

Student Thesis

Level: Master in Business Studies

Salesperson's Personality, Motivation and Selling Performance

The Study of New Product Selling

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Subject/main field of study: Business Administration

Course code: FÖ 3027

Credits: 15

Date of public presentation/examination: 4th June 2015

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Abstract: In the highly competitive environment businesses invest big amounts of money into the new product development. New product success potentially depends on different factors among which salespeople play an important role. The aim of this paper is to explore the potential link between salespeople's personality, motivation to sell new products and performance in selling new products. Based on the theoretical background of the Big Five personality dimensions, motivation and selling performance hypotheses were formulated and tested using statistical methods of correlation and regression analysis. The data was collected within one technologically intensive organization – ABB AB in Sweden using online web questionnaire and self-assessment measurements. Total investigation was conducted among organization's salesforce. The findings confirm the importance of salesperson's personality empirically showing that the latter significantly predicts both motivation and performance in selling new products. From all the Big Five Extraversion was confirmed to be the most important predictor of both motivation and performance in selling new products. Extraversion was found positively related with both motivation and performance in selling new products. Salespeople scoring high in Extraversion and especially possessing such characteristics as confident, energetic and sociable tend to be more motivated to sell new products and show higher performance results. Other personality dimensions such as Agreeableness, Conscientiousness, Neuroticism, and Openness to experience complexly approached are not proved to be significantly related neither with motivation nor performance in selling new products. The results are explained by the extreme importance of Extraversion in new product selling situation which analyzing in combination with the other personality dimensions suppresses the others. Finding regarding controlling for certain demographical characteristics of salespeople reveal that performance in selling new products is determined by selling experience. Salespeople's age is not proved to be significantly related neither with motivation nor performance in selling new products. Findings regarding salespeople's gender though proposing that males are more motivated to sell new products cannot be generalized due to the study limitations.

Keywords: personality, personality dimensions, the Big Five, new products, motivation, selling performance.

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Acknowledgments

We would like to thank our supervisor Lenka Klimpova for her support and guiding throughout the working process and Reza Mortazavi for his help and advice regarding methodology and analysis.

1. Introduction

In this part the background and the literature review of the subject are presented with the special emphasis on the role of salespeople in new product selling. Based on the introduced problem the aim of the study and the research questions are formulated.

1.1. Background

The ability of firms to innovate and provide customers with new products has become one of the most important characteristics in our modern changeable world with highly competitive markets. Both academics and practitioners agree that innovations are crucial for business success (Ahearne, Rapp, Hughes & Jindal, 2010; McKeown, 2008; Wieseke, Homburg & Lee, 2008).

Companies especially in technology-intensive industries and their customers spend big amounts of money on new product development (Fu, Yi & Zhai, 2013). Thus, business is highly interested in new products success. As a matter of fact it is far from being so: only small percent of new products succeed in market with the rest underperform and fail (Fu, Richards, Hughes & Jones, 2010; Zablah, Chonko, Bettencourt, Allen & Haas, 2012). Not surprisingly that the vital importance of the topic of new product success attracts much attention from the academic world. Although the scope of the research concerning new products success is wide, academics have been more productive in explaining such success by product (differentiation) and market (demand) factors (Zablah et al., 2012; Sorescu & Spanjol, 2008; Baker & Sinkula, 2007; Hauser, Tellis & Griffin, 2006; Henard & Szymanski, 2001). Researchers have been also active in focusing on such issues as customer and supplier involvement in new product development and new product performance (Lagrosen, 2005; Lau, 2011), technological evolution, product development, portfolio management, network externalities etc. (Fu, 2009; Sood & Tellis, 2005; Srinivasan, Lilien & Rangaswamy, 2004). Much research was done from the customer perspective and their adoption/rejection of new products (Ramanan & Bhargava, 2014; Wieseke, Homburg & Lee, 2008; Herzenstein, Posavac & Brakus, 2007; Cooper & Kleinschmidt, 1987).

1.2. The Role of Salespeople in New Product Selling

Though the role of salesforce in selling existing products is well-established, what concerns its role in new product success was neglected and it still holds true that little research uses

salespeople as a unit of analysis (Kauppila, Rajala & Jyrämä, 2008; Fu et al., 2010). That could be partly explained by the fact that many companies neglected the role of salesforce in new product success, taking their commitment to sell new products as a given. But new products do not sell themselves and adopting the attitude “if we do it, they will sell it” would be naive (Atuahene-Gima, 1997, p. 498). Salesforce plays pivotal and one of the most important role in new product success especially in business-to-business hi-tech markets where communication with customers goes directly through salespeople. It is the salespeople who initiate dialog with prospective customers affecting their product perception and facilitating new product adoption (Ahearne et al., 2010).

Nevertheless salespeople could be by some reasons engaged in counterproductive behaviors resulting in reluctance to sell new products (Kauppila, Rajala & Jyrämä, 2008). Previous research argues that often salespeople avoid selling new products showing less enthusiasm than their companies expect them to do (Atuahene-Gima, 1997; Wieseke, Homburg & Lee, 2008). The general questions arise: Why do salespeople behave in that manner? What influences salespeople regarding selling new products? The current research suggests different explanations. The literature review revealed two groups of articles: conceptual and empirical. Atuahene-Gima (1997) was the first who introduced the conceptual framework of the factors contributing to the salesforce’s adoption of new products. He argues that salesforce’s adoption of new products is an important antecedent of new product success. When salespeople adopt new product they are more motivated to sell it and less likely to engage in counterproductive behaviors. Kauppila, Rajala & Jyrämä (2008) also suggest a conceptual model of antecedents of salespeople’s reluctance to sell radically new products. They treat salespeople’s reluctance to sell radically new products from motivational theories perspective and argue that salespeople are reluctant to sell new products when they are not enough motivated to do so. Both research divide factors potentially influencing salespeople’s adoption/motivation to sell new products to some general conceptual categories, such as salesperson characteristics, organizational factors, sales control system, sales manager support, product factors, salesperson role ambiguity (Atuahene-Gima, 1997) and organizational explanations versus individual-specific explanations (Kauppila, Rajala & Jyrämä, 2008).

Though none of these abovementioned conceptual research tested their models there are some empirical works available in the academic field revealing relationships between certain suggested factors and salespeople’s motivation/adoption/performance of selling new products. Hultink & Atuahene-Gima (2000) tested the effect of sales force adoption, sales control, market

volatility and supervisory factors such as internal marketing, trust, training and field attention on new product selling performance. Wieseke, Homburg & Lee (2007) provide with results on the influence of expected customer demand and sales manager new brands adoption on the salespeople's new brand adoption. Fu, Jones & Bolander (2008) show the impact of product innovativeness and customer newness mediating by salespeople's intention on new product performance. Fu (2009) tested the effect of salesperson experience, age and goal setting on new product performance. Fu, Richards, Hughes & Jones (2010) explore motivation of salespeople to sell new products through attitudes, subjective norms and self-efficacy. Fu, Yi & Zhai (2013) report a case study on the impact of training on salespeople's behavior and new product sales performance.

1.3. Salespeople's Personality

The analysis of the current empirical studies reveals that salesperson's individual factors and characteristics and their potential effect on new product selling and performance are under researched in the current literature. Moreover salesperson's personality is of the particular interest because of two reasons. First, there is lack of available research on salesperson's personality and its relationship with salespeople's motivation/performance to sell new products. Not even the before mentioned conceptual works discuss salesperson's personality. Though Kauppila, Rajala & Jyrämä (2008) mentioned the potential effect of salesperson's personality as an important avenue for future research. And second, recently personality has been acknowledged to predict and explain people's behavior at work and outcomes that employers care about (Barrick & Mount, 2005; Ashleigh & Mansi, 2012) and some personality traits were even proved to predict certain professional occupations, such as extraversion is a valid predictor of sales (Barrick & Mount, 1991). Locke & Latham (2004), respected authors within motivational theory, give their recommendations for future research. One of these recommendation concerns personality and its application to task and situationally specific variables. In our case such specific task and situation is the situation of selling new products.

1.4. The Aim of the Study

Summing up the background of the problem and the literature analysis we conclude as follows. New products are of vital importance for business especially in technology intensive B2B industries but they don't sell themselves thus the contribution of salesforce requires. Salespeople are often reluctant to sell new products. The literature analysis of the factors

potentially influencing such behavior revealed that individual factors and especially personality being important but are currently under researched. Reluctance can be viewed and explained from the motivational perspective as salespeople who are motivated to sell new products will sell them and those who are not will show reluctance to sell such products. Based on that our research is aimed to explore the potential link between salesperson's personality, motivation to sell new products and performance in selling new products. The research questions are: *How does salesperson's personality influence motivation to sell new products? How does salesperson's personality influence performance in selling new products? How does salesperson's motivation to sell new products influence performance in selling new products?*

2. Theoretical Framework

In this part the theoretical framework for the study is introduced and hypotheses are formulated. Theoretical background of this study is represented by the theoretical concept of motivation and The Big Five Model of personality dimensions. In order for more demonstrative and convenient hypotheses formulation the theoretical concept of motivation is explained first, followed by the Big Five personality dimensions, hypothesized link between motivation and performance in selling new products, and finally demographic characteristics of salespeople age, gender and selling experience as control variables. Hypotheses formulated in the text are further summarized in the Figure 1.

2.1. Motivation to Sell New Products

We choose motivational theory as a theoretical base for one of our dependent variables because of three reasons. First, motivation is a matter of human action and intention (Ryan & Deci, 2000) and salespeople's reluctance to sell new products can be viewed as both intention (passive behavior, for example not offering new products to prospective customers) and action (active behavior, for example providing customers with inadequate information about new product). Motivated employees tend to achieve organizational objectives and are less often engaged in counterproductive behavior whereas unmotivated employees are more often resistant to innovations and changes and show reluctance in performing organizational tasks (Brooks, 2008). Second, motivation is one of the most important concept in work psychology and deals with the issue how to make people want to behave in the organizational interest (Ashleigh & Mansi, 2012). In our case the organizational interest is to have new products successfully sold, thus making salespeople want to sell them. Third, motivation refers to internal and external factors which impel (internal) and induce (external) action (Locke & Latham, 2004). In our case salesperson's personality represent an internal factor which can impel selling new products.

