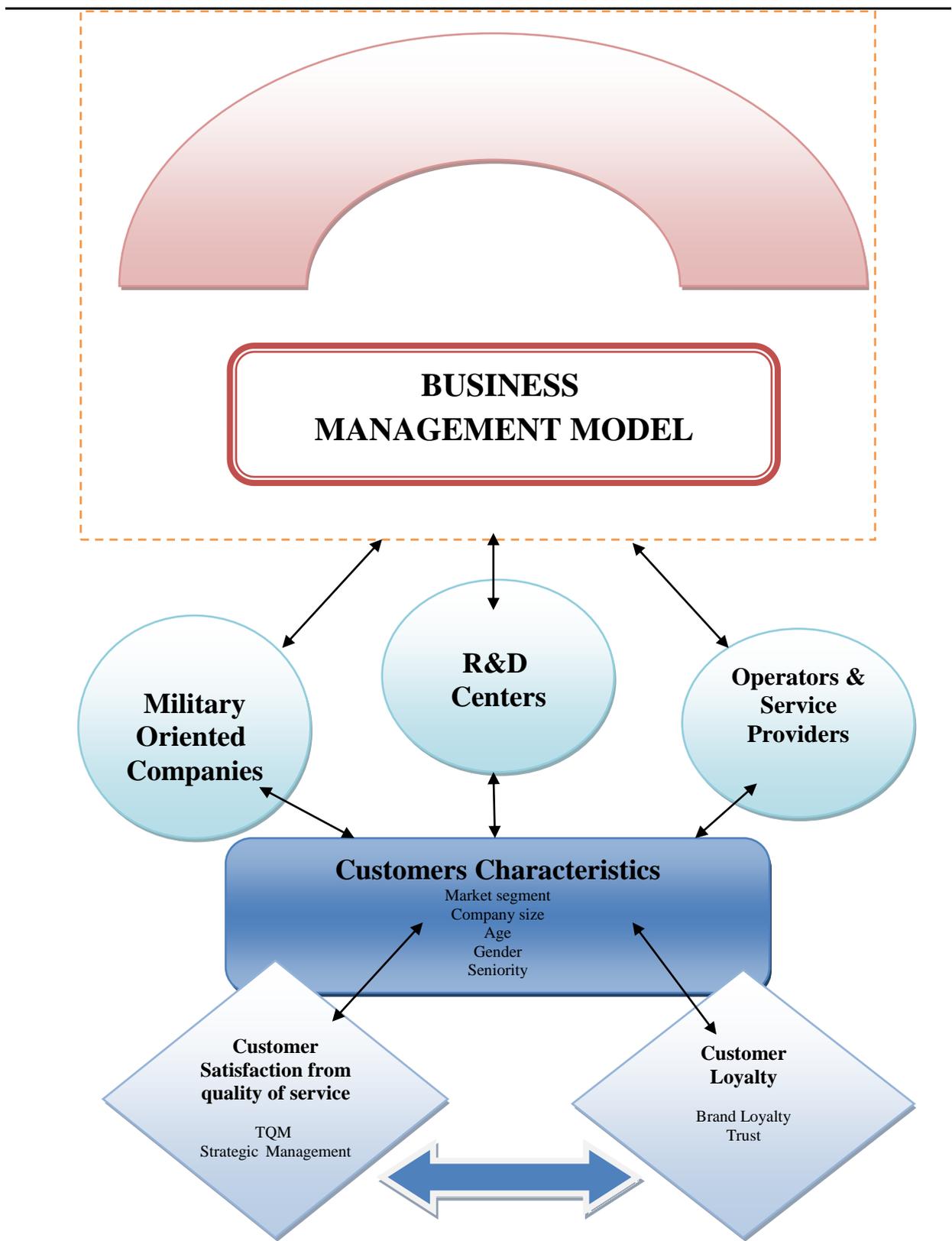
d. Kotler and Hornik (2000) presented a model for **achieving** customer loyalty. Customer's loyalty is achieved by understanding customers' expectations and establishing customers' satisfaction through the contentment of customers. This eventually leads to increase in performance of the suppliers as well as grow customers' satisfaction and loyalty.

**3. Relationship between satisfaction and loyalty:** Several researches introduced how customer satisfaction influences customer's loyalty either directly or indirectly (Cater and Cater, 2009). A direct affect was identified by (Yi, 1990; Szymanski and Henard, 2001; Spiteri and Dion, 2004; Woo and Ennew, 2004; Russell- ennett et al., 2007), while an indirect affect through commitment was identified by (Wetzels et al., 1998; Abdul-Muhmin, 2002, 2005; Hennig-Thurau et al., 2002; Caceres and Paparoidamis, 2007). A “new” stream of research suggested that the relationship between satisfaction and loyalty is affected by moderators and mediators (Homburg and Giering, 2001; Seiders et al., 2005). Researchers assumed that the relationship between satisfaction and different factors of loyalty: attitudinal, intentional and

behavioral is positive, however, could vary between products, industries and situations (Szymanski and Henard, 2001).

