

# ACADEMY OF ENTREPRENEURSHIP JOURNAL

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## LETTER FROM THE EDITORS

We are extremely pleased to present Volume 2, Number 2, of the *AEJ*. The Academy of Entrepreneurship is an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *AEJ* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to advance the knowledge, understanding, and teaching of entrepreneurship throughout the world. To that end, the journal publishes high quality, theoretical and empirical manuscripts, which advance the entrepreneurship discipline.

The manuscripts contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

As editors, we intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

The Editorial Policy, background and history of the organization, officer lists and addresses and calls for conferences are published on our web site. In addition, we keep the web site updated with the latest activities of the organization. Please visit our site and know that we welcome hearing from you at any time.

JoAnn and Jim Carland  
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# SOCIAL PATTERNS BEHIND STRATEGIC ACTION

Claus Nygaard, Copenhagen Business School

## ABSTRACT

*In this article I discuss some theoretical and methodological aspects in the development of a new business sociology and link this discussion to the work with industrial policy. The focus is on small subcontracting firms in the metalworking industry in two local communities in two diverse counties of Denmark. I look for the genuine aspects of each community, concentrating on which governance structures affect local industrial organization. The business communities in question are different, which shows in the interaction between the firms, and in their interaction with the institutional milieu. In short the governance structures differ across communities, which stems from the social, economic, and political development through time. To guide (and nurse) the establishment of new firms, to bootstrap the existing industry, it is necessary for policy makers to understand the different types of "strategic games" that go on in various local communities, which include actors from the industrial arena as well as actors from the proximate social institutional arena. My aim is to put forward a story that might help civil servants and industrial policy makers to better understand the constitution and performance of the industry they are serving; and at the same time help us as researchers and teachers to focus alternatively when dealing with issues of strategic management. Following that I have to stress that my aim is not to give advice, but rather to reflect upon these matters in a theoretical and methodological light.*

## ECONOMIC GROWTH THROUGH INDUSTRIAL POLICY WORK?

Several terms regarding the economic growth of industry have been on the Danish agenda for discussing industrial policy work during the latest decades, and several policy programmes have been formulated by actors in public institutions ranging from governmental institutions over institutions in counties to institutions in municipalities, programmes, which have all had as their overall purpose to generate industrial growth and hence better the nation's economic situation in general. Among the variables which have been connected to growth are the employment rate, the export rate, the number of entrepreneurs, the R&D spendings in firms, the size and location of firms - just to name a few. The recent industrial policy work has concentrated on solving what the actors on the different political arenas have seen as problems for the industry, more than it has concentrated on what the actors on the industrial arenas themselves have issued as problems in regards to industrial growth - or problems simply in regards to the act of running a business. Much has been said about what firms ought to do, and less about what they actually do, and it has resulted in the implementation of industrial policy programmes in counties and municipalities, which have

not fulfilled the needs of the respective parts of the industry to which the programmes were directed.

The work on industrial policy has been carried through on the basis of a quantitative macro understanding of the industrial organization, and this has resulted in an understanding of the industry being built upon discontinuous images in the time-space world (Schutz, 1967) and it has been through these momentary quantitative pictures of the industry, the focus of the industrial policy programmes has been shaped. If the export rate of a given part of the industry has been seen dropping from period  $T_0$  to period  $T_1$  it is almost certain that the next industrial policy programme has been centered around initiatives to better the export rate, dealing with initiatives such as economic subsidies for market research, marketing and establishment of foreign business relations (in connection with the mention of subsidies it is important to note that in relation to industrial policy programmes in Denmark - much unlike what I have been informed is the practice in USA - subsidies have often been given to the firms directly as grants, not necessarily on a loan/pay-back basis). In that way the industrial policy work has not been based on a qualitative micro sociological understanding of the industrial organization, because the explanans (with what we explain) has just been a replication of the explanandum (what we seek to explain). The policy makers have not inhabited a processual perspective built on continuous images of heterogenous qualities (Schutz, 1967) in their work, which could have turned their deduction of the explanans from the explanandum to an inductivistic approach based on the specific industrial relations in the part of the industry in question. Rather they have built their policies on a systemic presentation of the industrial organization per se, and hence neglected the interactions between the industrial actors.

The aim of my ongoing doctoral thesis is twofold, and it is also to be reflected upon in this article, where the overall subtitle could easily be: "Why do the actors on the political arena say that the actors on the industrial arena operate in one way, when they actually operate in another way?". Firstly I wish to create a new theoretical model for studying industrial relations based on qualitative micro sociological research, which I see as a way to improve the foundation for the creation, implementation and evaluation of industrial policy programmes. To put it simply I seek to find the needs for industrial policy work by going into the field and doing open ended qualitative interviews with the actors on the industrial arena - a sort of ethnomethodological field studies - which question my own previous conceptualization of industrial relations which hitherto has been partly based on regional economic models and transaction cost economics (Jensen & Nygaard, 1992; Nygaard, 1993, 1994). This is exactly what raises the second aim of my study, namely the urge to get to a motivated understanding of the "strategic game" carried out by the industrial actors, and that insight is used as my basis for further theoretical experimentation, to bring me closer to the field and away from my own haze of pragmatic and preconsidered thinking. To put it broadly that means a need for a move into the fields of sociology and institutionalism.

To end this short introductory section on a positive note I will open the main part of this article by saying that I do not see any negative aspects or impossibilities in bootstrapping the industry by creating industrial policy programmes in order to generate industrial growth, if only the politicians and civil servants would consider an alternative outset to their

quantitative macro understanding built on discontinuous images, itself leaving no focus on the explanatory patterns behind the industrial organization. To me we will get more value for the money spent on industrial policy programmes if we reach a motivated understanding of the industrial organization, thereby laying open the industrial actors “strategic game” as our explanans leading to our explanandum. To get to this point a theoretical framework is needed upon which we can put our causal factors in our ways towards the explanandum. That I will look into in the first part of the article, before the case stories are told and my conclusions reached.

### SORTING OUT THE GOVERNANCE STRUCTURES

If you depart from a qualitative micro sociological outset when doing industrial studies you will soon find that the organization of patterns of action differs across communities, and that there is more to the story of industrial development than a systemic presentation of industrial key actors and key proximate social institutions. The strategic game differs due to a “*shared sense of appropriate procedures and appropriate interpretations, an assembly of behaviours distributed among two or more people, and a puzzle to be worked on*” (Weick, 1979:4), where the *sharedness* derives from the embeddedness of the informational input on which the actor operates (I use the term operate as a synonym for behaviour and action, and later I return to the differences that I read into these words). Information is here seen as the premises for operation, where the actor finds herself with an *appropriateness* stemming from her enactment of the context in which she is embedded. In other words the information is at a premium for the operation, and the way in which the information is enacted depends on the actor’s relations vis-a-vis the provider of information. Sources of information can vary ranging from oral, written, multimedia, as well as being close to or distant from the receiver, which itself is an element I will not look into, as my focus is merely on the embeddedness, no matter what is the informational source. The argument of embeddedness has been defined as “*the argument that the behaviour and institutions to be analyzed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding... Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations*” (Granovetter, 1992:53-58). This is to encapsulate under the heading of the governance structure, which in my way of using the term is the social, economic and political relations that affect actors operations and the creation of background social institutions and proximate social institutions (Whitley, 1992a). The background social institutions refer to the institutionalization processes, whereas the proximate social institutions refer to institutions as collectivities of actors/organizations. In a brief moment we will get back to these categories.

The governance structures are here seen as the factors that guide and constrain the operations of the industrial actor as well as of the proximate social institutional actor. Note that I see the term of the governance structures in the way that they are able to guide as well as constrain operations. Sometimes the actor will find her operations to be backed/supported

by the governance structures, but at the next moment her operations may be blocked by the same structures. The metaphor of the well-known boxed labyrinth game, where you steer a silver ball through a labyrinth, which is supported by a wooden plate that can be moved by two handles at the side of the box may be used to symbolize the role of the governance structures. You turn the right handle and the silver ball gladly rolls ahead, guided by the structure of the labyrinth, and the next moment it hammers against the wall and find itself trapped in the corner. Even if you use the same operation, turn the right handle, the silver ball does not move, because the structure constrains it to support your current operation. Of course you can force through your operations, but then you eventually find that the silver ball drops in one of the holes on the board and the game is then over. When referring to the governance structures as constituted by social, economic, and political relations, it is of course an analytical framework I as a researcher put forward to grasp the motivation for operation in the industry, as I can then use these “environments” as scenarios in a request for reflection from the actors participating as respondents in my case studies. This is serving me in the same way as the notion of the ideal type has served others before (Weber, 1922).