Before we start looking for the potential relationships between salespeople's personality and motivation to sell new products and motivation and performance in selling new products we need to identify what motivation is and how we will understand it for this research purpose. Motivational theories are diverse and multiple. Motivation was theoretically approached from different perspective such as biological, psychological, learning, psychoanalytical, cognitive, and humanistic (Franken, 1994). In simplified terms motivation is the person's will to perform (Brooks, 2008). In organizational studies motivation is one of the most important issues and is

often understood as the employee's *effort* towards organizational goals and tasks (Robbins, Judge, Millett & Boyle 2013; Buchanan & Huczynski, 2013; Ashleigh & Mansi, 2012). Employees' effort represents the force, energy and activity to accomplish the work (Brown & Peterson, 1994). Conceptually motivation as effort should possess three dimensions: direction, intensity, and persistence (Robbins et al., 2013; Buchanan & Huczynski, 2013; Ashleigh & Mansi, 2012). Moreover besides the direction, intensity, and persistence the study of motivation has also traditionally been concerned with the arousal of human behavior (Franken, 1994).

Direction refers to the question of what an individual is motivated to do, what activity to perform. In other words effort should be directed towards some organizational goal and established activity which is situational, desired and beneficial for organization. *Intensity* refers to the question of how hard an individual tries to do what he/she is doing. *Persistence* is concerned with the question of how long a person maintains doing things, or how sustained these actions are over time (Robbins et al., 2013; Ashleigh & Mansi, 2012). Finally, *arousal* is more general dimension of motivation. Similar to effort arousal is defined as the driving force or energy behind the human behavior (Pfaff, 2006). It is the key component in the initiation, strength and persistence of motivation (Ibid). Nobody can be "motivated without being aroused" (Pfaff, 2006, p. 2).

In our case we adapt definition of motivation with its four dimensions to the situation of selling new products. That is consistent with the previous research which recommend to study motivation and personality issues in situational context (Locke & Latham, 2004; Barrick, 2005). Thus, in our case *direction* dimension of motivation means situation of selling new products. *Intensity* dimensions means how intensely salespeople work to sell new products. *Persistence* dimension means how much time salespeople spend selling new products. *Arousal* means the salespeople's overall interest and desire to sell new products. Due to the fact that this study intends to explore the effect of salespersons' personality on their motivation to sell new products we were also interested to see how salespeople asses their motivation in selling new products in comparison with selling traditional conventional products.

2.2. Personality

There is no one unified way to describe personality. The word personality goes back into ancient Greece, where it meant a mask which an actor used in the theater when he played different roles representing different characters (Engler, 2013). Nowadays theorists use more than fifty

different definitions of personality each taking a different perspective (Brooks, 2008; Engler, 2013). For our purpose we will employ personality definition within organizational settings. Thus, personality is “specific characteristics of individuals which may be open or hidden and which may determine either commonality or differences in behavior in an organization” (Brooks, 2008, p. 42). According to Robbins et al. (2013) personality is often described as a set of measurable traits that person exhibits. Trait theories of personality assumes that personality traits are inherent, relatively stable and unchanged throughout a person’s life time and determine person’s behavior (Brooks, 2008).

Of all available trait theories The Big Five was chosen to conduct the study. In theory some authors distinguish between the Big Five personality traits/dimensions/characteristics and the Five Factor Model (Engler, 2013). This difference originally stems from the history of the research on personality. The Big Five come from the descriptive study of language analyzing adjectives which were used to describe a person. The Five Factor Model origins from the interpretation of the Big Five Factors and claims that individuals can be described by their score on these five broad concepts (Ibid). Further in our study we are not attempted to emphasize on this difference and use the Big Five and Five Factor Model as synonyms referring to as the Big Five.

The Big Five was chosen as theoretical base for independent variables because of some reasons. First, “the Big Five has provided the most widely accepted structure of personality in our time” (Judge & Ilies, 2002, p.798). The Big Five personality dimensions are identified as a fundamentally base especially relevant for work environment and companies (Elbert & Griffin, 2010). Second, the Big Five allows for enduring prediction of different work behaviors from performance behaviors to counterproductive (Barrick & Mount, 2005). In our case we expect to predict salespeople’s motivation and/or salespeople’s reluctance to sell new products by their personality traits. Third, the Big Five represents a meaningful, orderly structured and applicable taxonomy for studying personality suitable for collecting, analyzing and discussing empirical data (Barrick & Mount, 1991). Forth, the Big Five personality dimensions are found to be the most influential model of individual differences important for organizations (Ashleigh & Mansi, 2012). The Big Five taxonomy is proved to be of universal importance because it is applicable to all human beings regardless their nationality (Barrick & Mount, 2005) which has sense when salespeople have different national background. And the last and one of the most important argument is that the Big Five were proved to be effective at predicting the specific sales performance criteria to which they are conceptually aligned (Sitser et al., 2013).

In the academic literature there is general agreement about the number of personality factors constituting the Big Five and some disagreement about their names and precise meaning (Barrick & Mount, 1991). In this study we employ generally accepted so called OCEAN abbreviation for labeling the Big Five. The Big Five factors names correspond to the capital letters in the abbreviation and consist of Openness to experience (O), Conscientiousness (C), Extraversion (E), Agreeableness (A), Neuroticism (N) (McCrae & John, 1992). Each from the Big Five personality dimensions represents a “super trait” or a set of sub-traits combining under one dimension (Buchanan & Huczynski, 2013). McCrae & Costa (1997) identify six sub-traits under every Big Five dimension.

2.2.1. Extraversion

Extraversion represents individual’s level of comfort with relationships and communications with other people (Robbins et al., 2013). Extraversion is also interpreted as combination of ambition and sociability (Hogan, 1986 via Barrick & Mount, 1991). High score in this dimension characterizes extroverts who are sociable, talkative, dominant and positive, introverts who score low tend to be quiet, reserved and shy (Buchanan & Huczynski, 2013). McCrae & Costa (1997) attribute the following six sub-traits to the dimension: warmth, gregariousness, assertiveness, activity, excitement seeking, positive emotions.

Extraversion was previously found to be correlated with motivation to perform despite occupational frame because extraverts would have greater confidence in their abilities to perform (Judge & Ilies, 2002). Moreover Extraversion was proved to be a significant predictor in sales job in general and in selling performance particularly because such job involves interacting with others and such interactions presume influencing others and obtaining status and power (Barrick & Mount, 1991; Barrick, 2005). Selling of new products imposes much demand on the salespeople because they serve as a link between new product and perspective customers, they suppose directly affect and influence customers in their positive perceptions and adoption of new products (Fu et al., 2010). This important role of the salesforce in its turn presumes numerous interactions and contacts first and foremost with perspective customers and other concerned persons. Such activities might require high level of comfort in communication and relations with other people, being sociable, influential and talkative which characterizes high level of extraversion dimension. Based on this, we assume that:

H1: Extraversion is positively related with the salesperson's motivation to sell new products (H1a) and performance in selling new products (H1b).

2.2.2. Conscientiousness

Conscientiousness characterizes person's reliability: those with high score in this dimension are reliable, organized, dependable and achievement-oriented (Robbins et al., 2013; Barrick & Mount, 1991). Those with low score are disorganized, unreliable, and irresponsible (Robbins et al., 2013). Conscientiousness is characterized by competence, order, dutifulness, achievement striving, self-discipline, deliberation (McCrae & Costa, 1997).

Conscientiousness was previously found to be a valid predictor in all organizational occupations and jobs and in overall performance because people with high level of Conscientiousness tend to follow organizational rules and exert effort (Barrick & Mount, 1991; Judge & Ilies, 2002; Barrick, 2005). Moreover Sitser et al. (2013) argue that Conscientiousness most optimally predicts general sales performance, demonstrating positive strong relation between this personality dimension and achieving sales results. However as we mention in the introduction part of this work selling of existing and new products are two different dimensions of salesperson's job. The same salesperson who successfully sells familiar existing products might be reluctant in selling new products (Kauppila, Rajala & Jyrämä, 2008; Atuahene-Gima, 1997). Selling existing products with the organized familiar routines and order might be related to the high level of Conscientiousness. At the same time selling new products might require particular level of novelty imposing new unproved strategies and routines and might even go in contradiction with established organizational rules. Based on that, conscientiousness in selling new products might not be of the same importance as in existing products selling performance. Thus,

H2: Conscientiousness is neither related with the salesperson's motivation to sell new products (H2a) nor with the performance in selling new products (H2b).

2.2.3. Neuroticism

Neuroticism is also often called for Emotional Stability in its positive pole, these are two extremes of one dimension (Judge & Ilies, 2002). This dimension is characterized by ability to stand up to stress, anxiety and depression (Robbins et al., 2013). Common traits attributed to

Neuroticism are worry, anger, discouragement, self-consciousness, impulsiveness, and vulnerability (McCrae & Costa, 1997).

As well as Conscientiousness Neuroticism was previously found to predict overall performance across all organizational occupations and jobs. Low level of Neuroticism is seen as a “generalizable predictor” of work motivation performance because it refers to the capacity to allocate resources to accomplish tasks (Barrick, 2005). High level of Neuroticism is linked to low performance motivation (Judge & Ilies, 2002). Moreover people who score extremely high in Neuroticism meaning that they are highly neurotic and cannot handle stress related to job can hardly manage to complete any organizational task (Barrick & Mount, 1991). That corresponds to the fact that emotionally stable and calm people would do better on almost all jobs than their nervous and depressed colleagues (Robbins et al., 2013). In the general sales job settings Neuroticism has been proved to be highly negatively correlated with general selling performance (Sitser et al., 2013). At the same time there is an opinion that Neuroticism can both help and hinder performance. In some occupational or/and professional tasks and situations people who are worrying, nervous and emotional might perform better (Robbins et al., 2013). That can be explained that such particular tasks and jobs might impose certain pressure related to high performance or the complexity and/or novelty of the task that cause employees to display certain levels of neurotic traits (Barrick & Mount, 1991). Uppal (2014) confirms that under particular organizational settings neurotics can be motivated to put more effort in performing their tasks. Selling new products as opposed to selling existing products can impose more pressure on the salespeople because it is a complex and difficult task due to numerous reasons such as new products are unknown for customers, often ill-appraised and possess flaws and bulkiness, and selling them might be time-consuming, undercompensating, and unpleasant (Kauppila, Rajala & Jyrämä, 2008). Thus,

H3: Neuroticism is positively related with the salesperson’s motivation to sell new products (H3a) and performance in selling new products (H3b).

2.2.4. Agreeableness

Agreeableness concerns conformity and individual ability to defer to other people, being friendly, flexible, cooperative, forgiving and soft hearted (Barrick & Mount, 1991). People with high level of agreeableness tend to be cooperative and trusting, and those with low level are antagonistic, cold and disagreeable (Robbins et al., 2013). McCrae & Costa (1997) attribute the

following six sub-traits to the dimension: trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness.