4. **Relationships between quality of service, customer satisfaction and loyalty:** a model that was developed and known as “Service Profit Chain” (Heskett et al, 1997), introduced a direct and strong relationship between profits, growth, customer loyalty, customer satisfaction, the value of goods and services delivered to customers and employee capability, satisfaction, loyalty, and productivity. The service profit chain is described according to the following links (Heskett et al, 1997): 1. Profit and growth are stimulated primarily by customer loyalty. 2. Loyalty is a direct result of customer satisfaction. 3. Satisfaction is largely influenced by the value of services provided to customers. 4. Value is created by satisfied, loyal and productive employees. 5. Employees’ satisfaction, in turn, results primarily from high quality support services and policies that enable employees to deliver results to customers. Zeithaml et al (2008) developed a conceptual model that correlates service quality, customer satisfaction and customer loyalty in one frame. According to the model, service quality is the outcome of reliability, assurance, responsiveness, empathy and tangibles.
5. **Customer characteristics:** different demographic characteristics are taken into account in this research including: market segment, company size, age, gender and seniority. Gender was found to be a direct effect on outcome variables such as perceived service quality (McColl-Kennedy et al., 2003; Ganesan-Lim et al., 2008; Grewal et al., 2003). Similarly, Age can be expected to be another moderator variable. There are several theories that can be applied to explain age-related differences in the context of customer satisfaction and loyalty (Evanschitzky and Wunderlich 2006). No literature sources were found for the characteristics market segment, company size and seniority, using them as mediators for the correlation between satisfaction and loyalty. The current study shall use these characteristics as mediators, thus this is a novelty.

The research collected evidence to advance an informed and evidence-based understanding that enlightens the influence of customer satisfaction on customer loyalty as a way of achieving effective practice for this study. Figure 1.1 depicts the conceptual framework model representing visually the unity of the components that constitute the process, and the way these are interacting with each other. The business management model provides a combination of theoretical and practical umbrella of this study where different market segments are involved and being investigated in terms of customer behavior. Five different characteristics are under study for finding out whether they impact the correlation between customer satisfaction from quality of service and loyalty or not. In addition, the research investigates whether the characteristics are moderating variables of satisfaction from quality of service and loyalty. At the same time, there are two directional processes, according to which one is influencing the other. The first process is describing the influence of customer satisfaction from quality of service on customer loyalty while the second process focuses on customer characteristics and its impact over the relationship between customer satisfaction from quality of service and loyalty. In the center of the model there are different market segments that are under study.



**Figure 1.1: The Conceptual Framework of this research**

## **II. METHODOLOGY**

I have designed a two-phase research process, according to which evidence gathered in Phase-One was used as a foundation for the design of the following stage. The guiding assumption of this research was that my personal and professional experience in the Israeli hi-tech industry could be used to interpret the collected data. Figure 2.1 depicts the research design model. It also shows that Phase-One, the qualitative stage, served as a data foundation for a larger and more detailed investigation in Phase-Two, the quantitative stage. I used triangulation as a strategy for corroborating the data and for increasing my confidence in it. Furthermore, triangulation was used for widening the perspectives of the issues under investigation and for reducing bias. Additionally, I used triangulation as a strategy for cross-checking and strengthening the research design, and for presenting a robust body of evidence towards an understanding of the discussed correlation of satisfaction from quality of service with loyalty in the Israeli hi-tech industry.

### **II.1 Mixed methods research**

Mixed methods research is often defined as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts into a study. Its logic of inquiry includes the use of discovering patterns, testing theories and hypotheses, and relying on the best of a set of explanations for understanding one's results (de Waal, 2001). A mixed method concept is more appropriate in this research because of the following main reasons: the main goal of this research is to create a business management model, which can help the Nisko/Ardan Group and similar companies worldwide to increase their sales performance, therefore, this study requires a grounded theory, which a single method could not apply sufficiently. In addition, a mixed method concept may result with stronger evidence as well as facts, which a single method cannot provide. Although a mixed method research is more expensive to perform, this research is getting some financial support by the Nisko/Ardan Group mainly because of its interest in developing a business management model, which may help to increase their sales performance. Finally, the academic background and support of the Israeli and the Rumanian staff allow this research to establish a mixed methods concept.

