
Adaptive Selling and Organizational Characteristics: Suggestions For Future Research

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In this paper the relationship between adaptive selling and organizational behavior is analysed. Specifically, it is discovered that adaptive behavior is a multifaceted concept which is not linearly related to the organizational characteristics in the way it was operationalized in a former study by Sujana and Weitz. In order to gain a better insight into the functioning of adaptive selling within organizations, a different methodology is suggested. By means of more inductive research more detailed models should be generated, which then can be tested for robustness with a more deductive approach. Concept creation should have a more empirical foundation before concepts are entered into a theoretical network.

Introduction

Recently many contributions have been made towards a better understanding of sales-client interactions. Specifically, "adaptive selling" or the "contingency approach" to selling attracted much attention. Weitz (1981) provided a notable conceptual framework for this adaptive selling concept. This conceptual framework sparked a concatenation of investigations around this subject; some have been focusing on the knowledge structure of salespeople which allow salespeople to be adaptive during the conversations (Leigh and Rethans 1984; Szymansky and Churchill 1990; and Sujana and Betman 1988, to mention a few). Other studies focused on the behaviors salespeople display during the conversation (Schuster and Danes 1986). Together with Sujana (1985), adaptive selling was also studied by Weitz from an "organizational perspective." Later, Spiro and Weitz (1990) developed an instrument to measure the degree to which salespeople practice adaptive selling.

The central idea of most of the studies of adaptive selling has been expressed by Weitz, Sujana, and

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Sujana (1986) as "... the altering of sales behaviors during the customer interaction or across customer interactions based on perceived information about the nature of the selling situation" (p.2.) Based upon this definition, these researchers are asking how adaptive selling can boost the performance of the salesperson. Essential to their theoretical statements is their implication that the benefits of an adaptive approach must exceed the costs of selecting and training if it is to be useful in a company (Weitz and Spiro 1990).

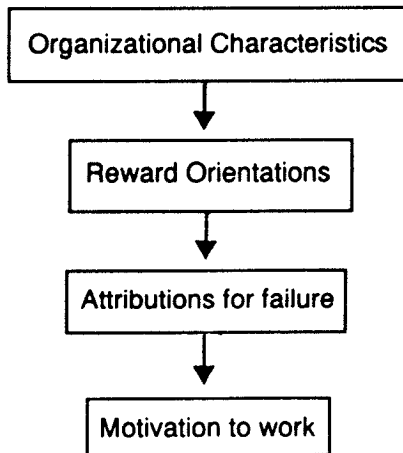
This linkage between the costs and benefits of adaptive selling leads to the assumption that a relationship exists between the adaptive behavior of the salespeople and organizational characteristics. In this study we will investigate how adaptive behavior and organizational characteristics are related in Dutch companies. First we will outline the theoretical foundations of this study. Then we will explicitly describe an operational model which describes the relationship between adaptive behavior and organizational characteristics. The performance of this model will be evaluated using data gathered from Dutch salespeople. Finally, based on the empirical analysis, some remarks and suggestions for future research and theoretical development will be made.

Theoretical Foundations

Sujana and Weitz (1985) proposed a model in which

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Figure 1
The theoretical foundation of Sujan and Weitz' model



adaptive selling behavior was linked to organizational characteristics. In order to tackle this problem, they developed an *information processing* approach. Specifically, they were interested in the causal relationships between organizational characteristics, intrinsic and extrinsic reward orientations, attributional styles, and the salesperson's motivation to work harder or smarter (see Figure 1).

Working smarter then means using *information* "which is acquired through observing the outcomes of selling strategies to enrich their knowledge structure which then allows them to develop more sales situation categories with associated declarative knowledge and selling heuristics" (Weitz, Sujan, and Sujan 1986). This strategy, as pursued by Sujan, Sujan and Weitz, is traditionally called a "structural" as opposed to a "functional" research strategy: structural explanations seek to explain human behavior on the basis of a model of cognitive functioning that utilizes a parsimonious set of logical principles or procedures (Zimmerman and Whitehurst 1979).