Not only are such governance structures different across communities, but very often they are also perceived differently by the actors in the same community. If you interview a manager/owner about the business she is in, you will most probably get a description based on her everyday operations including a notion of the social setting, and the economic development of the industry. If however, you interview a politician or a civil servant on the same subject, she will most probably give you a description based on the economic and political development of the industry. It is of course only natural that you meet such different perceptions, as the reality, here the question of industrial constitution and industrial development, is selectively perceived by each actor (Berger & Luckmann, 1967). But in connection to industrial policy work these institutionalized world views constitute a problem. In an extreme society with no relations between firms and the regulatory institutions (Scott, 1995) such differences would be of only minor interest to researchers, but where the work on industrial policy plays a significant role in the shaping of the relationship between government, business and society, to get to a motivated understanding of the governance structures guiding and constraining the operations of the actors becomes central. My hypothesis is that different perceptions of the governance structures - which stem from an understanding rather than a motivated understanding (Weber, 1922) of the industrial relations in question - in the worst cases lead to the formulation and implementation of an industrial policy that does not result in the intended effect, and therefore the actual bootstrapping of the industry does not guide but rather constrains firm creation and firm performance (Sabel, 1994). To reach a motivated understanding you have to come to terms with the subjective meaning that the actor attaches to her operation, which is to go a step further than just describing the outcome of her operation. You do not have a good base to build upon your industrial policy if you just know that the firms has such and such a size and export rate, if you do not understand why they have chosen this size and this level of export.

The impact of the industrial policy is dependent on the context in which it has to function, so what is therefore needed before the shaping of any industrial policy programme,

is a motivated understanding of the strategic game governing the industrial development at the community level, and thereby constituting what can be labeled the local business system. In so far as we can locate a somewhat general pattern of strategic behavior in a specific part of the industry, it makes sense to talk of the presence of a genuine business system (Whitley, 1992a, 1992b, 1992c). The business system is defined as “*particular combinations of firms and markets which have become established in particular institutional contexts and so develop at the level of collective organisation which contains key institutions*” (Whitley, 1992c:269). My focus on the business system is an ex post observation of the social, economic and political development in the community, which I will look into in the following three sections, when I deconstruct the definition of the business system. It is however a systemic view on what actors and factors are involved in the industrial organization, so accompanying this view has to be a more socialized view. That I will get to in just a minute. In the midst of my talk on communities I ought to clarify that the dispersion of a genuine business system is not necessarily a city or a region, as thought of in geographical terms. Therefore I use the term *community* to express the situation in which a thick institutionalization phase has shaped a somewhat institutional identity and thereby an ideal of community, in which the modes of social integration is no longer designed as organizational goals but have shifted towards common personal values (Selznick, 1992). It does not mean that organizations do not have goals, it is rather an emphasis on the importance of the social relations in the constitution of governing principles.

The *particular combinations of firms and markets* is the first level at which to perceive the industrial differences across communities, and it shows to what degree the production systems are hierarchically internalized or externalized vertically/horizontally. It may be expressed with a quantitative macro understanding, but to move to a motivated understanding, we have to focus on the motives behind the choice of the patterns of industrial relations, as expressed by the industrial actors themselves. Using a quantitative macro understanding we are picturing the industrial development through discontinuous images in the space-time world (Schutz, 1967) from which the development of the industry is perceived through momentary pictures of the industry, which do not allow us to come to terms with the motivation behind the operation of the industrial actor. We just get an overview of the result of the operations, measured on selected key-reference points, such as employment figures and export rate. By taking a qualitative micro sociological outset we construct our perceptions of the industry by continuous images of heterogenous qualities (Schutz, 1967) reflecting a process perspective, which is so because we reflect the factors that guide and constrain the industrial development by the recounting of the everyday experiences of the industrial actors we interview. If, for example, we take the continuum of obligational contracting and arm’s length contracting (Sako, 1994) we may well be wrong to conclude that firms dealing with written rather than oral contracts are participating in a business environment of the arm’s length type. The actor could set the record straight by telling us that because of a quality assignment, between the firm for which they are subcontracting and that firm’s foreign customer, they as a subcontractor have to sign a formal contract for each product they make. And to assure the sceptic researcher that this is indeed a case of obligational contracting they inform us that they

will always just get an order over the phone and that these aforementioned contracts for convenient matters are mostly written in batches after the production has taken place and the products are long delivered. However, this still is the immediate focus on the economic context of the business system. Following the theories on markets/hierarchies, the transaction costs and market failures especially (Coase, 1937; Arrow, 1974; Williamson, 1981, 1985, 1989), we can tell that there is of course a focus on the economic aspects of division of labor in the choice between internal production in hierarchies and subcontracting in the marketplace. To neglect the economic context would be to overemphasize the social- and political context, but at the same time the results from my study show that manager/owners to a degree are willing to operate economically irrationally in order to maintain their social relations, and that their embeddedness in the political context sometimes forces them to act economically irrationally, simply because a certain operational pattern is enforced by law (Nygaard, 1994). That is when the constraining governance structures show their faces.

The business system has *become established in particular institutional contexts and so develop at the level of collective organisation*, which is encapsulated under the term of the background social institutions. Although these are “...*distant in origin and indirect in impact*” (Whitley, 1992a:16) they “...*underpin the organisation of all economic systems and form the background to industrialisation and the development of modern market economies*” (Whitley 1992b:19). But just as the industrial relations have economic aspects, so do they have a social aspect, which is the basis for both the economic- and political development. The major focus on business cultures, national differences especially, tells us that there are different social aspects behind the firm operations, as well in regard to intra-organizational aspects as to inter-organizational operations (Hofstede, 1985). It leads us to the notion of the *business recipe* (Spender, 1989), the *mind set* (Ulrich & Wiersema, 1989), or the *industrial wisdom* (Hellgren & Melin, 1992) where two levels of analysis seems to be dominant, the macro level and the micro level. The former is argued in regards to a national analysis “...*because the nation state is the dominant collectivity for organising so many of the social institutions which impinge directly on economic activities, such as the legal, education and financial systems, as well as itself constituting one of the major influences on firm structure and behavior, it is the obvious starting point of analysis of business systems*” (Whitley, 1992b:37). This emphasis on the role of the political context as the major governance structure is seen as macro-level generalizations by the micro-level theorists, who point towards an alternative starting point when analyzing business systems which tend towards a focus on the background social institutions: “...*it may be necessary to pay careful attention to a host of meso-level and even micro-level units around which collective action can be organised within a country, and sometimes across national borders. These alternative emergent or 'natural' units of collective action include: industries, sectors; districts, regions; production systems; crafts, professions, elites; corporations; kin networks; cultures, religion; parties, ideologies.*” (Rasanen & Whipp, 1992:47). As this article points out in its case stories, there is a difference in industrial organization across business communities, which is not necessarily geographically bounded, nor does it stem from the proximate social institutions per se, but rather it grows out of the actors' enactment of the context in which they are embedded and upon which enactment they operate.



What we are dealing with here is the institutionalization process itself which has been described as “...to infuse with value beyond the technical requirements of the task at hand” (Selznick, 1992:233). Here the technical requirements are seen as the immediate rational goal of the operation, and to talk of an infusion with value beyond that specific requirement, is to stress the importance for the actor to operate in accordance with institutionalized patterns of operation. It drives our notion of the institution towards a specific way of carrying out a social function, and we can here describe the institutionalization of practice as “...the emergence of orderly, stable, socially integrating patterns out of unstable, loosely organized, or narrowly technical activities” (Selznick, 1992:232). Out of chaos comes order would be a too easy way of expressing the institutionalization process, which analytically is very difficult to come to terms with.