In empirical studies Agreeableness shows inconsistent results in its relation to the overall job motivation and performance. Some research indicate that Agreeableness is not a valid predictor of job performance even in those occupations including a large social component such sales (Barrick & Mount, 1991). Others found that Agreeableness can be a valid predictor in jobs involving significant interpersonal communications but only in those where interaction requires helping and nurturing others (Mount et al., 1998). In their meta-analysis Judge & Ilies (2002) found relatively weak and inconsistent correlations of Agreeableness and performance motivation. In sales settings Sitser et al. (2013) argue that only one narrow sales performance component such as customer relationship management was affected by Agreeableness. We hypothesize that selling new products activities though involve significant interpersonal communication do not require helping and nurturing others. Moreover customer relationship management being an important part of sales job in general might not be of the same fundamental importance in selling new products than it is in communication with present customers in selling existing products. Thus,

H4: Agreeableness is neither related with the salesperson's motivation to sell new products (H4a) nor with the performance in selling new products (H4b).

2.2.5. Openness to experience

Openness to experience means personal level of openness to novelty. People who score high in this dimension are creative, imaginary, curious and unconventional, those with low level are conventional and like the feeling of familiarity (Robbins et al., 2013). The traits are often attributed to the dimension are: fantasy, aesthetics, feelings, actions, ideas, and values (McCrae & Costa, 1997).

Unlikely Conscientiousness Openness to experience has not been found to be a valid predictor for overall job motivation and performance in wider organizational settings irrespective of the situational context. The results regarding Openness to experience indicate that this personality dimension effects job motivation inconsistently: both positive and negative correlations with different motivational aspects were found (Judge & Ilies, 2002). Nevertheless Openness to experience was found to be strongly related with creativity and ability to adapt to changes (LePine et al., 2000; George & Zhou, 2001). Employees with high level of Openness to

experience tend to be successful in dealing with changes and contribute to innovative activities (Barrick, 2005). Additionally Openness to experience was proved to have positive effect on performance in training programs (Barrick & Mount, 1991). Moreover in sales job settings Openness to experience was found to be a very strong positive predictor of narrow sales performance such as attaining new customers (Sitser et al., 2013). Selling new products assumes certain changes in selling procedures and techniques in order to promote innovative new products unknown to the existing customers and to attain new perspective customers trying to convert them into the active ones. Selling new products also assumes numerous trainings devoted to the new products features and characteristics. Thus,

H5: Openness to experience is positively related with the salesperson's motivation to sell new products (H5a) and performance in selling new products (H5b).

2.3. Motivation and Selling Performance

Overall the fact that motivated employees perform better than their under motivated colleagues is generally accepted (Robbins et al., 2013; Buchanan & Huczynski, 2013). Wide range of different motivational approaches from expectancy theory (Vroom, 1964 via Ashleigh & Mansi, 2012), goal-setting theory (Locke, 1968 via Ashleigh & Mansi, 2012), and self-efficacy theory (Bandura, 1997 via Robbins et al., 2013) strongly link motivation to performance in organizational settings. Motivation is a constituent part of job performance which means that whatever skilled an employee might be without motivation he/she will not perform well (Maier, 1955 via Ashleigh & Mansi, 2012). Churchill et al. (1985) in their meta-analysis confirm the general trend that motivation is an important determinant of salesperson's performance. Brown & Peterson (1994) offer empirical arguments that motivation seen as a salesperson's effort in accomplishing his work positively affects sales performance. More specifically within new product selling settings both Hultink & Atuahene-Gima (2000) and Atuahene-Gima & Michael (1998) also provide empirical evidence that such motivational concept as effort positively related to new product selling performance. These findings are also in the line with later research results arguing that salespeople's selling intentions measured as the level of motivational effort have strong impact on the new product performance (Fu et al., 2008; Fu et al., 2010). Thus,

Hypothesis 6: Salesperson's motivation to sell new products is positively related to performance in selling new products.

2.4. Salespeople's Age, Gender and Selling Experience

In addition to the personality traits other factors might influence salesperson's motivation to sell new products and performance in selling new products. Due to the fact that this study emphasizes salespeople's personality we decided to control for salespeople's particular demographic characteristics. Therefore those are approached as the control variables no separate hypotheses are formulated.

Previous research indicate that age, gender and selling experience might affect salespeople's motivation and job outcomes (Hultink & Atuahene-Gima, 2000; Moncrief, 2000; Conte & Gintoft, 2005; Fu, 2009; Jaramillo, 2012). Moreover as Struman (2003) notice, relationship between age/experience and performance is of "critical concern" for both theory and practice.

The *gender* of salespeople was long believed to constitute a significant difference in salesperson's job attitudes and behavior, mostly because of lack of women in sales function due to the relative difficulties for females to gain entry into this prior male-dominated field (Moncrief, 2000). Now studies report different results and confirm that gender is not relevant in predicting job attitudes and outcomes in selling settings (Frino & Desiderio, 2013; Wieseke et al., 2008; Conte & Gintoft, 2005).

Salesperson's age and selling experience produce more mixed results. Though logically salesperson's age and sales experience are positively related their respective effects on sales outcomes are often opposite. Some studies report that *age* has no significant effect on sales outcomes (Wieseke et al., 2008; Conte & Gintoft, 2005). Others confirm that age is negatively related with both motivation (Judge & Locke, 1993) and performance (Fu, 2009). *Sales experience* is on contrary often positively associated with work outcomes (Fu, 2009; Atuahene-Gima, 1997; Frino & Desiderio, 2013). Though some studies confirm salespeople's experience as non-significant for sales outcomes (Jaramillo, 2012; Conte & Gintoft, 2005; Hultink & Atuahene-Gima, 2000).

Figure 1 summarizes the set of hypotheses we developed above.

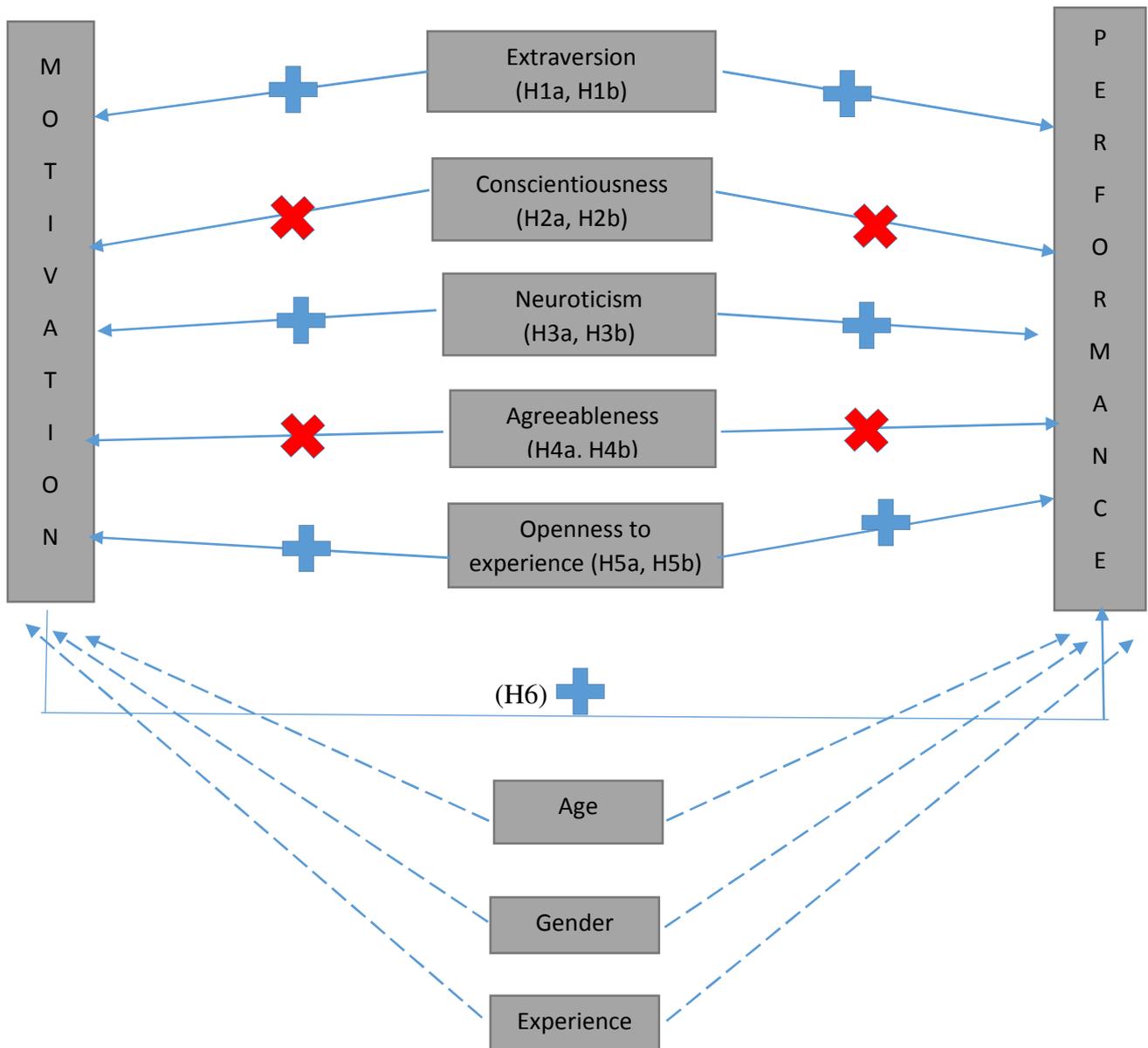


Figure 1. Personality, motivation and performance in selling new products

Note. **+** means positive relationship between variables
X means no relationship between variables
 - - - - - means possible influence of the control variables

3. Research Design

In this part the methodology of the study is presented discussing the research strategy, methods of data collection and analysis, measures of the theoretical concepts, and finally the issues of data quality and potential problems in conducting the study.

3.1. Research Strategy

The purpose of this research is to examine the potential link between salesperson's personality, motivation to sell new products and performance in selling new products. To answer the research questions the study is designed as *quantitative research*. According to Saunders et al. (2012) the distinction between quantitative and qualitative research is though problematic and narrow due to some practical and even philosophical issues. Indeed, though this study attempts to fulfill the research purpose by collecting and analyzing numeric data which is the attribute of quantitative research, such data contains certain qualitative element. Notably, data for analysis is expected to be collected from human objects and is based on salespeople's opinions and perceptions which can be seen as a part of interpretivist philosophy and therefore involving some qualitative characteristics (Saunders et al., 2012).

Quantitative research is often related to the *deductive approach* meaning that existing theory or theoretical concepts are used and applied in order to fulfill research purpose by testing them in a real world settings (Saunders et al., 2012). In this study we apply motivation theory represented by the theoretical concept of motivation and the Big Five Model to the organizational settings in selling new products. Moreover the literature review of the existing research in the field was conducted. The hypotheses based on the theoretical background of motivation theory and the current research were formulated to be further tested in this work.