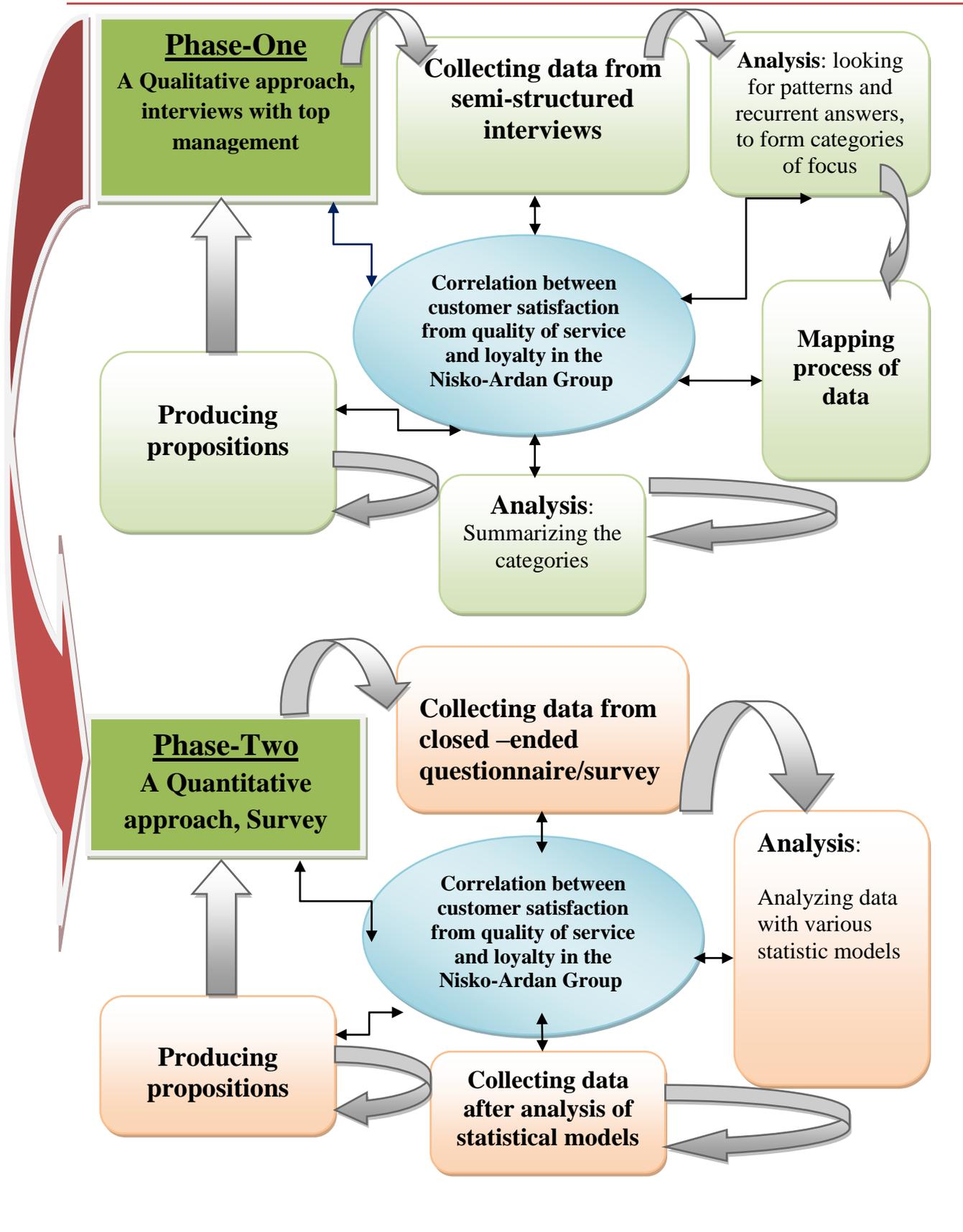


Figure 2.1: Research design

## II.2 Research questions

1. How do different attitudes of customer satisfaction influence customer loyalty?
  - a. How is loyalty perceived in military oriented companies comparing to other market segments?
2. How do different characteristics of customers influence the correlations between customer satisfaction from the quality of service and their loyalty?

## II.3 Research hypotheses

**H1:** There will be a positive correlation between customer satisfaction and their loyalty.

**H2:** There will be a positive correlation between customer satisfaction from the quality of service and their loyalty.

**H3:** The correlation between quality of service, satisfaction and customer loyalty will be high.

**H4:** Different characteristics of customers will not influence customer satisfaction.

**H5:** Different characteristics of customers will influence positively the customer satisfaction from the quality of service.