You can, however, look upon the notion as a dichotomy (yes, yet another theoretical dichotomy to our collection), where you take the actors’ explanations of their industrial relations as your starting point. Where unstable operational patterns exist, and the manager/owner has to shop around constantly to get contracts, and constantly shift strategic focus to suit the market demands, it is difficult for her to come to terms with the value beyond the technical requirements. There you find the actor who is not always sure about the value of her firms’ work to others, and she has often wondered why the firms for which her firm subcontracts, place their orders with her firm. A question mark is put to which of their goals her firm fulfils, if not just the economic goals. She knows that as a subcontracting firm they are the means to the end of the putting out firm, but she wonders about the role of her own firm in the strategizing game, and in her explanations of the industrial organization she will often emphasize the economic terms of the relations. The fact that she wonders, is the central element here, not the uncertainty, because nobody has full information and every rationality is bounded (March & Simon, 1958; Cyert & March, 1963), no matter what are the characteristics of the background social institutions, and the answers you get to your questions are of the *I-have-often-wondered-about-that-myself*-type. At the other side of the coin you have the actor who will talk sociology and refer to goals in vague terms of value, and she will often look upon you with surprise/astonishment when you ask a question so “deeply” rooted in her personal experiences. That is, when the ways of doing business are institutionalized to a degree where it can hardly be explicated by the actors in the industry themselves, and the answer you get here will often be of the *I-have-never-thought-of-that*-type. You can of course run into an unreflective manager/owner, who does not know anything at all about industrial relations and at the same time operates almost as by the toss of a coin, but normally you find out about such matters during an interview. What I am talking about here is the situations where you get a batch of respondents tending to position themselves at the same side of the coin. That tells you something about the level of institutionalization, and thereby the presence of a genuine business community. I ought to stress that this dichotomy is not used in a processual way to say that industrial actors necessarily move from one side to the other over time, but rather as a methodological classification scheme to be used on the empirical material.

Taken together the social background institutions point towards a specific way of operating, which has been forged under special preconditions. “*Actions and procedures become*

*institutionalized when they are endowed with moral significance and thus subject to approval or disapproval on the part of an actor's significant others*" (Moore, 1964:892). Thereby these institutions are seen as a complexity of norms, which are a precondition for social organization, alias the aforementioned collective organization. Norms can of course be private, but they then differ from the social norms in so far as they are not (necessarily) shared with others and then not subordinated to the approval of others (Elster, 1989). The norms of interest here are the norms of cooperation, which can be both outcome-oriented and non-outcome-oriented, depending on the situation, and that is in itself to acknowledge the rational aspects of operations, even under the terms of norms. It is so because *"...actions typically are influenced both by rationality and by norms. Sometimes, the outcome is a compromise between what the norm prescribes and what the rationality dictates"* (Elster, 1989:102). It is important to stress that the industrial actor's perception of her rational operations does not need to be outcome-oriented, but can easily be non-outcome-oriented and yet perceived as rational. That is the reason why the norms play a crucial role in our urge to come to terms with the motivation behind operation. Just as we discussed before with organizational goals and values, it is not an either or, but a combination of both. Yet we still do applaud white lies, even if it is not legitimate to lie, and so an actor can break norms if it is not discovered by others, or if it is necessary to do so to fulfill important goals and so forth. This subordination of social norms to the approval of others means that *"...a sense of institutional identity and an ideal of community are most likely to develop where values are more central than goals or at least are equally important, and where goals are multiplied in order to accommodate a broad range of interests"* (Selznick, 1992:237-238). This is exactly what lies in the *value beyond-expression* as referred to previously. Summed up, it is then through the focus on the background social institutions we see that history (the time element), so to say, matters in the creation of communities (the space element), as the genuine characteristics of the community are not established nor altered overnight, but are following a process over time, where history shows us the social, economic and political development, which together constitutes the context in which the industrial actor is embedded.

The industrial actors are not decoupled from the remaining society, and this collective organization, though, is not a matter of industrial relations alone, as the business system *contains key institutions*, namely the so-called proximate social institutions. They *"...affect business behavior currently and in the recent past"* (Whitley, 1992a:16) and are *"...directly involved in the economic system and constitute the more immediate business environment"* (Whitley, 1992b:19). This type of institutions is the reference to a group/organization, rather than a social practice, as was the background social institutions. This now gives us two types of institutions to work with although we - as researchers - do not need to end in desperation because *"...this ambiguity is easy to live with, for the basic phenomena is the same. The group itself may represent an institutionalized way of carrying out a social function"* (Selznick, 1992:232-233). It stresses the importance of both structure and conduct, as it tells us that for every proximate social institution exists an institutionalized way of entering into the "strategic game".

It is exactly this ambiguity that forces us to move to a qualitative micro sociological analysis, but it is also the fact which actually points at the very crucial aspect of the interconnectedness between the background social institutions and the proximate social institutions. Because even if institutions under the broad headings of *the state, the financial system, the education and training system, and the labor organisation and the labor markets*, may at first seem to be identical, that is only so if we look at them as normative institutions embracing ourselves “*a social realist ontology and a rational choice logic of action*” (Scott, 1995:49). To move away from this systemic and objective interpretation and instead focus on the subject of the proximate social institution is to tone down the constraining aspects of the institutional structure itself and bring the focus onto the actor. It means that even in our study of the proximate social institutions we have to find an outset in the analysis of the operation of actors in the institutions, rather than turn to a description of the presence of the proximate social institutions themselves. That is an analytical shift towards strategic conduct: “*In institutional analysis structural properties are treated as chronically reproduced features of social systems. In the analysis of strategic conduct the focus is placed upon modes in which actors draw upon structural properties in the constitution of social relations* “ (Giddens, 1984:288). With strategic conduct is meant that we look into the role of the institutional actors, and do not take for granted that each proximate social institution operates in accordance to “universal laws” made explicit for that specific institution. The presence of the proximate social institution itself tells us little about the conduct upon which we can conclude about the input these have to the genuine characteristics of the business system. This is also the case for the industrial actor, and in that connection it is important to stress that the conduct is not just a presentation of profit-maximizing behavior.

As an example our awareness of the existence of a proximate social institution for education of unskilled workers and in-service training of skilled workers is not something from which we can draw our conclusion about the strategizing game in the business community, not even if the statistics show us that a lot of people attend these courses. In Denmark we have such an institution named the AMU, with 24 educational centers located across the country. In 1994 these AMU-centers had 40,4% unskilled workers and 21,2% skilled workers attending their courses, who all had their course-attendance formulated as a part of a formalized personal education plan (Langager, 1996). Now, if that was taken as our case, we could tell the story that the strategy of the firms was to make personal education plans for their individual employees, for their use of the AMU-institutions for in-service training to upgrade their unskilled employees to meet the technical requirements at hand in their job, and to a lesser degree upgrade further the skills of the skilled workers. But the existence of 24 AMU-centers and the distribution of workers on their courses tell us so. Well, it could be that the state apparatus had decided that unemployed workers, upon request from AMU to the unemployment benefit offices and employment exchange offices, should attend courses to obtain their right to draw unemployment benefit, and hence these courses were mainly attended by unemployed people, because the firms did not appreciate their workers’ attendance, and therefore the courses were filled by currently unemployed people. As an example this shows us how we, by taking a step from the immediate institutional analysis to

a focus on the strategic conduct, could then see that our explanation of the way in which actors draw upon the structural properties change as we shift our focus. Our understanding is motivated differently whether we focus on the workers, the firms, the AMU-institution itself, or the state apparatus. It tells us that each firm and each proximate social institution consist of a pool of actors who each participate in a strategic game, and it is this game we have to grasp to understand the nature of the industrial organization.

Summed up we can say that the strategic game takes place not only on the industrial arena, but also on the proximate social institutional arena, and it is constrained and guided by the background social institutions as reflected in the community, and the latter factors are the mediate factors between the first two arenas.

The institutionalization process of organizing principles follows the principle of recursiveness, which is to say that the principles of organization “...are not brought into nature by social actors but continually recreated by them via the very means whereby they express themselves as actors. In and through their activities agents reproduce the conditions that make these activities possible” (Giddens, 1984:2). The actors’ operations are simultaneously affected by and recreate social structures. If we link the conception of a business system to the brief debate on different perceptions of governance structures and the work with industrial policy as presented above, we cannot expect any macro-political initiatives to serve the industry as a whole, not even if we isolate just one branch of it, which is because the social, economic and political constitution differs across communities. What is needed is an actor’s perspective from which we can study the strategy process itself, from which we can get to a motivated understanding of how the industrial actors and proximate social institutional actors operate as strategizers in the context in which they are embedded. This statement sums up the recursiveness and the need for a focus on conduct: “Agents in any country may be opportunistic, try to shirk and even to be free-riding towards their principals, but what they can shirk about, and what is defined as shirking, differ. So does the nature of their opportunism because they are able to strategize with very different means and from very different situations” (Kristensen, 1996a:26). By other words we have to go and look for genuine business systems through which the key aspects, the governance structures so to say, of communities can be singled out. To do so we have to look for the governing principles for which we need a vocabulary - a point of reference to center the study around. I will look into that in a minute, but first we shall come to terms with the conduct, what I have previously called the operation.