Quantitative research is aimed on examining relationships between different numerically measured variables (Saunders et al., 2012). Moreover quantitative research deals with specific variables which first need to be measured and then analyzed, so the processes of data collection and data analysis are separated (Denscombe, 2010). This study attempts to measure salespeople's motivation to sell new products and salespeople's performance in selling new products as dependent variables and salespeople's personality traits as independent variables to further analyze them and examine the potential relationships between them.

Based on the research purpose and research questions this study is conducted using mixed strategy combining characteristics of *survey* and *case study*. Both survey and case study are

very common and popular strategies within social sciences (Denscombe, 2010). According to Saunders et al. (2012) quantitative deductive research is usually associated with survey strategy. But survey often requires wide and inclusive coverage (Denscombe, 2010). This research aimed on wide and inclusive coverage but only within one organization settings¹ which often refers to case study (Denscombe, 2010). As case study this research concentrates on just one instance of one single organization. But as opposed to case study we are not aiming on holistic view and the depth of the study. On the contrary this research is done in order to explore the potential relationships between different variables which is one of the key characteristics of survey (Saunders et al., 2012). According to Denscombe (2010) survey is relevant strategy for such aims because it allows for a breadth of view. Moreover survey is often associated with empirical research meaning that it provides the real general and broad information from “out there” in order to grasp the current state of situation and look if and how the theory works in life (Denscombe, 2010). As the research is administrated within a single organization it potentially can influence the generalization ability of survey as usually survey results allow for overall generalization (Saunders et al., 2012). On the other hand using data collected within one organization allows for better control of contextual factors and might improve the internal validity of the research (Fu, 2009).

Summing up this research is attempted to gain a wide coverage within one organization settings of salespeople’s personal characteristics, motivation and performance in selling new products in order to be able to explore the potential relationships between them.

3.2. Method, Data and Sampling

To fulfill the purpose of this study we need to collect standardized data measuring salespeople’s level of the each of the Big Five personality dimensions, the salespeople’s level of motivation to sell new products and the performance in selling new products. Moreover we intend to control the results for salespeople’s gender, age, and experience. Thus, factual information is required concerning respondents’ age, gender and selling experience and opinion-based information concerning personality traits, motivational issues and perceptions of selling performance. Therefore different types of quantitative data are to be collected. More about the types of data and measures is under “Measures” part of this paper.

¹ See the next subchapter and Appendix 1 for motivation for the choice of the participating organization and its characteristics

Questionnaire is chosen as a relevant method for data collection because it allows for large numbers of respondents and thus collecting standardized, straightforward and brief information suitable for statistical analysis (Denscombe, 2012). Moreover questionnaire is suitable method for conducting a study which purpose is to investigate the potential relationships between different variables (Saunders et al., 2012). Other advantages of questionnaires are as follows: they are economical, easy to arrange, supply standardized accurate and pre-coded data suitable for the purpose of this study (Denscombe, 2010).

To gather the information needed for further analysis this study aims to use internet survey with the self-completed *web-based questionnaire*. The link to the internet page containing the questionnaire was sent through email to all salespeople in the participating organization. KwikSurvey online service is used because for educational purposes it provides charge free survey support with unlimited number of questions and direct collection of the responds. Questions are formulated in English because English is the corporate language in the participating organization and one of the working languages for salespeople in our case.

Due to the time and resource limitations this study is conducted within one organization. Moreover to study relationships between different variables in a single company settings is a well-established way to collect data within sales management field (Fu, 2009; Wieseke et al., 2008; Brown & Peterson, 1994). The organization was chosen based on the purpose of this research aiming to examine new innovative products sales, namely the relationship between certain variables in new product selling situation. ABB is a global leader in power and automation technologies and the largest supplier of industrial motors and drives, the largest provider of generators to the wind industry and the largest supplier of power grids in the world (ABB, 2015). ABB is particularly suitable for this study because of its record for innovation - widely recognized through countless awards and scientific accolades (Ibid). ABB is a relevant case for this study because it continuously deals with developing, producing and selling both existing conventional products and new innovative products. Many of the technologies taken for granted today, from ultra-efficient high-voltage direct current power transmission to a revolutionary approach to ship propulsion, were developed or commercialized by ABB (ABB, 2015)². Moreover ABB AB is a relevant case which allows for convenient access to the required data due to the fact that one of the researchers is currently employed there.

² For more information about ABB, its salesforce strategy, organization, and new products see in Appendix 1

The research is taking place in ABB AB, the Swedish organization of the global concern. The research *population* for this study is defined as all salespeople employed by ABB AB and based in Sweden. According to the internal information ABB AB has 600 sales employees in Sweden. We got organizational access to the emails of all salesforce employees. For the purpose of this study we conducted a *total investigation*. It is in line with Saunders et al. (2012) who confirm that in some research it is possible and feasible to collect data from the entire population. Thus, we distributed questionnaires among all ABB salespeople in Sweden and got 170 responses back which constitutes the response rate of 28%.

3.3. Measures

Personality. Personality is measured using the Big Five personality dimensions. In the literature there are three common and popular scales to measure the Big Five: lexically-based TDI which means Trade Descriptive Adjectives (Goldberg, 1992); questionnaire-based NEO PI-R which is Revised NEO Personality Inventory (Costa & McCrae, 1992); and short phrases-based BFI which is The Big Five Inventory (John, Donahue & Kentle, 1991). Of all these three taxonomies this study adopts the Big Five Inventory (BFI) method because it allows to save respondent's time answering the questions in comparison with the long, complicated sentence-based NEO PI-R method and provides more context than the single adjectives TDA method (John & Srivastava, 1999). Moreover the BFI taxonomy was previously used in the research in the sales settings (Sitser et al., 2013). The BFI (John & Srivastava, 1999) with its short brief scale allows not only to save time but also minimize boredom of the respondents which might positively affect reliability and validity of the answers. It is a 44-item test designed to produce a quick - around 10 minutes, reliable, and valid overview of the respondent's scores on the Big Five dimensions. Each dimension is measured with 10 to 12 items, answered on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*) (Sitser et al., 2013).

Motivation. Salesperson's motivation to sell new products is measured by four questions based on the theoretical concept of motivation in the organizational studies. We adopted three measuring scales from Fu et al. (2010), Hultink & Atuahene-Gima (2000) and Brown & Peterson (1994) and adjusted them to the situation of selling new products. Motivation to sell new products is measured by four self-report items: salespeople's interest in selling new products, overall effort to sell new products, persistence of effort to sell new products and intensity of effort to sell new products. Specifically we ask salespeople to indicate how interested they are and how much time, intensity and overall effort they anticipate to spend on selling new products if compare with existing conventional products they sell. Each item is

measured on a 5-point Likert-type scale from 1 (*far less than on conventional products*) to 5 (*far more than on conventional products*).

Performance. In the literature there is no one unified relevant and “appropriate” way to measure sales performance. There are objective such as sales volume or sales quotas and subjective measurements such as selling performance evaluation by managers, peers or salespeople themselves (Churchill, 1985). This study uses salesperson’s self-report measures of performance. This subjective approach is proved to be valid and useful in measuring performance (Churchill, 1985). Moreover previous research argue for appropriateness of performance self-evaluation by boundary-spanning employees such as salespeople (Behrman & Perreault, 1982; Harris & Schaubroeck, 1988). Additionally self-evaluation of performance was used within sales setting before (Sujan et al. 1994; Hultink & Atuahene-Gima, 2000; Frino & Desiderio, 2013). We measure performance in selling new products by the five items scale adopted from Sujan et al. (1994) and adjusted based on the work of Hultink & Atuahene-Gima (2000). Specifically we ask respondents to evaluate themselves comparing with other salespeople on achieving quantity and quality new product sales objectives. We ask salespeople to evaluate themselves relatively to other salespeople because this is the way the self-report measures of performance was used in the research before (Sujan et al., 1994; Hultink & Atuahene-Gima, 2000) and is logically in the line with measuring salespeople personality and their new product selling performance. New product sale objectives include gaining significant market share, generating high level of sales volume, speed of generating sales, exceeding sales targets, and assisting the sales manager in achieving the objectives set for new product. Each item is measured on a 5-point Likert-type scale from 1 (*to far less extent than other salespeople*) to 5 (*to far higher extent than other salespeople*).³

New products for the purpose of measurements are defined as all products such as new products to the market, difference in technology, innovations, etc. launched within the last 12 month and which the salespeople did not sell before. Conventional products are defined as traditional products and the opposite to the new products.

3.4.

3.5. Methods of Data Analysis

The purpose of this study is to examine the potential relationships between independent (salespeople’s personality traits) and dependent (motivation to sell new products and

³ All measurements could be found in Appendix 2

performance in selling new products) variables by testing the earlier formulated hypotheses. Specifically we are intended to assess if and how closely the Big Five salesperson's personality dimensions are connected with motivation to sell new products and performance in selling new products. For such purposes it is relevant to employ statistical tests of significance (Denscombe, 2010). We expect to test null hypotheses presuming that there is no connection between any of the Big Five personality dimensions and salespeople's motivation and performance in selling new products. Moreover we attempt to control for salespeople's age, gender and selling experience. To test the strength of relationship between variables such as salesperson's motivation to sell new products and performance in selling new products the correlation and the simple regression analysis will be used. Correlation and simple regression analysis will be also used to test if approached separately each Big Five dimension is correlated with both motivation and performance in selling new products. And finally the focal test of multiple hierarchical regression analysis will be used in order to assess the strength of relationship within a model consisting dependent variables (motivation and performance in selling new products) and the complex of independent variables such as the Big Five personality traits (Saunders et al., 2012). Software for statistical analysis is Excel and Stata. Moreover descriptive statistics in form of mean, median, mode and standard deviation will be used to describe the spread of the data (Denscombe, 2010). The data and the results will be presenting by different types of charts, graphs and tables.

3.6. Data Quality

Quality of the quantitative data is only then reliable and valid when it is collected from the relevant sources using relevant methods (Denscombe, 2010). Validity concerns the accuracy of the data or in other words the precision of the measurements. Reliability concerns consistency of the results or in other words the research should produce the same results in different occasions (Denscombe, 2010).

We ensure the reliability and validity of the research by numerous ways. First, by defining appropriate case study, population and sample suitable for the study purpose which ensures reliability. Chosen as the study case organization is in the hi-tech B2B industry involving in developing, producing and selling innovative products. Salespeople who are to participate in the survey are engaged in activities of selling new products on the everyday bases and thus represent relevant source to collect the data from.