In contrast to this "(sales)man-the-computer" stance of the structural approach, functional explanations focus on predicting and describing behavioral processes and outcomes rather than on constructing a master blueprint of mental processing (Zimmerman and Whitehurst 1979). A basic and relevant distinction between both strategies is that, according to the structural approach, "knowl-

edge" is an "independent" factor and is the main causative agent for the behaviors in an interpersonal exchange.

Within structuralistic research it is assumed that before the interaction begins, the salesperson possesses explicit knowledge and abstract knowledge structures in his/her memory concerning the customer (best exemplified by Szymansky 1988). Perhaps this methodological distinction explains why Weitz, Sujan and Sujan make "working smarter" an operationalization of the practice of adaptive selling (Spiro and Weitz 1990). Subsequently, they ask how people can be trained to work smarter and, perhaps more importantly, how to motivate them to work smarter. As Weitz, Sujan, and Sujan suggest, "[salespeople] must be motivated to try different sales approaches and to analyze the effects of these selling experiments."

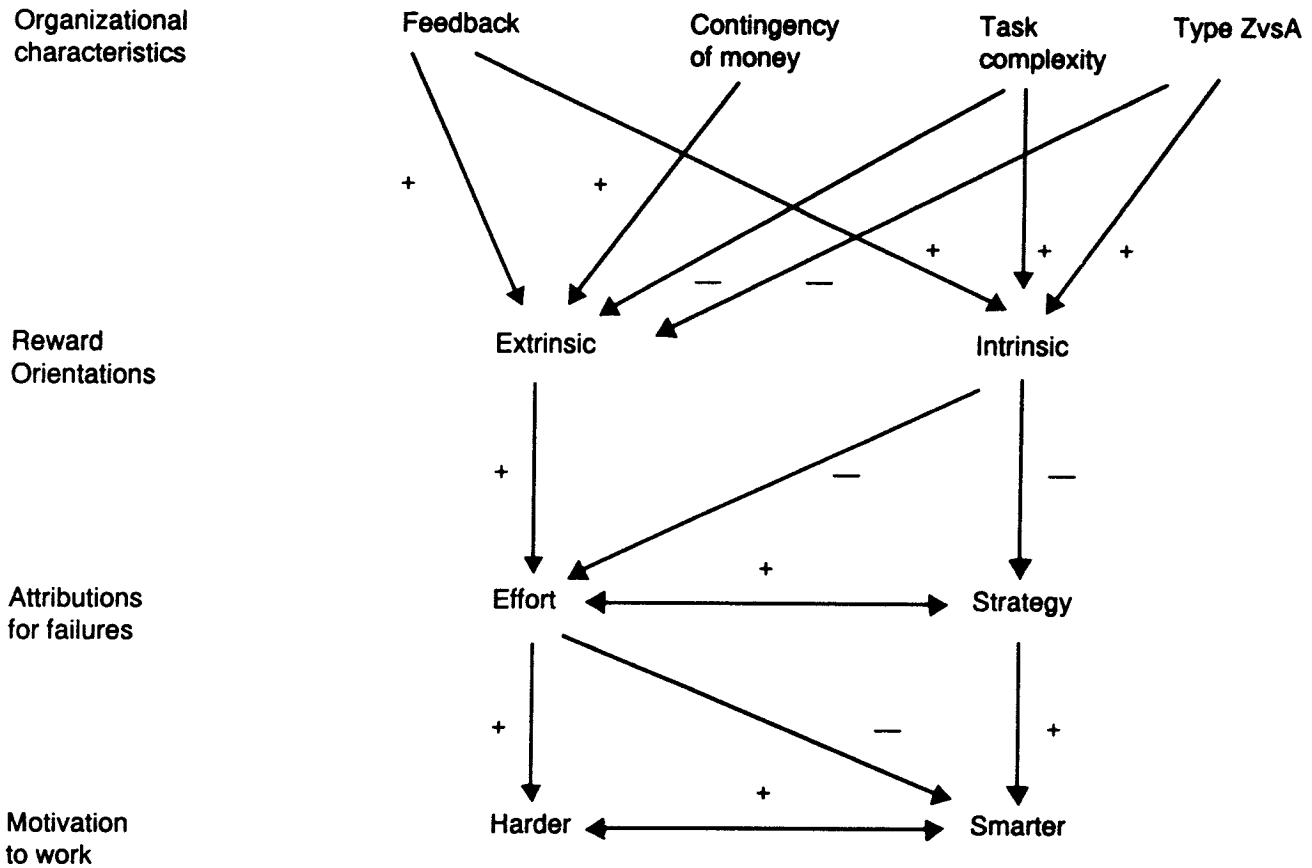
It is well known that organizational characteristics such as the culture of the organization and compensation systems all can have an effect on the motivation of salespeople (Tyagi 1982; Churchill et al. 1985; Anderson and Oliver 1987). Most of these studies make a direct link between organizational characteristics and motivation to perform. However, they do not focus on how organizational characteristics relate to the assumed precondition of performance, namely adaptive selling. We felt, therefore, that the model of Sujan and Weitz (1985), because it addressed this issue, was a good starting point for our study. The aim of this study then is to look at the structure of the model. We are, therefore, not interested in statistical generalization but we will approach the subject in a more inductive data analytic way (Tukey 1977).