## THE NOTION OF ACTION

Following the discussion of the collective organisation and the constitution of business communities, it is fruitful to dig into the notions of strategic behavior, strategic action, social action, and strategic social action - what I have hitherto broadly referred to as the operation of actors. It is so because this reflection has methodological implications for our way of analyzing the industrial organization in business communities. It allows us to move from the system analysis to the analysis of interaction. First of all action can be defined as “...all human behavior when and in so far as the acting individual attaches a subjective meaning to it” (Weber,

1922:88). It means that all human behavior, to be regarded as action, has to give meaning to the individual actor, the subject. If not it stays as behavior and is not regarded as action. In that light, the notion of strategic behavior is then based more on tacit knowledge (Polanyi, 1967) than is strategic action, and we may expect the actor to be able to express her subjective meaning attached to her own strategic behavior, thereby transforming it into a strategic action, upon which we as researchers can reflect and analyze. The outspoken subjective meaning is so to say our point of analysis. Thereby action can only be created by the actor herself, whereas what other human beings do, to the actor will be reflected upon as behavior. Social action can then be defined as “...*action based on the behavior of others*” (Schutz, 1967:15), because only the self can act, whereas others behave. Following that definition together with the notion of *behavior* and *action* we find, that just as the individual actor is able to create a meaning to her own behavior (thereby converting it into action) so will the action based on the behaviors of other, only become action, if the actor is aware of the behavior of others, and if the actor is able to interpret this behavior. If not the behavior will not have attached to it a subjective meaning, and it will therefore be random, unreflected and so forth, and we will not be able to look upon it as neither *social* nor *action*. That interpretation of action is supported by the sociological tradition of symbolic interactionism, where the *symbolic* aspect is the emphasis on the construction of meaning out of the behavior of others (McCall & Becker, 1990). The focus on *interaction* is important as it points out that this is a processual view, in which the relationships between actors play a crucial role, as the information on which you interpret the behavior of others, varies in regards to the social organization you as an actor is embedded in.

It means that the actor who is not able to interpret the behavior of others and act upon that interpretation will turn out as an asocial, unreflective and randomized behaving actor. Well, this is a thick caricature of the actor, I know, but it is important to stress the notion of social action, as it only gives a meaning when we talk about business communities, because the more distant the social organization is, the more difficult it is to construct a meaning out of the process of interaction. The precondition for the constitution of communities, as we discussed earlier, is the existence of a focus on values, and that goals are created in order to accommodate not only own interests, but a broader range of interests being of value to a larger social group. In order for the local business community to exist in the first place, and in order to be able to survive in that community the actor must be able to interpret the meaning of the behavior of other actors, so to say objectivate the subjective meaning of others. The actor who is not able to do so, will probably find herself being somewhat isolated, a somewhat lonely pale rider in the community having a hard time establishing and doing business. This is also referred to as the degree to which recipe “solutions” to “problems” are socially shared and transmitted over time (Hall, 1990), and if such institutionalized ways of carrying out social functions are not established, accommodations of interests are non-present, and a genuine business community therefore does not exist. Then we will find the pale rider syndrome to be more of a rule than an exception, but that of course has to do with the genuine characteristics of the business system, as pale riders syndromes are more likely to be taught than inherited, if we follow suit to the social-psychological arguments emphasizing

environment over inheritance. Finally we can also, as briefly mentioned earlier, find situations in which the actor is not able to attach a meaning to her behavior and still behave in accordance to the strategizing game, which is when the knowledge is so institutionalized and the element of tacitness is so high that the behavior cannot be made explicit by the actor herself.

### THE GENUINE BUSINESS SYSTEMS

The central element of the study I am doing is the illumination and understanding of the interactional patterns between the industrial actors and the proximate social institutional actors in the genuine business systems. This is carried out with a processual view with focus on the creation and destruction of industrial relations, rather than a presentation of the relational patterns in a systemic view. This is done with a focus on the actors' embeddedness, where key factors that give the business system its genuine aspects emerge from the background social institutions. Of course we find an impact from the proximate social institutions, such as regulative institutions being legally sanctioned (Scott, 1995), for example the economic constitution of the firm; the need to add VAT to the transactions; the need to fulfill environmental requirements and so on. But in so far as these regulative institutions are not ignored by law-breaking industrial actors, they are designed to have the same functional implications across communities, and need not to be taken into account.

That is not the case with the background social institutions. Here we find the historical aspects in the traditions for establishing and doing business (Bianchi & Bellini, 1990), which may very well affect the way in which industrial policy work dealing with entrepreneurial activities will succeed or fail. This is also pointed out in the notion of spectator communities (Kristensen, 1994) which in itself stresses the importance of the social integration, which is *"...involving reciprocity of practices (of autonomy and dependence) between actors or collectivities. System integration then means systemness on the level of face-to-face interaction"* (Giddens, 1984:28). Inherited in the community is a taken for grantedness, represented in the cognitive institutions (Scott, 1995), and to function as a manager/owner in the industry or a civil servant in a proximate social institution you have to take into account the customary rules of the strategizing game, which is enforced by your exposure to peer groups of colleagues, competitors, friends and foes.

Certain norms exist for strategic behavior, which may be habitual but at the same time exposed to (and maybe constrained by) the threat of external sanction (Moore, 1964), and you can well find examples of business relations being devastated due to actors not having followed suit to the norms for strategic behavior in the community (Nygaard, 1994, 1996b). If industrial policy work interfere with these norms, the effect of the policy programmes is limited, as there are not many managers/owners who will expose themselves to external sanctions from the industrial peer groups in order to acquire legitimacy from actors on the proximate social institutional arena. That the industrial policy work interferes with the industrial norms is very possible, as the civil servants and politicians themselves do not underlie the same norms in their professional life, and therefore they do not understand the borders for acceptable

strategic behavior on the industrial arena. On the subject of norms, in suggesting such lies the danger that it turns out as an intangible category in which you as the researcher can easily put all from your collection of data that does not fit your hypothesis, which is a reason why you have to be careful when labeling strategic behavior as following norms. The morally governed normative institutions (Scott, 1995) are very difficult to pick out, but a help might be to see the norms, the rules of conduct so to say, as the means to the values (Moore, 1964), which give you some scenarios to put forward and deal with in your qualitative analysis. In that way you can come to terms with the institutionalization process itself, which develops where values are more central than goals (Selznick, 1992).

Together that puts forward the notion of a game of reputational linking (Kristensen, 1996a, 1996b) which is a very concrete subject to stress in your research, as the actor can reflect upon the question as to whether the strategic behavior earns her a reputation in the local business community. The notion of reputation has been dealt with in various empirical contexts, by researchers striving for the construction of a theory for factors that help organizations earn a reputation. One study concludes that reputational status is “*a function of organizational performance, organizational structure, and network position*” (Shrum & Wuthnow, 1988:882), whereas yet another concludes that the variables contributing to reputation building are “*...(1) accounting signals or profitability and risk, (2) market valuation, (3) media visibility, (4) dividend yield, (5) size of firm, and (6) boundary spanning through foundations, charitable contributions, and advertising*” (Fombrun & Shanley, 1990:251). To put forward such studies is merely the same as drawing two different rabbits out of the magician’s top hat, but even if the empirical fields and applied methodology differ, and even if the studies have been done in a different context than the Danish case studies I am putting forward, both studies have important conclusions about the social aspects of reputation building. The common factor is that they stress the importance of the actor’s social network position in relation to her earning a reputation, and when dealing with task-oriented fields, which is a label you can give a pool of subcontracting firms, there is a tension to see the reputation of the firm or the actor being reflected in the contribution made to the system goals, that is the goals of the task-oriented field itself (Shrum & Wuthnow, 1988). It means that for the actor to earn a reputation, her behavior has to qualify as action, which on the other hand has to qualify as social action. Furthermore, the social aspect is stressed in the notion of reputation as it requires acknowledgment of others. If not we would talk of personal pride, and that is not something on which to base a subcontracting firm.