Second, reliability is ensured by using an appropriate for the purpose of this study method for the data collection – questionnaire. The questions for the questionnaire are based on the reliable theoretical background and tested before by the previous research including the research in the sales settings which ensures accurate and full information. The measurement scales of the Big Five personality traits, motivation and performance are adopted from the empirical academic papers, adjusted for the purpose of this paper with its selling new products background, and thus are trustworthy and ensure that we measure the concepts we attempt to measure.

Third, the formulation of the survey questions follows the general methodological rules such as unambiguous wording, suitable for the specific target group salespeople, minimum scientific jargon, keeping questions short and precise, avoiding leading formulations, including sufficient options for answers (Denscombe, 2010).

Forth, the validity was ensured according to the methodological requirements when the data was pilot tested in order to provide face validity of the questionnaire (Saunders et al., 2012). We asked three salespersons from the participating organization to answer a pilot test of the questionnaire before distributing it among the research population. Based on the results of the pilot test we refined and adjusted questions so the further respondents would not have problems in answering them. Moreover pilot test minimizes risks with accurately recording the data for the further analysis which ensure validity and reliability (Saunders et al., 2012).

And lastly, in order to ensure validity the data before using it for the analysis were checked and recorded accurately and precisely by two researches. This minimizes the risk of mistakes, errors and using invalid data. The reliable means for data proceeding and analysis such as Excel and Stata were used.

3.7. Ethical Considerations and Potential Problems

As the study is dealing with human participants in business and management settings it is essential to ensure ethical considerations (Saunders et al., 2012). The study thus attempts to minimize ethical concerns by first, explaining the purpose of the study to the participants and providing voluntary participation in the survey with the freedom to withdraw at any time without giving a reason. Second, providing an anonymous participation with guarantee that the personal data will be used as aggregate scope without possibilities to identify personal answers. And the last, avoiding formulations and wording that can cause offence (Denscombe, 2010).

We did not experience any problems related with the organization access as one of the researchers is employed there and possess necessary contacts with the management and participants. Neither any technical problems occurred as using the online instrument for web-based surveys and proceeding the data accrued through the data collection was free of charge and relatively easy. It was not problematic to transfer the collected data to the appropriate format for data analysis, Excel and Stata formats because the online web service allows for such conversions.

Moreover some problems related to the participation in the study were predicted to occur as well. Due to the fact that salespeople are usually limited in time and are bound to perform their organizational tasks it might be problematic for them to be involved in the survey. To overcome this potential issue we made an attempt to make the questionnaire relatively time saving, effective, easy to answer and precise. The time estimated to complete the questionnaire was about 15 minutes.

According to methodological literature quantitative studies especially conducted with survey and questionnaires might face the situation with low response rate (Denscombe, 2010; Saunders et al., 2012). To prevent this potential issue we come into the contact with salespeople's managers first prior the questionnaire distribution and inform them about the study. After the first round of questionnaire distribution we contacted the managers again reminding them about the study and then emailed follow-ups to the participants. This steps might have improved the participation rate.

Recourses for data collection and analysis were available both in the organization (negotiated data access), online (KwikSurvey) and at the University Dalarna (experts in organizational studies and statistics, computers and software such as Excel and Stata).

4. Results

In this part we present the empirical findings and the results of the statistical data analysis followed by the discussion of these results, managerial implications, the limitation of the study which should be taken into account when interpreting the results, and finally the suggestions for future research.

4.1. Empirical Findings and Analysis

4.1.1. Data Presentation

Web-based questionnaire was distributed among the whole population – 600 salespeople from ABB AB. We got 170 questionnaires back which constitute the initial response rate of 28 percent. After checking the responses and taking away inappropriate and not fully answered questionnaires the number of proper responses suitable for the analysis reduced to 144. Thus the valid response was obtained from 144 salespeople which constitute the final response rate of 24 percent.

Participants are 128 males (88.89 %) and 16 females (11.11 %). Participants' gender is represented in the Figure 2.

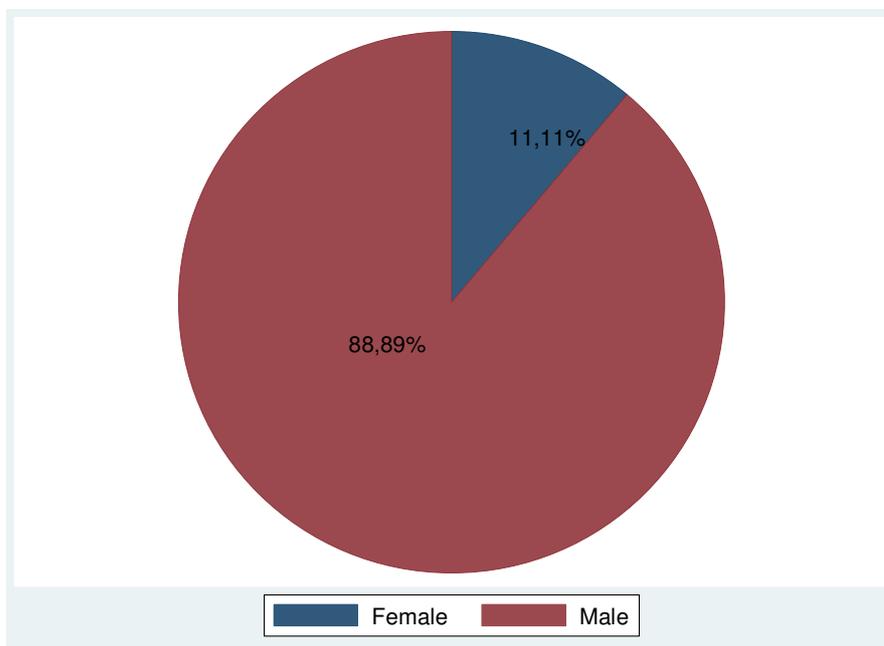


Figure 2. Gender

Respondents' age ranged from 26 to 66 years, with an average of 37.87 years (standard deviation 9.42). Respondents' age is represented in the Table 1. Division of age to the categories

represented in Table 2 reveals that majority of the respondents (52 %) are from 26 to 35 years old.

Table 1 Participant Age

Variable	Obs	Mean	Std. Dev.	Min	Max
Age	144	37.86806	9.416729	26	66

Table 2 Participant Age by Categories

RECODE of Age (Age)	Freq.	Percent	Cum.
26-35 years	75	52.08	52.08
36-45 years	44	30.56	82.64
46-55 years	13	9.03	91.67
56-66 years	12	8.33	100.00
Total	144	100.00	

Sales experience ranged from less than 1 year to more than 20 years in sales function. Two categories which occur most often are “1-3 years” and “4-6 years” meaning that almost 49 percent (70 people) have sales experience from 1 to 6 years. Respondents’ sales experience is represented in the Table 3.

Table 3 Participant Sales Experience

SaExp	Freq.	Percent	Cum.
less than 1 year	6	4.17	4.17
1-3 years	35	24.31	28.47
4-6 years	35	24.31	52.78
7-9 years	25	17.36	70.14
10-12 years	16	11.11	81.25
13-15 years	12	8.33	89.58
16-18 years	2	1.39	90.97
19-20 years	1	0.69	91.67
more than 20 years	12	8.33	100.00
Total	144	100.00	

To account for the effect of potential non-response bias we checked the data comparing the known values for the population. Gender proportions for the salesforce in the company was reported as average of 85 percent male and 15 percent female. Average salespeople age in the company is 35 years. Thus, neither the gender proportions nor the average age of the respondents are significantly different from the company's average. Non-response bias was also checked comparing early and late answers. All responses were divided into two groups depending on the time of their obtaining. No significant differences on the demographic variables between early and late responses were found.

Before testing the hypotheses the dependent and independent variables were mean-centered. This is argued to reduce the potential problems of multicollinearity (Hultink & Atuahene-Gima, 2000). We also checked for the internal validity of the central variables. In order to do this we measured means (M), standard deviations (SD) and the internal consistency (Cronbach's alpha α) of the variables. They are represented in the Table 4. Cronbach's alpha measures the internal consistency of responses within each set of questions that are combined for every Big Five dimension and the composite indicators of motivation and performance to sell new products (Saunders et al., 2012).

Table 4 Means, Standard Deviations and Internal Consistency of the Central Variables

	<i>M</i>	<i>SD</i>	<i>Cronbach's alpha α</i>
Extraversion	4.56	0.57	0.89
Conscientiousness	4.55	0.34	0.61
Neuroticism	2.20	0.60	0.71
Agreeableness	4.32	0.42	0.63
Openness	3.94	0.40	0.64
Motivation	3.98	0.66	0.79
Performance	3.55	0.59	0.79

Note. N=144

Cronbach's alpha of 0.6 and above indicates the satisfactory values for the internal consistency of the measured concepts (Kline, 2013). In our case all variables show satisfactory internal consistency which means the robustness of the questionnaire and that questions combined in each scale are measuring the same thing.

4.1.2. Statistical Analysis

First step in hypotheses testing is to assess the possible linear relationship and the strength of such relationship between each Big Five personality dimension, motivation to sell new products and performance in selling new products. In order to do so we applied statistical correlation analysis. The results of correlations are represented in the Table 5.

Table 5 *Correlation Coefficients (r) for Central Variables*

	Motivation	Performance
Extraversion	0.54**	0.48**
Conscientiousness	0.32**	0.24**
Neuroticism	-0.19*	-0.39**
Agreeableness	0.07	0.28**
Openness	0.17*	0.20*

Note. $N=144$. * $p<0.05$. ** $p<0.01$.

The results of correlation show that almost all the Big Five significantly correlated with motivation and performance to sell new products, except Agreeableness which is not significantly correlated with motivation.

Extraversion shows positive relatively strong correlation which is statistically significant ($p=0.0000<0.01$) with both motivation and performance ($r=0.54$ and $r=0.48$ respectively). Thus, these findings fully confirm Hypotheses 1 (H1a, H1b).

Conscientiousness is positively and significantly correlated with both motivation ($p=0.0001<0.01$) and performance ($p=0.0033<0.01$), though the correlation coefficients are relatively low ($r=0.32$ and $r=0.24$ respectively). Thus, Hypotheses 2 (H2a, H2b) are not confirmed with these findings.

Neuroticism is significantly negatively correlated with both motivation and performance though its correlation is stronger with performance ($p=0.0000<0.01$; $r=-0.39$) than with motivation ($p=0.0171<0.05$; $r=-0.19$). Thus, Hypotheses 3 (H3a, H3b) are not fully confirmed with the findings. Though Neuroticism is related with both motivation and performance, the sign of such relationship is proved to be negative.