The model of Sujan and Weitz.

In the original study (Sujan and Weitz 1985) a "process - oriented motivational model" was introduced as opposed to a "content - oriented motivation model." This model hypothesized that organizational characteristics would affect reward orientations (extrinsic and intrinsic). These orientations, in turn, would affect the attributional strategies used by salespeople to explain outcomes in sales - client interactions. It was conceptualized that a salesperson will attribute a negative outcome ("failure to make a sale") as resulting either from a lack of effort or a lack of strategic insight. Lastly, these attributional styles were hypothesized to influence the motivation to work harder or smarter.

Figure 2 displays the resulting model of Sujan

Figure 2
The final results of Sujan and Weitz' Model



and Weitz' statistical exploration of their model. Even though the model looks plausible, there are some aspects that need further elaboration. The first objective of this study, however, is to use Sujan and Weitz' model in an European context and to compare the results with those from the U.S.A. in order to add to its validation. Secondly, we will try to enhance its theoretical and empirical coherence.

The Study in the Netherlands

Sample and procedures

To be able to compare our results with those of Sujan and Weitz (1985), we used a translated version of the original questionnaire, which was sent to us by H. Sujan. The translation was done by a registered translator in order to minimize the possibility of inaccuracies in translation.

Kluwer, a Dutch publishing company, supplied us with the addresses of companies subscribing to their journal, *Verkopen* (Selling). From this database, 50 companies were randomly selected. We did not use a specific sampling design because at the outset we were not interested in differences such as company size or branch. Our main interest was to see whether we could reproduce the structure, that Sujan and Weitz found in the U.S.A., in our data. The statistical information was to be used as a heuristic device only because of the way the sample was constructed and also because of the non response. Therefore, the statistical preconditions were not met. This is often the case in questionnaire (or other) research. The information gained from calculating statistics, when this is the case, can only be used as an heuristic device (Tukey 1977). Since the air of this paper is replication and exploration and not generalization this is not a drawback. Five

Table 1
The Reliability of the Scales

Components of the model	Study	
	American	Dutch
MOTIVATION		
Smarter	0.80	0.75
Harder	0.88	0.84
ATTRIBUTIONS		
Strategy	0.57	0.61
Effort	0.75	0.78
REWARD ORIENTATIONS		
Intrinsic	0.63	0.45
Extrinsic	0.79	0.68
ORGANIZATIONAL CHARACTERISTICS		
Type Z vs. A	0.74	0.53
Task complexity	0.39	0.11
Contingency of money rewards	0.73	0.78
Feedback	0.59	0.34

hundred questionnaires were sent to these companies for salesmanagers to randomly distribute to their salespeople. The sales managers were asked to motivate their salespeople to return the completed questionnaires to us directly within three weeks. To stimulate and speed their response, *Verkopen* featured two adds reminding salespeople to complete and return the questionnaire. After two months, 240 questionnaires were returned. Thirty-nine were judged to be filled out unsatisfactorily. This reduced our sample size to 201 questionnaires (a 40% usable response rate). For a description of the questionnaire, the reader is referred to the original paper (Sujan and Weitz 1985).