If we then return to the notion of *reputational linking* as a governing principle (Kristensen, 1996b) it is in this view seen as the goal of the strategizing game itself, in so far as actors are fighting for social space rather than economic space. It is so because the economic results in the end will stem from the social space earned, whereas the actor with no social space will be limited in earning herself an economic space. That is also expressed in terms of investment in product quality, because if “*...consumers rely on sellers’ reputations, a seller who chooses to enter the high quality segment of the market must initially invest in his reputation via the production of quality merchandise... he cannot command those prices associated with high quality items until his reputation is established... a snapshot of the*

*competitive equilibrium will reveal some firms earning a flow of profits that are in fact merely a competitive return on their investment in reputation”* (Shapiro, 1983:660). This is also the case on the industrial market, whereas if the firm does not rely on the subcontractors reputation the only way for that subcontractor to get contracts is if the quality is distinguishably superior or the price is remarkably lower than what is offered by competing subcontractors. And in the long run the subcontractors following the latter strategy will fail, or give themselves a hard time succeeding, because it is very difficult for them to raise the price of work that has been introduced at a lower price, if the quality has not been improved, and it still meets competing subcontractual work of superior quality. And if the quality of work has to be raised, it usually demands an increase of costs, which will make it difficult for the subcontractor to keep the low initial price.

These aspects are all important parts of the governance structure constraining and guiding the strategizing game in which the industrial actors take part when they establish a firm and enter the industry. I find it is necessary to focus on such factors if you have to move from an understanding to a motivated understanding of the industrial relations. Now let us look at the two communities in more detail - their history in brief; the key actors; the traditions and norms for doing business (here with a focus on the social action). Before that a short rave on methodology.

## TWO COMMUNITIES

In a methodological light, my focus on two communities does not imply a comparative study, where characteristics of the one community is seen vis-a-vis the other. In my view to make such a comparative study will be to move the focus from the particular to the homogeneous. The force of comparative studies is that they often generate an overview of the field. With a *démarche homogénéisante*, you often do quantitative studies to point out similarities and differences, but you seldom reach a motivated understanding of the industrial relations. For that you have to take a *démarche particularisante*, which often goes along with quantitative studies, where you have the opportunity to generate an insight into the field. In my case the emphasis on the community instead of on the geographically bounded municipality, country or other regional demarcations allows me to get away from the micro, meso, macro and cosmo categorization in a merely systemic view, which in itself is not fruitful when you work with notions as meaning and action. How can I as a researcher decide if a proximate social institution is a part of the constitution of the meaning on which one of the managers/owners in a subcontracting firm bases her strategic action? I can only do so by taking my empirical outset with a running tape recorder at the other side of the table at the industrial manager/owner’s office, in an attempt to get the world from real to reel, and move further into the field from there, taking a journey through the field based on the world view as presented by the respondent.

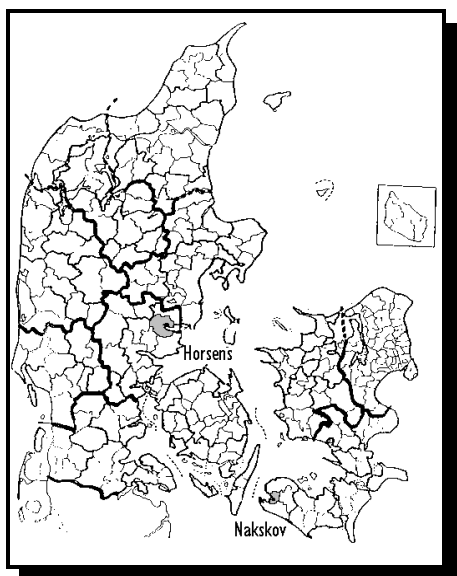
From my point of view there is no legitimacy in the choice of actors from the proximate social institutions on beforehand, disregarding the story of the industrial actors. I see the politicians and civil servants working with industrial policy primarily as agents for the



industrial principals (Jensen, 1983), and therefore they need to be present in the mind of the industrial actors, if their policy has to succeed. My outset is the pool of SMEs, and I am trying to communicate their logic on its own premises, which is then done through links to context.

### THE CASE OF NAKSKOV

If we look at the city of Nakskov (see map#1) in the county of Storstrøm (see map#2) in the southeastern part of Denmark, it is located in an area which due to geological matters (which I am not capable to enter into a detailed discussion of myself) has a strong agricultural tradition. During centuries a majority of the people in that area lived as (wage-paid) workers in the agricultural sector, as Denmark had an adscription that forced people as parishioners to serve the squires and landed proprietors in the parish where they were born. Of the production made on the farms, the lot that was not for consumption by the family itself, had to be delivered to the squires and land proprietors. The adscription was canceled in 1788, and due to the fertile soil in the southeast the farmers continued farming. In Denmark around 1850 nearly 50% of the total population worked in the agricultural sector (Bjørn, 1988). When

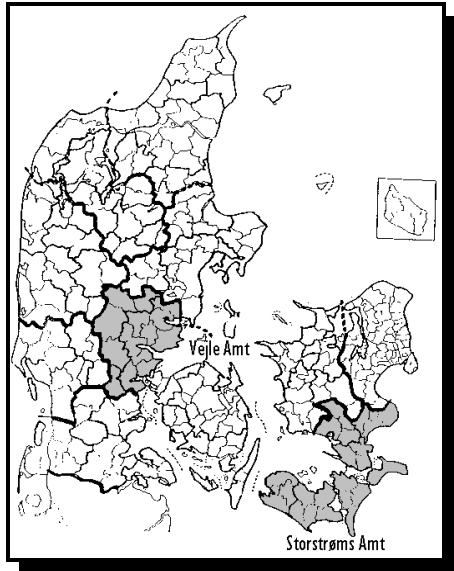


MAP#1

industrialization began, the major part of the industry established on the isle of Lolland (see map#3) was connected to the agricultural sector, where a sugar production factory, a cereal factory and agricultural machinery shops were among the most dominant. In 1916 a ship yard was built at the harbor of the city of Nakskov itself and together with the existing factories it became the direct provider of jobs for wage-workers as well as the provider of contractual work to the existing metalworking firms. Out of the people employed as metalworkers in the 9 municipalities on the island of Lolland, where the city of Nakskov is located at the westernmost edge, a total of 52% of the employed people worked in that municipality alone in 1984 (Storstrøms Amt, 1987). The reason the industry achieved such a dominant role may be due to the fact that the modernization of the agricultural production demanded less people, and also due to the fact that the young people looked for an alternative to agricultural work, which

could be found in the newly founded industrial sector. The movement from the agricultural sector took place to such a degree that throughout the first half of this century Polish workers were brought to the island in order to fill the vacant jobs in the agricultural sector left open when the new generation of wage-earners went from agriculture into industry.

As reported elsewhere (Nygaard, 1996a) especially the ship yard functioned as an important customer for the small firms throughout decades, which was seen from the fact that it employed 1.287 people in its final year of existence, out of a total of 1.520 people employed in the metalworking industry in total in the municipality of Nakskov (Storstrøms Amt, 1990). In 1980 the indirect employment at subcontracting firms contracting with the ship yard had been measured to more than 2.000 (Smith, 1995), so it is easy to imagine the impact of the



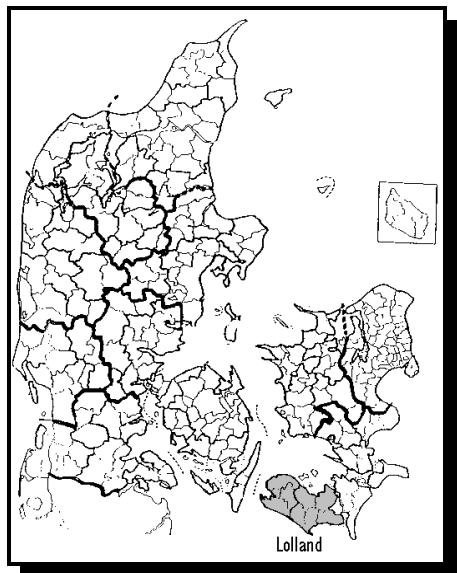
MAP#2

closure on the surrounding industry as well as on the society in general. Already in the early years of the existence of Nakskov ship yard there had been an economic partnership with other large firms on the island of Lolland, as in 1918 a ship yard in Copenhagen named Københavns Flydedok together with the ship yard in Nakskov, bought a machine factory and an iron foundry on Lolland (Johansen, 1988). That allowed the ship yards a supply of iron parts and motors for their ships, but at the same time it tied the small subcontractors on the entire island of Lolland closer to the ship yard. The closure hurt a large part of the industry in the region of the ship yard and a recession swept through not only the municipality of Nakskov but the entire county. The importance of having such a big provider of jobs and contractual work in the community, when talking about employment statistics cannot be neglected, but on the other hand it is clear that it turned out to be an adventure played on borrowed time. In the history of the

ship yard especially, the metalworking firms needed not to look outside the community to get subcontracting work, because as long as orders for new ships came in at the ship yard, the local industry could produce materials for the ships or simply out-source workers to take part in the construction of ships at the grounds of the ship yard itself. With a tradition for the subcontractors in the area to work as buffer suppliers for the ship yard as orders on the construction of large ships had rolled in continuously, their need for industrial relations elsewhere had been limited, and it seemed to be only the more adventurous of the small firms that had looked for orders elsewhere. After all, most of the subcontractors had no product to sell, and hence lived off their specific knowledge of working up. They did not take unnecessary trouble establishing business relations while the big local firms provided work.