Agreeableness though not significantly correlated with motivation ($p=0.3935>0.05$; $r=0.07$) shows positive significant correlation ($p=0.0007<0.01$) though relatively weak ($r=0.28$) with

performance. Thus, these findings confirm Hypothesis 4a regarding the absence of significant relationship between Agreeableness and motivation to sell new products. In the respect of Agreeableness and performance in selling new products Hypothesis 4b is not confirmed by these findings which indicate positive relationship though relatively weak. We will further continue testing this relationship with regression analysis.

Openness to experience shows though positive and statistically significant ($p=0.0449<0.05$ and $p=0.0160<0.05$) but relatively weak correlations with both motivation and performance ($r=0.17$ and $r=0.20$ respectively). Thus, Hypotheses 5 (H5a, H5b) are confirmed with these findings.

From the analysis of the correlations we can conclude that though almost all Big Five to some extent are related with motivation and performance in selling new products only Extraversion shows strong associations. Thus, Extraversion would seem significantly predict both motivation and performance in selling new products in the regression models.

Analyzing the strength of relationship between motivation to sell new products and performance in selling new products we found that they are positively and significantly correlated ($p=0.0000<0.01$) and this correlation is relatively strong ($r=0.48$). This finding confirms Hypothesis 6.

To control for salespeople gender, age and sales experience we first used chi-test as it is one of the most flexible and most commonly applied statistical test suitable for nominal as well as for ordinal, interval and ratio data (Denscombe, 2010). Chi-test shows that salespeople's gender is significantly associated with both motivation and performance ($Pr=0.0000<0.01$ and $Pr=0.04<0.01$ respectively). Wilcoxon rank sum test confirms this results ($|z|=3.36>2$; $p=0.0008<0.01$ and $|z|=2.82>2$ and $p=0.0048<0.01$). Sales experiences was not confirmed to be significantly associated neither with motivation ($Pr=0.470>0.05$) nor with performance ($Pr=0.641>0.05$). Salespeople's age does not show any significant association with motivation ($Pr=0.243>0.05$) but is associated with performance ($Pr=0.003<0.01$). Correlation analysis further applied to the age – performance association in order to check how closely the variables are connected did not though confirm any significant connection between them ($p=0.3230>0.05$; $r=0.08$).

Now we will continue hypotheses testing using regression analysis which helps to learn more about the relationships between the variables and the strength of such relationships. Moreover regression analysis allows for prediction of changes in dependent variables explained by the

changes in the independent variables (Saunders, 2012). Regression can also be applied in form of multiple regression when we want to test a model with more than two independent variables together affecting depending variable. In our case it is relevant when we test the total effect of personality represented by the Big Five on motivation and performance, also when we control for some other factors (gender, age, sales experience) in the model. Thus in our case we will examine motivation to sell new products and performance in selling new products as dependent variables and Big Five personality dimensions as independent variables, also controlling for salespeople's gender, age and sales experience.

First we applied simple linear regressions between dependent variables and each of the independent variables. This can be presented in the simple equations as:

$M = f(E)$	$P = f(E)$
$M = f(A)$	$P = f(A)$
$M = f(C)$	$P = f(C)$
$M = f(N)$	$P = f(N)$
$M = f(O)$	$P = f(O)$

In the equations M – motivation to sell new products, P – performance in selling new products, E – Extraversion, A – Agreeableness, C – Conscientiousness, N – Neuroticism, O – Openness to experiences. We also applied simple regression analysis independently to each of the control variables: gender, age and sales experience.

Simple regressions with single predictor mean that we only checked the possible relationships between one dependent variable and one independent variable without accounting for other factors. The results of single regressions should copy the results of correlation analysis as standardized regression coefficient (β) is equal to correlation coefficient (r). The main difference that regression analysis assume relationship between dependent and independent variables whereas correlation tests the strength of relationship between two variables disregarding their dependency. So the results from the simple regression analysis are expected to confirm the results of the correlation analysis and also show the variation in the dependent variable which can be explained by single independent variable without accounting for other factors. The results of simple independent regressions are represented in the Tables 6.

Table 6 Summary of the Results of the Simple Independent Regressions

	Motivation		Performance	
	β	R^2	β	R^2
Extraversion	0.54**	0.30	0.48**	0.23
Conscientiousness	0.32**	0.10	0.24*	0.06
Neuroticism	-0.20*	0.03	-0.39**	0.15
Agreeableness	0.07	0.01	0.28**	0.08
Openness	0.17*	0.03	0.20*	0.04
Gender	0.33**	0.11	0.30**	0.09
Age	0.14	0.02	0.08	0.01
Sales Experience	0.02	0.00	0.22**	0.05

Note. $N=144$. * $p<0.05$. ** $p<0.01$. Gender: male=1, female=0.

As predicted before the results from single regression support the results of correlation analysis and thus partly support the hypotheses.

Thus, Extraversion is positively and significantly ($p<0.01$) related with both motivation and performance. This means that people scoring high in Extraversion are more motivated to sell new products and also more successful in selling new products. The strength of such relationships is strong ($\beta =0.54$ and $\beta =0.48$ respectively) which makes Extraversion an important predictor of both motivation to sell new products and performance in selling new products. Moreover relatively high coefficient of determination ($R^2=0.30$ and $R^2=0.23$ respectively) shows that changes in motivation and performance are explained by changes in Extraversion by respectively 30 and 23 percent. These results confirm the results from correlation analysis and fully support Hypotheses 1 (H1a, H1b).

Simple regression in the line with correlation analysis suggests that Conscientiousness is positively related with both motivation and performance ($\beta =0.32$; $p<0.01$ and $\beta =0.24$; $p<0.05$) rejecting the Hypotheses 2 (H2a, H2b). Conscientiousness prediction values are though low

($R^2=0.10$ and $R^2=0.06$) meaning that only 10 and 6 percent of variation in motivation and performance respectively could be explained by Consciousness.

Neuroticism as predicted by the correlation analysis is negatively related with both motivation ($\beta = -0.20$) and performance ($\beta = -0.39$) which partly support Hypotheses 3 (H3a, H3b) but the sign of the relationship is negative. Coefficient of determination ($R^2=0.03$ and $R^2=0.15$ respectively) shows that 3 percent of variation in motivation and 15 percent of variation in performance could be explained by Neuroticism.

The results for simple single regression for Agreeableness are in the line with the correlation analysis showing mixed support for the Hypotheses 4. Agreeableness is not significantly related with motivation ($\beta = 0.07$; $p > 0.05$), which confirms H4a, but indicating significant relationship with performance ($\beta = 0.28$; $p < 0.01$) which rejects H4b, though the prediction value is relatively low ($R^2 = 0.08$) meaning that only 8 percent of variation in performance could be explained by Agreeableness.

Confirming Hypotheses 5 (H5a, H5b) Openness is statistically significant at the 0.05 level ($p < 0.05$) to predict both motivation and performance, but the prediction value is relatively low, 3 percent of variation in motivation and 4 percent of variation in performance could be accounted to the Openness.

The results of the simple linear regression for each of the control variables indicate that there is neither significant relationship between Salespeople's age and motivation ($\beta = 0.14$; $p > 0.05$) nor between age and performance ($\beta = 0.08$; $p > 0.05$). Sales experience did not show any relationship with motivation ($p > 0.05$, $R^2=0.00$) but is proved to be significantly related to performance ($\beta = 0.22$; $p < 0.01$) which means that 5 percent of changes in performance in selling new products could be predicted by changes in sales experience, namely the longer a salesperson worked within sales function the better his/her performance in selling new products. Gender as predicted before by the correlation analysis shows significant relationship with both motivation and performance ($p < 0.01$) meaning that in our case males are more motivated to sell new products and also show better performance in selling new products.

Thus, the overall results from the single regression analysis allow us to summarize that taking separately almost all the Big Five personality traits are related to motivation and performance to sell new products. The effect of Extraversion on both motivation and performance is though the strongest and stands for highest percentage of prediction value.

Now we will continue with the multiple hierarchical regression analysis and test some models.

First two models (Models 1) are:

$$M = f(E,A,C,N,O)$$

$$P = f(E,A,C,N,O)$$

And in the final step we test two models (Models 2) with control variables of gender, age and sales experiences. The results of regressions are represented in the Table 7.

Multiple or hierarchical regression analysis allows to explain the strength of the relationship between one dependent and more than two independent variables (Saunders, 2012).

Table 7 *Summary of the Results of the Multiple Regression*

	Motivation		Performance	
	Model 1 β	Model 2 β	Model 1 β	Model 2 β
Extraversion	0.52**	0.40**	0.41**	0.42**
Conscientiousness	0.14	0.19	-0.11	-0.13
Neuroticism	0.07	0.15	-0.20	-0.19
Agreeableness	-0.14	-0.14	0.06	0.03
Openness	0.11	0.14	0.07	0.07
Gender		0.19*		0.01
Age		-0.17		0.11
Sales Experience		0.18		0.27*
R^2	0.32	0.35	0.28	0.31

Note. $N=144$. * $p<0.05$. ** $p<0.01$. Gender: male=1, female=0.

In the Models 1 a multiple regression was run to predict salespeople's motivation and performance to sell new products from personality. The results indicate that motivation to sell new products can be on 32 percent explained by salesperson personality approached as the Big

Five ($R^2=0.32$). Performance in new product selling can be on 28 percent explained by personality ($R^2=0.28$).

The analysis of all Big Five personality traits together in one model in comparison with simple single regressions means that we test each personality dimension simultaneously accounting for the rest of the dimensions. Analyzing together in multiple regression from all Big Five only Extraversion is found to be significantly related to both motivation ($\beta= 0.52$; $p<0.01$), and performance ($\beta= 0.41$; $p<0.01$).

Adding the demographical control variables of gender, age and sales experience to the models (Models 2) slightly improves the prediction value for both motivation and performance. Salesperson's personality together with the demographic characteristics explains 35 percent of variance in salespeople's motivation to sell new products ($R^2=0.35$) and 31 percent in salespeople's performance in selling new products. The control variables only slightly affect the result for the central variables. In the Models 2 from all the Big Five it is also only Extraversion which is significantly related to both motivation and performance with slightly altered but still strong coefficients ($\beta= 0.40$ and $\beta= 0.42$ respectively).

Controlling for the salespeople's demographic characteristics we found that age is not significantly related neither with motivation nor with performance in selling new products. Sales experience though not significantly contributing to the motivation is proved to be significantly positively related with performance ($\beta= 0.27$; $p<0.05$) which is in the line with previous analysis. Salespeople's gender on the contrary only partly confirms the correlation and simple regression results and is not proved to be significantly related to performance though showing significant contribution in predicting motivation ($\beta= 0.19$; $p<0.05$) meaning that males are more motivated to sell new products.