Instrument reliability

The reliability of the scales used to measure the concepts in the model was evaluated using Cronbach's alpha in order to make a good comparison with the original study possible. The results of this analysis are displayed in Table 1. To compare the Dutch and American results, the results of the original study are also displayed in this table. In

general for both studies the reliabilities, especially for the organizational characteristics, were low. The goal of the study is to evaluate the Sujan and Weitz model and therefore we maintained the scales in spite of these low reliabilities. A more detailed analysis of the different scales can be found in Verbeke and Vink (1990). Later on in section 5 we will return to this issue.

The scales used to measure "motivations" and "attributions," and which are central to Sujan and Weitz' model, have similar reliabilities in the Netherlands and the U.S.A. Both "reward orientation" scales show a lower yet still acceptable consistency in the Netherlands. The "organizational characteristics" scales, except for the "contingency of money rewards" scale which has a higher consistency, all show lower consistencies. This may indicate a difference in how salespersons in the U.S.A. and the Netherlands perceive their working environment (Goffman 1959). It may also be a consequence of the translation into Dutch, despite the registered translator, since local nuances may have been lost or the aspects mentioned may have a different meaning in Dutch culture. The scale used to mea-

Table 2
The total effects and measures of fit of Sujan and Weitz' final model

<i>Components of the model</i>	Strategy	Effort	Intrinsic	Extrinsic
Smarter	0.27	0.09	-0.03	0.00
Harder		0.43	-0.03	0.00
Strategy			-0.10	
Effort			-0.07	0.01

	Z vs. A	Task Complexity	Contingency	Feedback
Smarter	-0.01	-0.01	0.00	-0.01
Harder	-0.01	0.01	0.00	0.01
Strategy	-0.03	-0.02	0.00	-0.02
Effort	-0.02	-0.01	0.00	0.20
Intrinsic	0.28	0.16	0.00	0.20
Extrinsic	-0.10	-0.07	0.37	0.02

Table 2c
The measures of fit

Chi-square	22.60	(df=23, prob.=0.484)
Goodness-of-Fit Index	0.978	
Adjusted Goodness-of-Fit Index	0.947	
Root mean square residual	0.052	

The model without these correlations had a chi-square of 115.09 (df=26, prob.=0.00).

sure "task complexity" is a special case. In the Netherlands, the consistency of this scale is too low to justify retaining the complete scale. It was decided, therefore, to use just one item ("Your work is too routine"), which best describes the theoretical meaning of the concept as an indicator for task complexity. All other scales were retained to mimic as closely as possible the original study. From these

results it can be concluded that, although differences do exist between the U.S.A. and the Netherlands, all but one scale were compatible.

Causal models

The causal model was analyzed with LISREL VI (Jöreskog and Sörböm, 1984). Although Sujan and

Table 3
The correlations between the endogenous variables

The correlations between the data. Sujan & Weitz (Kluwer data) correlation matrix				
	Smarter	Harder	Strategy	Effort
Smarter	1.000			
Harder	0.411	1.000		
Strategy	0.347	0.324	1.000	
Effort	0.236	0.433	0.541	1.000

Weitz proposed both a hypothetical model and a final model (the result of their exploration), we shall concentrate on the final model. This is because our emphasis is on comparing data structures between the U.S.A. and the Netherlands. The results of our test indicate that this model consists of two independent parts. Table 2 (a&b) presents the total effects and the measure of fit for this model. The correlations between the endogenous variables have a large, or even decisive, influence on the fit.

The fit of the model was inflated by inclusion in the model of the correlations between the endogeneous variables. For a more complete technical analysis of this model and others proposed by Sujan and Weitz (including HOMALS and alternative LISREL models), we refer the reader to Verbeke and Vink (1990). The main observations concerning this model are, on the one side, the obvious breakdown of the model and, on the other side, the remaining high correlations between the endogeneous variables. In the next sections, we will concentrate on these two issues.

Before we go any further, however, the following concluding remarks must be mentioned. The results in the U.S.A. and the Netherlands are compatible:

- A. The measurement instruments are similar in their reliability; in both countries they are, however, low.
- B. The directions and estimates of the parameters in the causal models are comparable.
- C. The models show the same dependency on the correlations between the endogenous variables leading in both cases to an inflated fit.