**H6:** Different characteristics of customers will not influence customer loyalty.

## II.4 Research variables

- ◆ **Independent variable:** customer satisfaction from the quality of service
- ◆ **Dependent variable:** customer loyalty
- ◆ **Moderating variables:** market segment, company size, age, gender and seniority at work

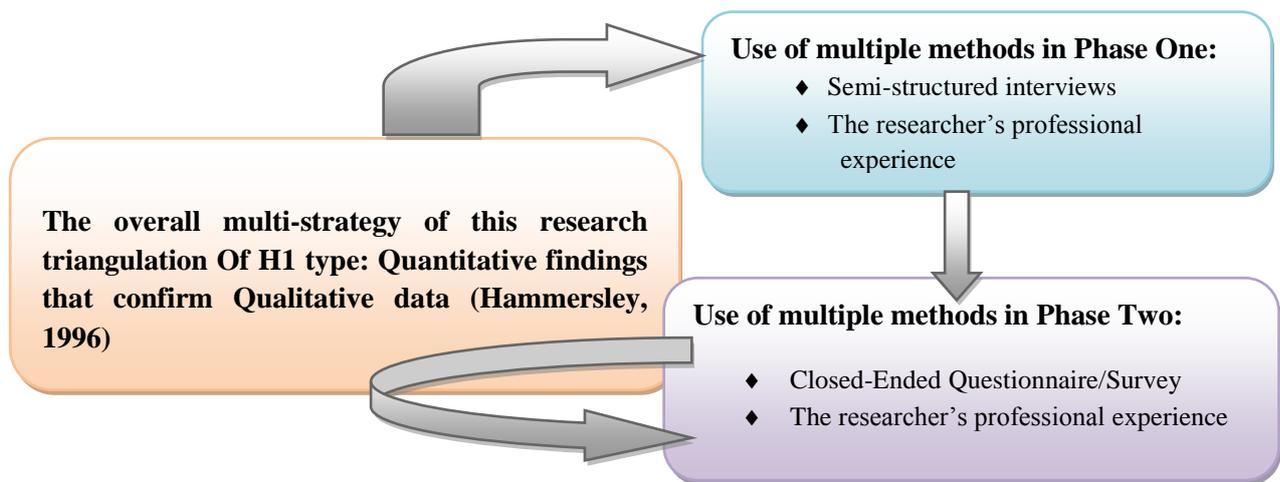
## II.5 Triangulation

Triangulation was included in my research as a strategy for gaining a rich data source to analyze and use few methodologies. It is "... the collecting of information from a diverse range of individuals and settings, using a variety of methods" (Maxwell, 1996:75). It is an approach in which 'multiple observers, theoretical perspectives, sources of data, and methodologies' are combined (Denzin, 1970:310). Triangulation, then, involves the use of two or more methods of data collection in the study of a

particular aspect of human behavior. The current study is using a mixed methods concept as well as several theoretical perspectives to get better evidence to the final stages of findings. One of the main goals of using the triangulation is to cross-check the findings by qualifying and confirming both quantitative and qualitative research programs. In particular, in this research, triangulation was created of several sources of information:

- a) Semi-structured interviews conducted with top management employees from the Israeli hi-tech industry. i.e. military, R&D and the operators market segments.
- b) Survey that was used on 106 different companies from the Israeli hi-tech industry to find different correlations and influences of this study.
- c) The researcher's professional experience in the discussed market.

A model of the triangulation used in this research is presented in Figure 2.2.



**Figure 2.2: Triangulation in this research**

## **II.6 Validity, Reliability, and Generalizability**

Reliability and validity are important criteria for establishing and assessing the quality of quantitative research. Reliability relates to a stance in which if the methods of collecting and analyzing data are repeated, then the claims and the conclusions would be the same. Moreover, the information provided by the researcher regarding the ways the evidence was gathered and analyzed enables another researcher to follow these procedures, and believe it to be true. Reliability is defined as the degree to which a measure of a concept is stable (Bryman, 2012:715). The author suggests a few

strategies that can help in meeting the requirements of validity in qualitative research method by choosing senior managers from the Israeli hi-tech industry who their status and position do not allow them to behave different than 'honesty and integrity' with all of their responses. Additionally, the research uses extend of triangulation, to avoid reliance on a limited perspective, and to strengthen the research design by enabling crosschecking. In the current research, attempts are made to provide thick descriptions (Geertz, 1973) in order to increase the generalizability level of the findings.

## **II.7 Research population**

### **II.7.1 Phase-One: interviews with top management**

The research was employed in two phases where in each phase a different research population provided respondents. The population included the customers who have business relationships with the NISKO-ARDAN Group and are operating in the following market segments: *Military oriented companies, R&D Centers, and Service Providers*. Senior managers were selected for the first phase of this research. This stage was used also to interpret the second phase. Eighteen top managers and engineers from the discussed markets were interviewed. Each individual manager provided his feedbacks, opinions and experienced knowledge related to the main topics of this study. This source of knowledge was needed in order to fulfill the investigation on the relationship between customer satisfaction and loyalty in the Israeli hi-tech industry. Additionally, it helped in describing the existing perceptions, attitudes, and beliefs of senior managers about customer's behavior in the discussed market segments.