It was clear to everyone that the industrial relations themselves were vulnerable to fluctuation at the ship yard, but supported by their union the metalworkers being laid off during the periods with less orders were more or less able to retain their current standards of living, if not for the psychological stress of being temporarily unemployed. No one imagined the day when macro-political decisions would demand that the economic injections into the ship building industry would be cut down, causing the ship yard to close, and leaving the community with not only a large pool of unemployed people, but also a large pool of

subcontracting firms with somewhat empty orders book. It happened in 1986, when the ship yard finally closed. After years of heavy debate concerning its activities the Danish government stopped the economic support to the ship yard. It had been functioning on indirect subsidies from the Danish state for years while a serious debate in the EEC led to the



MAP#3

issuing of directives that threatened such subsidies to the ship building industry. The vulnerable position of the metalworking industry was then laid open, and it did not help that the cereal factory closed down leaving 250 more persons unemployed the following year and the sugar-production factory cut down on its activities and moved some of the production to the nearby island of Falster (Smith, 1995). The historical development with the tradition for being employed as a wage-worker in the agricultural sector or in the large industrial firms, saw the county with a relatively low tradition for entrepreneurship. Over time it had resulted in the development of a somewhat static and not very flexible industry structure, flexibility being elsewhere described as the main criteria for the success of the Danish industry (Kristensen, 1992). Furthermore, the subcontracting firms that were established had after all, been able to count on doing business with these big partners, and only the most adventurous had established strong relations

with partners outside the community. Or maybe they were the pale riders not able to get enough orders from within the community to support their business, and hence having to establish “foreign” relations?

To understand the strategic game of the industrial actors in the community of Nakskov you have to look at the embeddedness in ongoing social relations stemming from the adscription that enforced people as parishioners to work for the estate owners. *“By starting a new firm, an entrepreneur simply confuses his/her position to the lower classes who will passively observe as spectators his/her actions, expecting such an adventure to fail... On the other hand the higher circles do not recognize such a simple self-employed person as a true member of their circles. To them he/she still belongs to the helpless lower classes, so instead of supporting the adventure by helping to raise capital and to be tied in with the connections which they themselves command, they leave him or her alone and watch his/her struggle as a group of passive spectators”* (Kristensen, 1994:188). That is itself a link back to the previous embeddedness-discussion on traditions for establishing new businesses, reputational linking as a governance structure in a fight for social space, and the peer group’s influence on social action. Research supports the hypothesis that entrepreneurs seldom move to another community in order to establish a new business, and nearly 70% of the entrepreneurs in a Danish survey reported their permanent address as the main reason why they chose to locate their firm in the city in question (Kjeldsen & Vestergaard, 1991). Upon establishing a new

business the entrepreneur is then on her way to break out of the workers' community, and into the community of managers/owners, and at the same time she has to recruit workers from within her old community, from which she is now trying to break out. It may sound strange to foreign people (and even to Danes living outside this region) but I assure you, being born and raised in that particular area of Denmark, that the mentality of the wage-worker is so dominant that people trying to follow a route as employers and to a lesser degree self-employees are not honored but rather looked upon as traitors to the majority of society. A personal experience is that I seldom told people that my grandparents owned a hotel, because employers as they were, that would have been seen as a way of sticking my nose in the air. But I was able to say that my mother had established her own hairdressing salon, because she was only employing herself in order to support her own family, she was not imposing authority upon workers. Needless to say the level of entrepreneurship is low in this region, and as an example of that, no people in the entire county of Storstrøm established a so called "high-tech firm" during a 5-year period from 1985-1989 (DTI, 1992), even if the possibility was there to be partly financed from an industrial policy programme for high-tech entrepreneurs (Jensen & Nygaard, 1992), and after all we are talking about a county with a labor force population of nearly 140.000 in 1989 (Danmarks Statistik, 1991). No statistical surveys have been done on intrapreneurship, but from my own qualitative research I have found that the firms do not support their workers in setting up new businesses. Even if proximate social institutions working with regional development urge firms to out source production to workers who are willing to set up their own business this model is seldom used (Jensen & Nygaard, 1992). To comment on the agricultural tradition, in 1991 10% of the working force on the island of Lolland still worked in the agricultural sector, while the average for Denmark was 5,5% (Europa-Kommissionen, 1994).

Following the closure of the ship yard and the decline in employment, the politicians set out on a long route to bootstrap the local industry. From 1987 till 1991 three industrial policy programmes were created, and out of this work came to life two proximate social institutions, an agricultural center [Grønt Center] and an industrial technology center [SydTek]. Their role was to generate new jobs for the recently unemployed people, which was sought done by a bootstrapping of the agricultural production and industry by raising the technological standards and urging the creation of firm networks. An important fact is that this work was done from the county council, which had all the municipalities as decentral agencies, and the work was then coordinated through local agents in the municipalities. Although the industrial bootstrapping was backed by subsidies from the Danish state and the EEC, which itself required specific goals of the industry policy programmes, the county council succeeded in a reformulation of these goals on the local level, when it became clear what parts of their industrial policy programmes did not apply to the need of the industrial actors. I shall here focus on the SydTek-institution applying to the metalworking industry. It went through a phase, where the focus on technology was toned down and the focus on networking activities was toned up. It meant that when a macro-political networking programme was initiated three years after the closure of the ship yard, the SydTek-institution in the city of Nakskov had just been through a reformulation of their activities and the head of SydTek was chosen to be

one of 40 network brokers educated by the state. By the time the government introduced the programme to the industry it showed immediate impact in the region of Lolland. The networking programme became a formalized occasion for the firms to establish types of interfirm relationships that had not been present when they worked as subcontractors for the big firms and the ship yard in particular. SydTek became a forum for the discussion of possible business strategies, and during the three-year period of the functioning of the networking programme, more than 10 networks were initiated (Nygaard, 1993) by the network broker. Today the proximate social institution is still running and the network broker is still head of the institution. Although that specific political programme was closed down in 1992, the county council, the municipalities and SydTek itself have reformulated the goals of the institution to suit the following industrial policy programmes. The interplay between the county council and the civil servants and politicians in the municipalities together with actors from the proximate social institutional arena and the industrial and agricultural arena has made it possible to forge industrial policy programmes being directed towards specific key problems in specific parts of the county at specific times. The time and space-elements have been taken into account, and one industrial policy has not been applied to the entire county.

In that way the historic development of the area has *constrained* entrepreneurship and intrapreneurship behavior, which I will claim stems from the tradition of being employed as a wage-worker in the agricultural sector and later in industry. At the same time it has *guided* the constitution of an industrial structure based on large firms employing wage-paid workers. As we saw the small firms in this area mainly lived off contractual work with the big partners, and it was not until they were closed that the subcontractors were forced to take alternative strategic action, simply in a need for survival. The wage-tradition, and the move away from the agricultural sector, which has to a large degree been due to the technological development within this sector resulting in a more effective production and a need for less employees, and a high unemployment rate in the region, has *guided* the location of production outlets of “foreign” industrial firms, which has taken economic advantage of the high level of unemployment and of the high level of unskilled workers. Together that has *constrained* the development of an entrepreneurship mentality, and the young people who seek an alternative to unemployment or will apply for a higher education have to move to either Copenhagen in the northeast or to Funen or Jutland in the west. Not until 1989 was it possible to apply for a bachelor-degree in the county, and the first brood of 60 Bsc’s in economics hatched in 1992. *Guiding* the industrial development on the other hand has been the decentralization of cosmo- and macro-political programmes through the reformulation processes between the county council and the municipalities. It has shown that the industry can be bootstrapped, but that such work takes an awful lot of years and a lot of redirection in accordance to the development on the industrial arena. But it has also shown that it is possible to alter the patterns of strategic action of the industrial actors, as there has been a shift from a sort of dependent subcontractor status to firms working in formalized networks constituted of multiple subcontracting firms. Thereby they have been able to take in work that they could not do previously. These interfirm relations, however, have been built from existing firms, and has largely been motivated by economic matters, nearly as a sort of *cooperate or die slowly*, but

today 10 years after the closure of the ship yard the unemployment rate is still nearly 4% above the level of the hey-days just before the ship yard closed down, and in 1994 the total number of firms in the 9 municipalities on the island of Lolland was 3.129 (Europa-Kommissionen, 1994). But the important aspect is that the focus has been more on the mentality of the subcontractors than it has been on the immediate generation of new jobs, and over time it has been proven that alternative patterns of strategic action can be established. Left is just the question, when the mentality of the wage-workers will change to a degree where the spectator community will *guide* rather than *constrain* new firm creations. But that has yet to be looked into by researchers.