This may be interpreted as a cross-cultural validation. The observed problems, however, make this

of secondary interest in this paper. This is why we will now focus on further exploration of the relationships between the thus far discussed concepts.

Further Explorations

The results of our analysis give rise to two speculations. Firstly, because of the remaining correlation between working harder and working smarter, it may be that future research should reconceptualize adaptive selling.

As we suggested, the structural approach emphasizes that adaptive selling must be perceived as working smarter, meaning that salespeople should develop more categories, more strategies, etc. Our data, however, show that it is possible that in some situations flexible salespeople concentrate on working harder rather than smarter or on a mixture of the two. The correlations between these concepts are all positive, indicating concordance and not discordance.

Secondly, the strong connections between attribution strategies and working harder and/or smarter might indicate that "adaptive selling" (working smarter or harder) is more complex than Sujan and Weitz suggest. It may be that "adaptive selling" is a process of interaction between attribution styles and cognitive strategies. In fact, our data support this with the positive correlations (Table 3).

When we assume the possibility of recursive causal effects between these concepts, it means that they reinforce each other. For instance, it may be that a salesperson who employs more categories and strategies during a sales-client interaction ("works smarter" according to Sujan and Weitz), may at the same time put more effort in the task at hand ("work harder" according to Sujan and Weitz). The compo-

Table 4
A factor analysis of the scales

Components of the model	Factor 1 Adaptive Selling	Factor 2 Motivation	Factor 3 Reward	Factor 4
Effort	0.77960			
Strategy	0.76057			
Harder	0.74042			
Smarter	0.63323			
Intrinsic Z vs. A		0.77815		
Feedback		0.71945		-0.43773
		0.68542		
Extrinsic Contingency			0.84608	
			0.77077	
Task complexity				0.89535

This factor analysis is only used as a technical tool to analyze the correlation matrix. Its aim is not to come to new concept creation.

sition of the mixture depends on the flexibility of attributional style. In some situations flexible salespeople will attribute their failure to a lack of effort or to strategies which motivate them to work harder, smarter, or both.

This suggests that the four distinguished concepts are all part of what could be called "adaptive selling." A factor analysis (Table 4) on the correlation matrix supports this idea with factor loadings between 0.63 and 0.78 for these four concepts on the same factor.

The results in Table 4 also show that the concepts can be regrouped into 3 main categories. (Task complexity is a separate [fourth] group. Because of the measurement problem with this concept, it is ignored from here on.) Not only does it separate the "adaptive selling" (factor 1) concepts from the other concepts, but it also confirms the distinction between reward orientations.

Specifically, salespeople's perceptions that their company has a Z-type culture, which means that within the company culture the emphasis is on the long term well being of human resources, and that feedback is given to them is highly related to their intrinsic reward orientation, while their being contingent on money rewards coincides with an extrinsic reward orientation. Remarkable is that these factors, the motivational factor (factor 2) and the

reward factor (factor 3), are uncorrelated. This may be one of the causes of the model's breakdown. Analytically, they are proposed as opposites. In reality, however, they can coexist and therefore the discriminating power of these concepts is diminished. A salesperson can, for instance, perceive his organization as a Z-type company, receive a lot of feedback, and have an intrinsic reward orientation scoring high on the motivational factor, yet at the same time be dependent on money rewards and therefore also have an extrinsic reward orientation, scoring high on the reward factor.

We conclude from this factor analysis the following:

- A. Motivation to work smarter or harder and the attribution styles are interrelated. They are recursively connected and urge us to broaden Sujan and Weitz' concept of "adaptive selling."
- B. The salespersons' indications of organizational characteristics do not allow for the distinction between company cultures as hypothesized in the model.
- C. The orthogonal factor solution precludes the possibility of linking "adaptive selling" concepts to "organizational characteristics" in a straightforward linear model.

Theoretical and methodological suggestion

This study was intended to investigate how organizational characteristics motivate salespeople to practice adaptive selling. The results show that this link is not clear cut. The main fault was the fuzziness of the interlinkage of the concepts in the model. Therefore we must ask the following questions:

A. Should we develop the structural methodology which emphasizes the cognitive dimensions of adaptive selling as indicated by Sujan and Weitz?