### **II.7.2 Phase-Two: Closed-Ended Questionnaires/Surveys**

Phase-Two of the research was concerned with the focus of this study. In this part the main correlations between customer satisfaction and loyalty were investigated and so were the influences of customer characteristics on the discussed correlations. Phase-Two is based on a quantitative research concept while 106 customers from different companies filled-in a closed-ended questionnaire that was basically developed according to the data was collected in Phase-One. Based on the categories formed in the first phase, a survey/closed-ended questionnaire was created and used on a sample of 106 employees from the three market segments that are under study.

## **II.8 Sampling Methods**

### **II.8.1 Theoretical Sampling, Qualitative Approach**

The population of this research phase was selected by having the theoretical sampling in mind. One form of purposive sampling is theoretical sampling, advocated by Glaser and Strauss (1967) and Strauss and Corbin (1998) in the context of an approach to qualitative data analysis they developed known as grounded theory. As they put it: *"Theoretical sampling is done in order to suggest the interrelationships into a theory. Statistical sampling is done to obtain accurate evidence on distributions and verifications"* (Glaser and Strauss, 1967:62). According to Glaser and Strauss (1967:450), theoretical sampling *"...is the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges. The process of data collection is controlled by the emerging theory, whether substantive or formal."*

### **II.8.2 Convenience Sampling, Quantitative Approach**

The population selected for the second phase of the research used the convenience sampling method. A convenience sample is one that is simply available to the researcher by virtue of its accessibility (Bryman, 2012:201). In the field of organization studies it has been noted that convenience samples are very common and indeed are more prominent than are samples on probability sampling (Bryman 1989a:113-14). Since the researcher had the relevant experience and relationship with many companies in the Israeli hi-tech industry - having the convenience sampling method implemented in this research, was ideal and convenient to perform. A closed-ended questionnaire was conducted over 106 customers from different companies in the Israeli hi-tech industry; the focus was on three main market segments: Military oriented companies, R&D centers and Operators. The sample size was calculated by using "The Survey System". This software was selected as one of the best Survey Software of 2013 by the TopTenReviews.

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## "Best Survey Software"



TopTenReviews selected The Survey System as the Best Survey Software of 2013.

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**Figure 2.3: The Survey Software**  
(<http://www.surveysystem.com/index.htm> ,21/11/2013)

The sample size of this research was calculated by using the concept illustrated in Figure 2.4. This **Sample Size Calculator** is presented as a public service of Creative Research Systems survey software. We can use it to determine how many people we need to have in order to get results that reflect the target population as precisely as needed. The number of the population is 1000, where 106 participants were calculated with a Confidential Level of 95%.

A screenshot of a web-based 'Determine Sample Size' calculator. The interface is grey with white text and input fields. It includes radio buttons for 'Confidence Level' (95% and 99%), input fields for 'Confidence Interval', 'Population', and 'Sample size needed'.

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**Figure 2.4: Sample Size Calculator**  
(<http://www.surveysystem.com/sscalc.htm> ,21/11/2013)

## II.9 Research Methods

### II.9.1 Qualitative - Semi Structured Interviews

The rationale for using semi-structured interviews in this research was that there is relatively limited research attention given to the issues under investigation. Therefore,

a data collection method provided a wide-angle exploration of the issues concerned or any other themes that may emerge while conducting the interviews was used here. In a semi-structured interview, the researcher prepares a list of questions to be addressed, and gives the interviewee leeway on how to reply. The answers may not follow exactly the way they were designed. Similarly, questions that were not outlined in advance might also be referred to. I used semi-structured interviews, having my conceptual framework in mind as a guiding principle. This enabled me to capture real-time data, to clarify ambiguities and to probe for further information.

### **II.9.2 Quantitative – The closed-ended questionnaire/survey**

A five-Point Likert-type scale was designed to find out what is the correlation between customer satisfaction from quality of service and loyalty in the Israeli hi-tech industry as well as to find out if different characteristics of customers influence that correlation. Measurement was needed for this research because, as Bryman (2001:66) alleged, “... *measurement allows us to delineate fine differences between people in terms of the characteristic in question.*” Furthermore, a measurement generates results that are not influenced by the context of the research, by its time or by the researcher. Finally, a measurement provides a basis for more precise estimates of the degree of relationships between concepts. The research literature introduces Likert scales as an approach to attitude measurement (Bryman, 2001:120).

### **II.10 Ethical Considerations**

In this research, harm to participants was avoided by maintaining confidentiality of all of the records obtained for this research. To avoid identification of the individuals involved in this research, all names were erased or changed. In qualitative research it is difficult to anonymize the participants; however, in this case pseudonyms were used as a common resource to eliminate the possibility of identifying any of the participants (Bryman, 2012). As the analysis was done only by the primary researcher, no risk exists to the anonymity of the participants. In addition: “*It is extremely difficult to present prospective participants with absolutely all the information that might be required to make an informed decision about their involvement... for fear of contaminating people’s answers to questions*” (Bryman, 2001:481). In other words, giving all the information about the concern and the focus of the research may either influence the participants’ behavior, or lead and bias their

answers. Instead, the participants were presented with the overall area of concern of the research, as well as its importance to the hi-tech industry in Israel and worldwide, in order to increase their involvement.