### THE CASE OF HORSENS

The city of Horsens (see map#1) is located in the county of Vejle in the midwest of Denmark (see map#2). For geological reasons the soil is not so fertile in that part of Denmark, which has led to a tradition for handcraft and industry, as centuries back the means for fertilizing the soil were not so varied as they are today. The city of Horsens itself has a long tradition as a commercial town and in the early part of this century it had one of the biggest merchant navies in that part of the country. In the west people were not much downtrodden by the aforementioned adscription as it was not sanctioned there to the same degree as it was in the east. Villeinage and copyhold farms were almost non-present in this region of Denmark in the first half of the 19th century, while more than 60% of the farmers on the eastern isles of Denmark were copyholders (Bjørn, 1988). One of the dominant factors in the creation of a craft movement was the establishment of the Danish railway system in the last century, which allowed an industrial diversity and flexibility to grow in between the railway towns (Kristensen, 1992). Throughout our century the industrial movement in the area of Horsens continued with a diversity, which resulted in a representation of multiple branches with a high concentration of small specialized firms subcontracting in an informal flexible network. By peer-groups the craftsman alternative to farming was seen much as *the-way-to-go*, and in the line of the debate of spectator communities the establishment of firms was seen upon with admiration. *“To become a yeoman, whether that be in farming, as a self-employed craftsman, or by setting up a small industrial firm, is looked upon if not with admiration then as ‘being on the way’ to become socially recognized as a ‘person’. For this reason, rather than looking at someone who embarks on some form of entrepreneurial adventure or another with suspicion, the spectating community celebrates the entrepreneurial adventure. Though such a person may be outright competitor to other SMEs in the local community, even these are forced by the spectator community to recognize him/her as an equal. Many spectators are convinced that they know from own experience what troubles and pleasures he/she will go through, and not only will the entrepreneurs be met with sympathy, so will also the family, whom they believe from own experience, will have to pay high costs for such praiseworthy activities”* (Kristensen, 1994:188). That philosophy has helped the creation of a large variety of small firms in various branches, throughout the period of industrialization.

In 1991 the municipality of Horsens alone, counted 3.357 firms (Horsens Erhvervsråd, 1992), and none of these could be said to have a dominant effect on the regional economy. Although several of these were large firms they existed within and across different trades. With such a high concentration of firms and with none being the sole dominant, the industrial relations in Horsens had become rather diversified over the years, as most of the small firms are today interwoven in informal production networks with a variety of larger firms. To survive in this part of the industry the owner of the small firm has built up a reputation based on the production skills and production capabilities of the firm, and it is this reputation that mainly serves as a basis for the daily functioning of the subcontracting firm in the industry. Due to the large concentration of firms in this municipality alone (just compare it to the island of Lolland) no major firm can supply the subcontracting firms with contractual work, hence the marketplace is a very active forum for contracting. In 1992 the largest firm in the metalworking industry in the municipality of Horsens had just 528 employees (Horsens Erhvervsråd, 1992). For the large firms it is always possible to find a subcontractor who is to them more flexible and cheaper than their own hierarchical production is, which is one of the reasons why a lot of work is traded through the marketplace, and why even the firms who are large in a Danish context remain small when compared to the firm-size in an international context. To internalize production with a marketplace like this being present, is to cut off one's own flexibility and diversity and employ rigidity and high costs. The unionization in the metalworking industry, in this case the skilled workers' membership of one union [Dansk Metal] and the unskilled workers' membership of another union [SID], can be said to benefit the small firms, as they are capable of being more flexible than the large firms where the workers' rights are more frequently looked upon and negotiated in connection with the daily production. That is not to say that the small firms take advantage of their workers and neglect their membership of a union, but my studies have shown that the smaller the firm the more it works like in the simple structure or the operative adhocracy (Mintzberg, 1993) where the sense of solidarity is placed above the rights of the workers (Nygaard, 1996b). If a firm has 6 employees the two unskilled workers do not strike if one of the three skilled colleagues takes over their part of the production. They may complain to the owner, but that itself seems to be a drastic move to make. In the large firm with say 100 employees the production is often formalized with a pull towards the machine bureaucracy (Mintzberg, 1993) and there the category of workers have their rights represented by the shop steward, who will often demand the social space of the workers to be protected (Kristensen, 1991).

If we look at the small subcontracting firms, most of them have no product to sell, and therefore they survive in business by the use of their specific knowledge of working up, and by doing so they gradually earn a reputation as a qualified subcontractor and partner, which serves to provide them with a role in a social network of friends-of-friends (Boissevain, 1974) on which they are able to further build their business relations (Nygaard, 1994). From my recent research in the metalworking industry in Horsens (Nygaard, 1996b) I found that it is not unusual for a small subcontractor to be located in a community based network with a regular pool of partners and customers of more than 100 different firms. Although most of the subcontracting firms also have business relations outside the local community, it is often so

that they prefer their local relations, which allow them to remain visible and flexible to their business partners, hence constantly adding to their reputation.

In this region where a lot of firms are present and the industry is highly flexible, the tradition has been to work with industrial policy in the municipalities. No common problem related to the industry in the county has been pointed out, like was seen in the county of Storstrøm when the large firms closed or cut down within a few years' span. Therefore the county council of Vejle has not played a dominant role in the creation of an industrial policy directed at key problems across the various municipalities of the county. It has resulted in the creation of local industrial policy programmes in the municipalities which have mainly consisted of parts adapted from macro-political programmes, and so the proximate social institutions of Horsens have to a large degree been administering national standard programmes instead of reformulating these to the needs present on the local industrial arena. As a consequence of the national technological development programme [TUP] running from 1984-1989, a proximate social institution was born in Horsens, the Technology Council [Horsens Teknologiråd], which served as an advisory institution in connection to the implementation of new technology in the industry. The Technology Council was closed down along with the TUP, which may have been due to the fact that there was no longer any programme to administer. If we remember the case of Nakskov, the proximate social institution named SydTek was created in connection to the TUP, but when it became obvious to the county council of Storstrøm that the goals of SydTek did not suit the industrial needs and that the subsidiaries from the TUP were going to end, they mobilized representatives from various municipalities in the county, reformulated the goals of SydTek and put them in connection with a new industrial policy programme with another focus, firm networking.

When the Danish state introduced its networking programme, which functioned from 1989 till 1992, it was implemented as a part of the industrial policy programme in Horsens, and it was administered by the Trade Council [Horsens Erhvervsråd], by the former head of the Technology Council, who was one of the before mentioned network brokers educated by the state. In this part of the industry being a network broker turned out to be a rough life, as the high population of firms had led to a high degree of interconnectedness and to the creation of informal production networks based on personal relations. Therefore the industrial actors did not take the idea of founding formal production- or sale networks in Horsens to heart, as their embeddedness in informal networks built on reputational linking watched by peer-groups (Kristensen, 1996b) did prevent formalized contracting. For them a tight formalized network with two or more partners would be a limitation of their possibilities to function as a subcontractor, because what they live from is their capability of getting orders from multiple sources. Seen from that point of view it may come as no surprise that the network broker did not succeed in creating one single network during the three years of the programme.