Thus, as multiple regression results do not prove any significant contribution of the Big Five dimensions beside Extraversion to the prediction of the salespeople's motivation and performance in selling new products they fully confirm Hypotheses 1 (H1a, H1b), Hypotheses 2 (H2a, H2b), Hypothesis 4 (H4a, H4b) and reject Hypotheses 3 (H3a, H3b) and Hypotheses 5 (H5a, H5b).

Now we will test Hypothesis 6 with the regression analysis. First we test the predicted relationship between motivation and performance to sell new products and then add the control variables to the model. In this model the performance is treated as dependent and motivation as independent variable. The relationship could be described with the following equation:

$P = f(M)$, where P is performance and M – motivation. The results are represented in the Table 8.

Table 8 *Regression Results for the Relationship between Motivation and Performance*

	Performance	
	Simple regression β	Model multiple regression β
Motivation	0.48**	0.41**
Gender		0.14
Age		0.12
Sales Experience		0.31*
R^2	0.23	0.30

Note. $N=144$. * $p<0.05$. ** $p<0.01$.

Simple regression run to predict performance in selling new products from motivation to sell new products shows that motivation is positively and significantly related to performance ($\beta=0.48$; $p<0.01$) meaning that the more salespeople are motivated to sell new products the better they perform in selling new products. 23 percent changes in sales performance can be explained by motivation ($R^2=0.23$).

Adding control variables to the model slightly improve the prediction value of the model to 30 percent ($R^2=0.30$) which means that 30 percent changes in performance can be attributed to motivation together with the demographic variables. Adding control variables does not change the result of regression, motivation is still significantly positively and strongly related to performance with slightly altered coefficient ($\beta=0.41$; $p<0.01$). This result fully confirms Hypothesis 6.

In the line with the previous results sales experience is positively and significantly related with performance in selling new products ($\beta=0.31$; $p<0.05$). Salespeople's gender and age are not proved to have any significant contribution to performance in selling new products.

As it was proved with the multiple regression Extraversion is the only personality dimension which significantly contributed to the both motivation and performance in selling new products. Moreover Extraversion has the strongest relationship with motivation and performance. Based on that it is interesting to test what interdimensional characteristics of Extraversion contribute to that result. Extraversion for the purpose of this study was measured by eight questions from

the Big Five Personality Inventory⁴ revealing the following sub-dimensions of Extraversion: talkative, unreserved, energetic, enthusiastic, sociable, assertive, confident, and outgoing. We now run multiple regression to predict what sub dimensions of Extraversion predict salespeople’s motivation and performance in selling new product. The results are represented in the Table 9.

Table 9 *Extraversion Sub-dimensions Multiple Regression*

	Motivation β	Performance β
talkative	0.02	0.09
unreserved	0.09	-0.01
energetic	0.20*	0.09
enthusiastic	0.02	0.05
sociable	0.22	0.27*
assertive	0.05	0.02
confident	0.30**	0.08
outgoing	0.10	-0.01
R^2	0.37	0.25

Note. $N=144$. * $p<0.05$. ** $p<0.01$.

The results of multiple regression of Extraversion sub-dimensions indicate that motivation to sell new products can be significantly predicted by such characteristics as confident ($\beta= 0.30$; $p<0.01$) and energetic ($\beta= 0.20$; $p<0.05$), where being confident has stronger positive relationship with motivation than being energetic. Performance in selling new products can be significantly predicted only by sociable ($\beta= 0.27$; $p<0.05$) which means that sociable salespeople are more successful in selling new products. Thus, the results shows that motivation and performance in selling new products are affected by different sub-dimensions of Extraversion.

4.2. Summary of Research Findings

This study examines the new product selling and the role of salesforce in it. More precisely we elaborated on the relationship between salespeople personality represented by the Big Five and motivation to sell new products and performance in new product selling.

⁴ For more information see "Measures" part in "Research Design" and Appendix 2

The presented findings show that personality as a whole is an important factor which predicts both motivation and performance in selling new products. Personality is accounted for 32 percent of changes in motivation to sell new products and for 28 percent in performance in new product selling.

Findings regarding personality dimensions reveal mixed results. We found that almost each of the Big Five dimension⁵ examined separately without accounting for the other dimensions is related with salespeople's motivation and performance. Comparing all the Big Five the strongest positive relationship though was discovered between one dimension - Extraversion with both motivation and performance in selling new products.

But as human personality is a complex phenomenon and in our study is approached as a combination of the Big Five personality dimensions it should be examined jointly, namely when testing each of the dimension simultaneously accounting for the others. Based on that we run multiple regression analysis to find out what personality dimensions treating together predict salespeople's motivation and performance. These findings indicate that only one dimension of the Big Five -Extraversion is significantly related to both motivation and performance. Extraversion was found to be a strong significant predictor of both motivation and performance in selling new products. As predicted this relationship is positive meaning that salespeople scoring high in Extraversion are more motivated to sell new products and are more successful in doing that. These findings confirm Hypotheses 1 (H1a, H1b) and are in the line with the previously discussed ones in the part revealing the strongest positive correlation between Extraversion and motivation and performance. Moreover these findings confirm previous research arguing that Extraversion is an important predictor for the sales job and sales outcomes (Barrick & Mount, 1991; Judge & Ilies, 2002; Barrick, 2005).

The findings also confirm Hypotheses 2 (H2a, H2b) and 4 (H4a, H4b). Though treating independently both personality dimensions, Conscientiousness (Hypotheses 2) and Agreeableness (Hypotheses 4), show some positive correlations with either motivation or performance when applying a complex model accounting for all the Big Five none of these dimensions was proved to be significantly related with either motivation or performance in selling new products.

Hypotheses 3 (H3a, H3b) and 5 (H5a, H5b) are not supported with the findings. Theoretically Neuroticism was thought to be positively related with both motivation (H3a) and performance

⁵ Except Agreeableness which was not found to be significantly related with motivation to sell new products.

(H3b). Empirical results failed to prove such relationships. Treating separately from the other personality dimensions Neuroticism revealed though relatively low but negative correlation with both motivation and performance, meaning that salespeople scoring high in Neuroticism are less motivated and less successful in selling new products. Further analysis though rejects any significant relationship between Neuroticism and both motivation and performance. Similarly the findings do not support theoretically predicted relationship between Openness to experience and both motivation (H5a) and performance (H5b). Though treating independently Openness to experience shows some positive correlations with both motivation and performance the strength of these correlations surprisingly is relatively weak. Moreover further analysis failed to reveal any significant relationship between Openness to experience and both motivation and performance in selling new products.

Summarizing the mixed findings regarding the Big Five we presume that no other personality dimension examining together except Extraversion was found significantly related with neither motivation nor performance because Extraversion revealed very strong positive correlation with both dependent variables and is proved to significantly explain the major part of variance in motivation and performance making the importance of other personality dimensions disappear in complex analysis.

Taking into account the important role of Extraversion we analyzed it further in order to understand what characteristics of Extraversion dimension affect motivation and performance in selling new products. Though it was not the initial aim of this study we found it interesting in the connection with the main results. Such analysis become possible because all the Big Five dimensions were measured with the standardized BFI measures consisted of certain number of questions describing particular dimension. Thus, the analysis revealed that such characteristics of Extraversion as confident, energetic and sociable significantly predict motivation to sell new products (confident and energetic) and performance to sell new products (sociable).

Regarding the predicted relationship between motivation to sell new products and performance in selling new products the Hypothesis 6 was consistently confirmed. In the line with previous research motivation was proved to be a significant predictor of performance (Churchill et al., 1985; Brown & Peterson, 1994; Atuahene-Gima & Michael, 1998; Hultik & Atuahene-Gima, 2000). Motivation to sell new products explains 23 percent in variance of performance in selling new products and together with the control variables this percentage increases to 30 percent. That means that motivated salesforce perform better.

From the control variables sales experience was found to be positively related with performance to sell new products, thus more experienced salespeople perform better. Motivation though is not found to be affected by selling experience. Logically normally the older a person is the more experienced he/she is. Expectedly salespeople's age and sales experience are strongly positively correlated between each other but surprisingly salespeople's age was not found to be significantly related neither with motivation nor performance in selling new products. Interesting to notice that salespeople's age was found to indicate some negative correlation with motivation which means that the younger salesperson is the higher level of motivation to sell new products he/ she reveals. But this relationship does not prove to be statistically significant. The findings regarding age and sales experience mean that for motivation to sell new products it is significantly more important that salesperson possesses certain personality than his/her age and sales experience. For performance in selling new products though sales experience together with personality is significantly important. This assumes that experienced sales people are better performers than unexperienced ones but motivation is not related with experience. Gender in its turn when treated independently from the other factors shows significant association with both motivation and performance meaning that male salespeople are both more motivated and perform better. But when testing salesperson's gender in combination with other factors it is found to be only related with motivation meaning that women are less motivated to sell new products. Though the study revealed the link between salespeople's gender and motivation to sell new products we cannot argue for that findings because the small proportion of the females participating in the research (16 females or 11%). Thus, the question regarding salespeople's gender requires additional research.

4.3. Managerial Implications

The most important managerial implication from this study is that salespeople's personality should be taking into account when planning new product selling. Both salesperson's motivation and performance in new product selling are significantly affected by personality.

Managers should be aware of personality dimensions of the people when recruiting them and placing them into the sales function. People with high score in Extraversion and especially possessing such characteristic as confident, energetic and sociable suit best in new product selling environment showing higher motivation to sell new products and perform better.

Moreover managers should focus more on increasing salespeople's motivation to sell new products because motivation is a strong predictor of selling performance.

On the contrary managers do not need to put much attention on such factor as salespeople's age because it affects neither motivation nor performance in selling new products. Though sales experience could be an important factor in combination with personality when predicting new product selling performance. More experienced salespeople possessing the right personality characteristics perform better.

4.4. Discussion, Limitations and Future Research

This study confirms the importance of salespeople's personality in new product selling environment. The results should be interpreted with caution taking into account the limitations discussed below. First, the study was conducted within one organization settings representing one industry. Though this allows for clear environment without possible intervention of external effects further research conducting in different industries, countries, and across organizations can produce additional findings which might be affected by industry specific and/or national characteristics and contribute to the generalizability of the results.

Second, this study takes the perspective of salespeople. The constructs are subjective using self-report measurements. It is appropriate taking into account the purpose of this paper and following evidence of usefulness and validity of such measures (Churchill et al., 1985; Hultik & Atuahene-Gima, 2000). Though it is relevant, one should be aware interpreting the results especially regarding the performance in selling new products that it was measured by salesperson's self-assessment. Moreover some alternative measurements: objective (organizational quotas, the number of new customers, the number of telephone calls promoting new products etc.) or subjective (managerial and/or peers assessment) especially for selling performance could be adopted by future research. The results further could be compared.