### **III. FINDINGS**

The findings of this research are grounded in a combination of two types of research, qualitative and quantitative. Phase-One deal with the qualitative research findings and describe the interviewee's answers to the questions raised during the interview. The second part of the findings refers to the quantitative research findings based on surveys that were answered by different hi-tech companies.

#### **III.1 Findings emerging from research questions 1 and 1a. Obtained from Phase-One, Qualitative Research**

- ❖ The need for customer loyalty is truly a real desire from a customer point of view as well as of the suppliers'.
- ❖ Loyalty is a key factor to suppliers' growth in the Israeli hi-tech industry.
- ❖ Both the customer as well as the supplier can benefit from loyalty.
- ❖ Customer loyalty perception might be diverse in its nature and depended on the market needs and to customers' demands. In return, suppliers should remain relevant in terms of new technologies and high quality products to keep customers loyal and continue with their purchases.
- ❖ Customers' satisfaction should be one of the desires of suppliers and service providers in the Israeli hi-tech industry.
- ❖ It is very clear that developing tools to increase customers' satisfaction should be implemented in the new business management model of this research.
- ❖ The correlation between quality of service, satisfaction and loyalty as expressed by the interviewees, is strong in most cases.
- ❖ The correlation between quality of service and loyalty is strong in most cases in the Israeli hi-tech industry as referred to the interviewee's feedbacks. Nevertheless, there are situations where such correlation is not relevant in the Israeli market and should be discussed further.

#### **III.2 Findings emerging from research question 1,1a and 2 Phase-Two, Quantitative Research Findings**

In summary, the quantitative phase of this research yielded the following findings:

- ❖ The characteristics of customers had no impact on the correlation between customer satisfaction from the quality of service and loyalty.
- ❖ There was a positive impact of different attitudes of customers' satisfaction on their loyalty.
- ❖ There was no impact of the market segments on customer loyalty, which means that there were no differences found between the market segments (Military, R&D and Cellular Operators) regarding customer loyalty.
- ❖ There was a positive correlation found between customer satisfaction and customer loyalty.
- ❖ There was a positive correlation found between customer satisfaction from quality of service and customer loyalty.
- ❖ There was a positive correlation found between quality of service, satisfaction and customer loyalty.
- ❖ The characteristics of customers did not influence customer satisfaction.
- ❖ The characteristics of customers did not influence customer satisfaction from the quality of service.
- ❖ The characteristics of customers did not influence customer loyalty.