Our data reveal the multifaceted nature of adaptive selling. Consequently, the cognitive (structural) conceptualization of adaptive selling should be expanded and should also include more dynamical perspectives such as behavioral, personal, and situational characteristics. In fact, these observations are supported by more recent research (Spiro and Weitz 1990) which includes a greater variety of perspectives.

B. If "adaptive" selling results in long term effectiveness when the benefits of the approach outweigh the costs, then should it be encouraged by means of training and selection ?

As indicated in the work of Spiro and Weitz (1990), there is no substantive relationship between performance, as evaluated by the manager, and adaptive behavior. Other researchers link the salesperson's performance to the role set as defined by management (goals, tasks, targets). Strikingly, this link which is made explicit in the concept of feedback does not correlate with the concept of adaptive selling. This implies that adaptive behavior is neither rewarded nor stimulated. This may be because it is not recognized by management, or because it is believed to be unrelated to effectiveness. Intuitively, that is not plausible. We must not forget that many sales tasks, which also contribute to performance evaluations, are not necessarily related to the salesperson's capacity to practice adaptive selling. MacKenzie et al. (1991), for instance, suggest that citizenship behavior, that is behavior of the salesperson towards the company itself as opposed to the behavior towards the customer, is also a very important dimension contributing to the sales manager's evaluation of the salesperson's

performance. It may therefore be of interest to identify situations, tasks, and also segments within the sales population to evaluate the function of adaptive selling.

C. Assuming it is effective, how can people be motivated to practice adaptive selling and how can organizational characteristics contribute to the motivational process?

This question cannot be answered because it has not yet been established if and where adaptive selling can be effective. In other words, we do not know the role adaptiveness plays within the organization, and thus we are not sure that it should be stimulated. If it is, it would mean stimulating correct attribution of failures too and not only categorizing customers.

As is clear from our research results, we are not able to make conclusive statements about the concept of "adaptive selling" as suggested by Sujan and Weitz, let alone claim that we are even close to understanding the role adaptive selling plays within organizations. To tackle this issue, two main suggestions for research will be made:

Multivariate and multilevel design strategies:

To obtain insight into the influence of organizational and situational characteristics, it is not enough to rely on the perceptions of the individual salespeople (something which occurred in our study). For instance, it may be that two salespersons from the same company identified that company in different ways. A possible solution to this problem is to use a multilevel research design as is practiced in educational research (Raudenbush and Bryk 1986) where the influence of, for example, school characteristics on student performance is estimated. In such a design, the data on the different levels are collected independently allowing for more specific and "objective" information about the environment in which the subjects perform. One of the drawbacks of our data was that the information on the organizational characteristics were the subjective perceptions of the salespeople. In a multilevel design, this information could, for example, be gathered by questioning the managers or using parameters derived from aggregation at different company levels. This would also make it possible to link information from managers and salespeople in the organization.

In general, when applied to the study of "adaptive selling" it can lead to a more complete picture

of the role and limitations of this concept.

Inductive strategies:

Sujan and Weitz' study is essentially exploratory. That is, they search for a model on the basis of their data. However, in tackling this problem they seem to have introduced a model which might be insufficiently sensitive to the intricate environment in which adaptive selling takes place. Because they began deductively, using a hypothesized model, they unnecessarily limited themselves, and, therefore, were unable to detect ecologically relevant categories which might have explained why salespeople work harder or smarter. Therefore, in ductive methods should be pursued which are better anchored in reality, thereby explaining how "adaptive selling" functions in different contexts. In later stages, more deductive research can then evaluate the robustness of the developed model(s) (Hofstede et al. 1991).

Conclusion

In this paper we have tried to analyze the relationships between adaptive selling and organizational behavior. More specifically, we have discovered that adaptive behavior is a multifaceted concept not linearly related to the organizational characteristics in the way it was operationalized in this study. In order to gain a better insight into the functioning of adaptive selling within organizations, we suggested a different methodology. It is suggested that by means of more inductive research more detailed models must be generated, which then can be tested for robustness with a more deductive approach. We feel that concept creation should have a more empirical foundation before concepts are entered into a theoretical network.

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