Third, the findings could be affected by the small sample size. Larger data usually tends to produce more precise results. Moreover though before the analysis the data was checked for non-response, some non-response bias can still affect the results. Non-response can be explained by different factors, such as some salespeople could have been unavailable due to vacations and other work leaves, some could have been uncomfortable to answer personal questions and reveal relatively personal information about their personality traits, motivation and performance.

This study establishes the link between motivation to sell new products and the performance in new product selling arguing that motivated salespeople perform better. Though the positive relationship is proved, the issue of how to motivate salespeople to sell new products is out of

scope of this paper. Future research could elaborate on different motivational theories examining for example intrinsic and extrinsic motivators, goal setting, and expectations in connection with salespeople's motivation and performance to sell new products.

The study confirms importance of salespeople's personality in new product selling treating personality from the Big Five personality dimensions. Future research could analyze other salespeople's individual-specific characteristics such as role ambiguity, commitment, satisfaction, fear, and self-efficacy. Moreover this study additionally found that being confident is the important salespersons characteristic predicting motivation to sell new products, thus preliminarily linking motivation with self-efficacy.

And finally, though the study established strong relationship between salesperson's personality, motivation and performance in selling new products, both motivation and performance might be affected by factors from other levels: organizational and market. Consequently, one explanatory theory including factors from different levels: individual, organizational, market is required in order to completely explain theoretically and test empirically what and in what extent determine salespeople's motivation to sell new products and performance in selling new products.

5. Conclusions

In this part we shortly conclude the findings and the results of the study.

This study based on the importance of new products selling in technology intensive industries and the role of salesforce explores the potential link between salesperson's personality, represented by the Big Five, motivation to sell new products and performance in selling new products.

Based on the empirical findings and the statistical analysis of the collected data the study reached the following conclusions. First, salesperson's personality is found to be an important factor which predicts both salespeople's motivation to sell new products and performance in selling new products.

Second, the most important personality dimension regarding new product selling situation is Extraversion. From all Big Five personality dimensions Extraversion was found to explain the most variations in both motivation to sell new products and performance in selling new products. Thus, salespeople with high score in Extraversion tend to be more motivated to sell new products and perform better in selling new products. Complex analysis of the Big Five personality traits argues that other personality dimensions such as Agreeableness, Conscientiousness, Neuroticism, and the Openness to experience though being related to the salespeople's motivation and performance in selling new products do not have significant impact neither on motivation nor on performance in new product selling. Such findings are explained by the extreme importance of Extraversion which in situation of new product selling suppresses all other personality dimensions. The additional findings of this study reveal that certain characteristics of Extraversion such as being confident, energetic and sociable are more important than others in predicting both motivation and performance in new product selling.

Third, salesperson's motivation to sell new products is found to be positively related with and significantly determinates new product selling performance which means that more motivated salespeople perform better.

Forth, selling experience turns to positively predict selling performance without having any impact on the salespeople's motivation to sell new products. Salespeople's gender alternatively has an impact on the motivation without being related to the performance. This result suggesting that male salespeople are more motivated to sell new products than females cannot though be

generalized due to the limited sample size. And finally, salespeople's age is not proved to be related neither to motivation to sell new products nor to performance in new product selling.

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Appendixes

Appendix 1

Short Information about the Study Case – ABB AB

ABB AB, Sweden is a Swedish subsidiary of the ABB Group which is one of the world's leading power and automation technology companies.

The ABB Group was formed in 1988 through a merger between Asea AB and BBC Brown Boveri AG. Initially founded in 1883, Asea AB was a major participant in the introduction of electricity into Swedish homes and businesses and in the development of Sweden's railway network. In January 1988, Asea AB and BBC Brown Boveri AG each contributed almost all of their businesses to the newly formed ABB Asea Brown Boveri Ltd, of which they each owned 50 percent. In 1996, Asea AB was renamed ABB AB and BBC Brown Boveri AG was renamed ABB AG. In February 1999, the ABB Group announced a group reconfiguration designed to establish a single parent holding company and a single class of shares. ABB Ltd was incorporated on March 5, 1999, under the laws of Switzerland. In June 1999, ABB Ltd became the holding company for the entire ABB Group. This was accomplished by having ABB Ltd issue shares to the shareholders of ABB AG and ABB AB.

ABB AB product portfolio ranges from switches, and sockets to robots, and from large, transformers to control systems that manage entire power networks and factories. The company provides solutions for secure, energy-efficient generation, transmission and distribution of electricity, and for increasing productivity in industrial, commercial and utility operations. About 15 per cent of its business today is attributable to the industry sector, 65 per cent each to transmission and distribution utilities and the balance 20 per cent to the power generation sector. They sell directly to end-users and through channel partners like EPC (Engineering, Procurement & Construction) firms, distributors, installers, system integrators and Original Equipment Manufacturers (OEMs).

Introduction of new innovative products is a part of ABB AB business strategy as it offers solutions which integrate power and automation technologies to improve the efficiency, productivity and quality of the customers' operations while minimizing their environmental impact. Technology and product innovation is one of the ABB AB key differentiators, therefore the company's future depends on having groundbreaking solutions that open up new opportunities for the company.

In each product business unit (BU) the marketing and sales function is managed by the BU Marketing and Sales Manager supported by regional Managers who in turn are supported by sales responsible. These salespeople are responsible for sales of existing and new products. ABB AB takes consistent efforts to introduce new products which meet customers future needs.

Typically each Product group has a total workforce of around 350-500. They are involved in design, development, manufacture, sales and service of respective products. The factory sales teams are organized with 20-25 sales persons who support the front end sales in respective countries to sell standard and new products to Utility end customers who are Transmission and construction companies.

In Ludvika there are product groups like Power transformers, Capacitors, Instrument transformers, Surge arrestors, Circuit breakers, Components and HVDC. In total the employee strength in Ludvika is around 2900 of which 200 are direct sales responsible for selling of new products worldwide. In Västerås there are product groups like FACTS, Robotics, Substation automation products and Low voltage products, and Power systems. In total the employee strength in Västerås is around 4500 of which about 400 are direct sales responsible for selling of new products worldwide.

As a key element of its business strategy, ABB AB is committed to harmonizing the naming of products, systems and services across multiple businesses. Along with increasing 'productization' of ABB technologies at both the stand-alone and system level, this commitment is intended to strengthen the company's image as a power and automation provider whose offering is composed of new innovative products and complementary elements.

Appendix 2

Measurements

Personality

BFI (Big Five Personality Inventory) adopted from John & Srivastava (1999).

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please mark the answer next to each statement to indicate the extent to which you agree or disagree with statement⁶. I see myself as someone who ...

- ___ 1. Is talkative
- ___ 2. Tends to find fault with others
- ___ 3. Does a thorough job
- ___ 4. Is depressed, blue
- ___ 5. Is original, come up with new ideas
- ___ 6. Is reserved
- ___ 7. Is helpful and unselfish with others
- ___ 8. Can be somewhat careless
- ___ 9. Is relaxed, handles stress well
- ___ 10. Is curious about many different things
- ___ 11. Is full of energy
- ___ 12. Starts quarrels with others
- ___ 13. Is a reliable worker
- ___ 14. Can be tense
- ___ 15. Is ingenious, a deep thinker
- ___ 16. Generates a lot of enthusiasm

⁶ Measured on a 5-point scale from "Strongly disagree" to "Strongly agree"

- ___17. Has a forgiving nature
- ___18. Tends to be disorganized
- ___19. Worries a lot
- ___20. Has an active imagination
- ___21. Tends to be quiet
- ___22. Is generally trusting
- ___23. Tends to be lazy
- ___24. Is emotionally stable, not easily upset
- ___25. Is inventive
- ___26. Has an assertive personality
- ___27. Can be cold and aloof
- ___28. Perseveres until the task is finished
- ___29. Can be moody
- ___30. Values artistic, aesthetic experiences
- ___31. Is sometimes shy, inhibited
- ___32. Is considerate and kind to almost everyone
- ___33. Does things efficiently
- ___34. Remains calm in tense situations
- ___35. Prefers work that is routine
- ___36. Is outgoing, sociable
- ___37. Is sometimes rude to others
- ___38. Makes plans and follows through with them
- ___39. Gets nervous easily
- ___40. Likes to reflect, play with ideas

- ____41. Has few artistic interests
- ____42. Likes to cooperate with others
- ____43. Is easily distracted
- ____44. Is sophisticated in art, music, or literature

Motivation to sell new products

Adopted and adjusted from Fu et al. (2010), Hultink & Atuahene-Gima (2000), and Brown & Peterson (1994).

Taking into consideration one or several new products launched within the last 12 months that you are responsible to sell please mark an answer next to each question which best indicates your effort in selling these new product/s⁷. New products here are defined as all products such as new products to the market, difference in technology, innovations, etc. launched within the last 12 month and which you did not sell before. Conventional products here are defined as traditional products and the opposite to the new products. Compared to existing conventional products you sell...

1. How much time do you spend on selling these new product/s?
2. How hard do you work to sell these new product/s?
3. How much overall effort do you put into selling these new product/s?
4. How interested are you in selling these new products?

Performance in selling new products

Adopted and adjusted from Sujan et al. (1994) and Hultink & Atuahene-Gima (2000).

Taking into consideration one or several new products launched within the last 12 months that you are responsible to sell please mark the answer next to each question which best indicates

⁷ Measured on a 5-point scale from “Far less than on the conventional product” to “Far more than on the conventional products”

the degree to which you have been successful in selling these new product/s⁸. New products here are defined as all products such as new products to the market, difference in technology, innovations, etc. launched within the last 12 months and which you did not sell before. Conventional products here are defined as traditional products and the opposite to the new products. Compared to other salespeople, to what extent have you been successful in...

1. Gaining significant market for these new product/s?
2. Generating high level of sales volume for these new product/s?
3. Quickly generating sales for these new product/s?
4. Exceeding sales targets set for these new product/s?
5. Assisting your manager in achieving the sales objectives for these new product/s?

Demographic characteristics

1. Age

Please indicate the year of your birth.

2. Gender

Please specify your gender⁹.

3. Sales Experience

Please indicate how long you have been working in a sales function (your overall sales experience regardless the employer).

⁸ Measured on a 5-point scale from "To far less extent than other salespeople" to "To far higher extent than other salespeople"

⁹ Alternatives: "Male", "Female", and "Prefer not to answer".