## **IV. CONCLUSIONS**

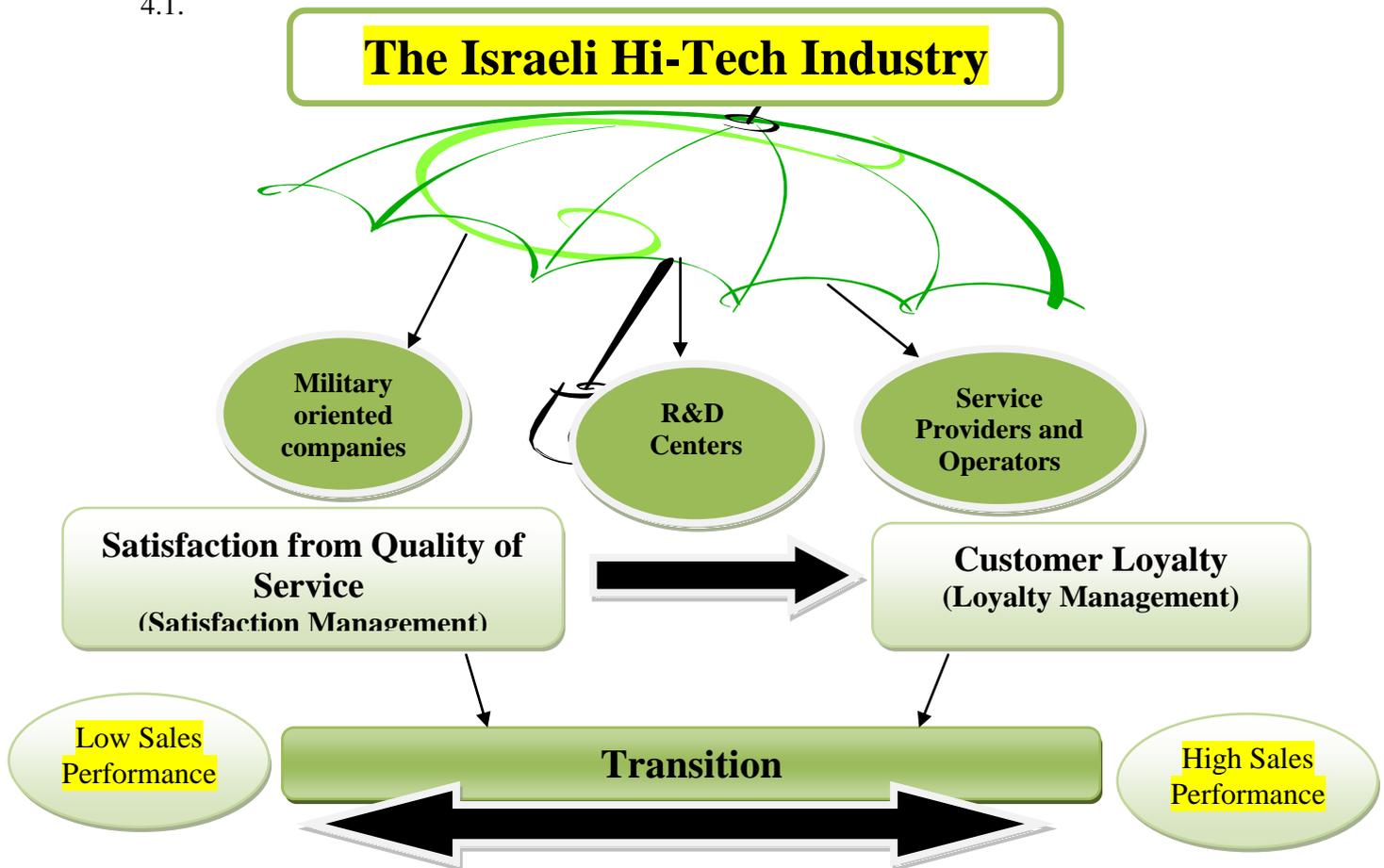
### **IV.1 The importance of this study**

**Israel and worldwide:** Science and technology in Israel is one of the country's most developed segments. The new business management model proposed in this study aims to create a reality whereby managers in the Israeli hi-tech industry could promote customers satisfaction, quality products and services and eventually have loyal customers who continue purchasing goods from suppliers.

### **IV.2 Conceptual Conclusions – a new construct for managing satisfaction and loyalty in the hi-tech industry**

On the conceptual level, referring to the role of customer satisfaction in creating firm value (ACSI model) and the Satisfaction – Profit chain concepts, the findings lead to a development of a new perception for satisfaction from quality of service and loyalty in two key vertical axes: satisfaction management and loyalty management. These are

based on existing models and theories and extend the understanding that in the attempt to increase financial performance through customer satisfaction and loyalty, firms often use some logic, which is not always enough to establish the desired growth in profit. Therefore, the expected change in the transition from 'low sales performance' to 'high sales performance' requires a new perspective of satisfaction and loyalty management and a construction process based on accumulated life experience together with adaptation to new needs which are translated into gaps in knowledge. The emphasis in developing new management programs lead inducing managers from the Israeli hi-tech industry, to develop management skills in various relevant and dynamic issues, rather than administrative elements. Development of new business management areas, which include customer satisfaction and loyalty management concepts evolve to a mutual financial-grow to the Nisko/Ardan Group in specific and similar companies worldwide in general. Conclusions drawn from this study allowed the advancement of the proposed business management model, which includes customer satisfaction and loyalty management concepts as shown in Figure 4.1.



**Figure 4.1: A comprehensive model of satisfaction and loyalty management in the Israeli hi-tech industry (SLM)**

The SLM model shows that satisfaction and loyalty management programs are not a one-time event but rather a continuous process. Furthermore, the transition from the status of 'low sales performance' to 'high sales performance' is a two-way transition. If the process is not properly managed, high performance sales can decrease to low performance sales. Therefore, the new SLM model maintains that management comes from a background of experience as well as draw on management developed skills and qualities. Hence, combining the development of managerial satisfaction and loyalty creates a synergy which promotes the business goal of increasing the firm profits and financial situation. Eventually, the content of the satisfaction and loyalty management programs, which includes quality of service, is based on the perception that they are subject to improvement and learning. The sweeping implication drawn from the SLM model is that the Israeli hi-tech industry should adopt a predefined management process, which will be based on satisfaction and loyalty management concepts. Hence, the business management program should encompass as much as possible the satisfaction from quality of service and the loyalty for the long term success processes.

### **IV.3 Research Limitations**

1. Interviewees who agreed to participate in this research were generally genial, have attended the meeting on time and avoided any other activities related to their daily work during the interview. To emphasize, the interviewees were top managers from different hi-tech companies, who have plenty of tasks and responsibility. Nevertheless, there were very few instances of phenomenon of impatience. Each interview lasted in average an hour; in some cases it was insufficient. Sometimes, the interview was shorter than an hour due to unexpected urgency of a project or an open issue that a team leader or a senior manager needed to take care of. In any case, missing information was completed via emails or calls.
2. Interviews were conducted with senior hi-tech employees, which could generate social desirability. However, following the recommendations of Mile and Huberman (1993), social desirability was minimized by allowing the participants to speak freely at their own convenience without projecting any judgmental comments.

3. Disinclination to be exposed during the interview - few managers hesitated to share their opinions about weaknesses of the company they are working for when referring to the correlation between customer satisfaction and loyalty. The interviewees were guaranteed that their 'voice should be kept' in secret, therefore, data continued to flow.
4. The surveys were filled anonymously. The responders were located in remote areas where the researcher had no direct contact with the participants. No communication was established after responding the questionnaire except of getting the filled surveys through an email or fax.

#### **IV.4 Contribution to Knowledge**

A. **Filling the gap in knowledge** - The new SLM fills the gap in knowledge by offering an evidence-based model of business management from the satisfaction of quality of service and customer loyalty point of view. The SLM model emerged from this research as a comprehensive model that can illuminate the area of managing customer satisfaction and loyalty, thus improving practice in this area. Since the SLM model emerged from this research it is considered a novelty.

B. **The gap is noticeable in a number of levels:**

1. A real need for customer loyalty in all market segments in the Israeli hi-tech industry - fill customers' requirements as well as developing new areas and technologies with supplying quality products, can result loyal customers and organization profitability.
2. Loyalty management should be expanded and implemented in the Israeli hi-tech industry because of the market recognition for a real need of customer loyalty.
3. Loyalty is a key factor that can assist to suppliers' growth in the Israeli hi-tech industry. Therefore, managing loyalty is important because it means not only managing behavior, but also managing a state of mind.
4. Loyalty is important to both the customer as well as the supplier in the Israeli hi-tech industry, therefore, having loyalty management as a business strategy, could contribute to a mutual success of firms and their customers.

5. Suppliers should plan to achieve customer loyalty for several main reasons: increase the total sales revenues as well as to increase the added value that a certain market segment has. In addition, a supplier needs to keep major customers and to maintain the customer base and deactivate the competitors.
6. Few factors should be considered for improving customer loyalty in the Israeli hi-tech industry: customer satisfaction, repeat purchase intentions, customer recommendation to other clients, the ability to increase profit margins along with an increase in the sales revenue.
7. Satisfied customers in Israel may find it useful to have relationship with a supplier that knows how to answer his requirements with a good price and quality products.
8. The supplier needs to provide some value resulted to be a basic factor that influences customer satisfaction.
9. Customers are not only asking for better service conditions, but also require a direct representative who can be a dedicated manager, like an account manager, to look after customers open issues that may occur in the life-cycle of a purchased product.
10. Customer satisfaction is influenced in the Israeli hi-tech industry by quality of service, product and price as well as the situational and personal factors, whereas, profit and growth are stimulated primarily by customer loyalty while loyalty is a direct result of customer satisfaction.

### **C. Changes in customer satisfaction and customers loyalty perceptions**

1. The new SLM business management model developed in this research constitutes a change in the perception of customer satisfaction and customer loyalty in the Israeli hi-tech industry and worldwide. The new concept is based on the belief that by adapting the new process and implementing the discussed program modules, Israeli hi-tech companies can produce better quality products, add value to such products and create customer satisfaction with increasing retention and eventually increase loyal customer base and organization profitability.
2. The new SLM business management model seeks to transform the Israeli hi-tech business management behavior by recommending key

concepts that need to be followed. These concepts illustrate additional dimensions for satisfaction management and loyalty management.

3. Companies in the Israeli hi-tech industry need to adapt the idea of customer orientation and focus as one of their principal policies.

#### **D. Contribution to practical knowledge**

Following the practical implementations of customer satisfaction from quality of service and customer loyalty requires adopting the new business management tools. Having this process established, may help Israeli hi-tech companies in general and the Nisko-Ardan Group in particular, to increase profitability and grow their market share. However, an organization should 'Try' and 'Measure' through the process, while different aspects related to the new model have been showing what are the organization weaknesses and if the new business management model helped in improving for the long term. Thus, the SLM model can embody a practical guide for improving practice in the business management area.

### **IV.5 Recommendations for Further Research**

Further research directions can be suggested:

1. Conducting dedicated studies for each market segment in the Israeli hi-tech industry.
2. Examine the new business management model on several hi-tech companies in Israel and worldwide. The findings can gather other views and ideas on how to improve customer satisfaction and customer's loyalty.
3. Repeat examination of the program modules contents, adapting them in the Nisko-Ardan Group and face a real environment experiences.

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