What *guided* the industrial development and the entrepreneurial spirit in this part of the country, may have been the limited possibilities for being competitive in agricultural production, and the fact that adscription, copyholding and villeinage were not very strongly enforced and present. The natural need for finding alternatives to agricultural production *guided* the creation of a large pool of craft shops, which were helped into being competitive and



flexible by the distribution of the railway system. In a way it seems like the metalworking industry in this area is today a self-supportive arena where the industrial development is created from within the system itself. However, this does not mean that there are no possibilities for improving the industrial development and generate or bootstrap an interplay between industry and the proximate social institutions, may that be educational or financial institutions. When talking with the industrial actors in the municipality of Horsens they often refer to their difficulties in getting the right on-the-job training for their workers, and in getting their new projects financed, so there is something for the Trade Council to look into. *Constraining* the work with industrial policy though, has been the adaption of national industrial policy programmes to serve the local industry. New political actors and proximate social institutional actors have been introduced and reintroduced over the time, and this has not helped create a close relationship between the actors on the industrial arena and the actors on the proximate social institutional arena. The various shifts in focus of the industrial policy work have caused the industrial actors to see the proximate social institutions as more interested in their own existence than the existence of the local firms. In that way the double-agent-status of the civil servants working with industrial policy, where they have the industrial actors as their principals on one hand and the politicians and proximate social institutions as their principals on the other hand, has *constrained* the interplay between these arenas (Nygaard, 1994, 1996b). Dealing with such gaps has yet to be examined.

### INDUSTRIAL POLICY WORK

We have learned from these case stories that the social patterns behind strategic behavior is different across communities. If we take a look at the possibilities for doing industrial policy work the most important lesson to learn seems to be that each business system is inhabited by actors who have their personal identity at stake. An identity that is built up and torn down in accordance with the way in which they play the strategic game vis-a-vis other industrial actors. A strategic game that cannot be chosen out of the blue, but is *guided* and *constrained* by the social, political and economic development of the community through time and space, which can be referred to as the fact that history matters. It means that the policy makers and the civil servants have to get to a motivated understanding of the values of the business community in question, and take these into account when they formulate, implement and evaluate industrial policy programmes. Very often the industrial policy makers have their own goals to pursue, because they themselves have an identity at stake in their community, and it means that the industrial policy programmes focus on growth in employment, export, number of new firms established, the level of technology - the examples are endless - because such goals are easy to argue in favor of and easy to evaluate in connection with politics. It means that the civil servants and policy makers in their urge to legitimate their own careers and create their own social space, turn out to be agents for the proximate social institutions, while they, at the same time, have to be agents for the industrial actors. That may cause them an unsuitable role as double-agents.

In saying so, I have to remark though, that I do not think that the work with industrial policy is a one-way street, where the policy makers have to work solely on the premises of the industrial actors. When focusing on the business community it may well be that some patterns of strategic action are found, which are not at all appropriate in connection with the growth of the community itself, and in such cases it is required that the industrial policy guides the growth of the community. There you have to bear in mind that the essential is not how many new firms you can see established in a given period of time, but rather whether you can make the industrial actors understand your mission, get them to see the unfruitfulness of their behavior, and bring them to act in accordance with your directions. The policy is then to understand that things take time and that e.g. SME programmes have no effect if they do not seek to alter the constraining relations and constraining behavioral patterns in the industry. Solutions to such problems may in themselves be found not only in the strategizing game in industry, but also in the strategy of the proximate social institutions. Therefore it is important that these actors build up a relationship based on mutual understanding, where the goals they aspire to are formulated in accordance with the local business community, including all business system components as presented earlier. This work may well be coordinated from within existing local integrating intermediary organizations (Steinthorsson, 1995) such as the local Trade Council. The only prerequisite for success seems to be that the actors work together in a long perspective and that they put common values over individual goals, or vice-versa put common goals over individual values in so far as these are agreed upon moving the business system in a wrong direction, hence causing a unfruitful industrial development.

## CONCLUSION

It has long been a key question to researchers how firms come to be established, and on a continuum, theories on this subject have ranged from dealing with purely economic explanations to pure social explanations, what is also referred to as theories being under-socialized or over-socialized (Granovetter, 1992). Here the under-socialized theories *“...disallow by hypothesis any impact of social structure and social relations on production, distribution, or consumption. In competitive markets, no producer or consumer noticeable influences aggregate supply or demand or, therefore, prices or other terms of trade”* (Granovetter, 1992:55). To take such a view allows the researcher to neglect the ongoing social relations, because there is a belief that the market is self-regulating and that all the actor has to do to sustain his/her competitive advantage is to optimize in regards to the price mechanism. The focus of the study is then solely on the organizational efficiency that is *“an internal standard of performance...measured by the ratio of resources utilized to output produced”* (Pfeffer & Salancik, 1978:11), and you could then easily ask the question: *why is there competition at all?* On the other hand there are the over-socialized theories where the actors are seen as *“...overwhelmingly sensitive to the opinions of others and hence obedient to the dictates of consensually developed systems of norms and values, internalized through socialization, so that obedience is not perceived as a burden”* (Granovetter, 1992:54). In this view the actor is so dependent on others that to obtain legitimacy is the primary goal of strategic behavior, and

the focus of the study is then on the effectiveness only that is “...an external standard of how well an organization is meeting the demands of the various groups and organizations that are concerned with its activities” (Pfeffer & Salancik, 1978:11). In that connection you could also easily ask the question: *why is there competition at all?*

My study has shown that the strategic action of actors is different across communities. Their strategic action is guided and constrained by the threat of external sanctions from peer groups - industrial as well as proximate social institutional. The constitution of firms and proximate social institutions in each community follows historical preconditions, which are themselves a result of the development of the background social institutions, what can be referred to as the institutionalization processes. That brings about the need for a focus on the motivation of their strategic action as told by the actors themselves. It is so because the actors fight for social space, upon which they build their economic space. Their strategic action requires acknowledgment of others in the community, which itself is a focus on the social aspects.

In my work on the constitution of local genuine business systems, I therefore stress the importance of a qualitative micro sociological outset when dealing with industrial studies, which means that the locus of the research is the nature of industrial relations in which is included also the interplay between firms and proximate social institutions. To move from a systemic perspective, where key actors and institutionalized constraints are presented without any further reflection, the social action is seen as the key issue, and it is important to stress that this action is “*embedded in concrete, ongoing systems of social relations*” (Granovetter 1992:58). Even if we find what looks like the same type of firms and proximate social institutions in various communities, we had better not expect them to react with uniformity to industrial policy activities.

### POTENTIAL POINTS OF IMPACT

In connection to the work with industrial policy; in connection to our general understanding of the industrial development; in connection to our teaching on strategic management; the understanding of the social patterns behind strategic behavior, become crucial elements. We cannot expect to understand the governance structures of the small business by simply looking at economic explanatory factors and by referring to the industry structure itself. There is no value in such phone-book research. We have to look at the context in which the industry is embedded, and the most obvious point of departure is here the local community level. Research on business systems and industrial districts has shown that there is no one best way of doing business, just as there is no best way of doing industrial policy work. To understand how best to bootstrap the industrial development it is necessary to understand the social, political and economic setting in which the proximate social institutions serving the industry has to function. This article has pointed out methodological- and theoretical aspects in doing this kind of research by referring to two case studies, and it has discussed some of the aspects of work with industrial policy in local contexts.

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# **AN EXPLORATION OF THE RELATIONSHIP BETWEEN MALE AND FEMALE PERCEPTIONS OF OPPORTUNITY FOR OCCUPATIONAL GOAL ATTAINMENT AND PROPENSITY FOR ENTREPRENEURSHIP**

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## **ABSTRACT**

*Scant attention, has focused on how the current turbulent business environment is being perceived by male and female business students as they acquire what they believe to be essential knowledge, skills, and abilities needed to begin both the career selection process as well as their careers. This investigation examines whether males and females have different perceptions about the current business environment, opportunities for occupational attainment, career decision making self-efficacy, and entrepreneurial propensity. A second aim of the study is to investigate how to best predict entrepreneurial propensity. The research questions guiding the study include: (1) What is the relationship between biological sex and corporate social performance?; (2) What is the relationship between biological sex and perceptions of opportunities for occupational attainment?; (3) What is the relationship between biological sex and career decision making self-efficacy?; (4) What is the relationship between biological sex and entrepreneurial propensity?; (5) How does entrepreneurial propensity relate to perceptions of opportunities for occupational attainment, career decision making self-efficacy, corporate social performance, biological sex, and parents?*

## **INTRODUCTION**

Historically, successful careers in organizations followed a well defined and predictable pattern. Typically an individual begins working in a chosen area with intentions of gradually acquiring more responsibility and authority through upward and lateral promotions. In contemporary organizations however, a single well defined and predictable pattern is almost nonexistent. It is becoming more common place for an individual to encounter several moves within a particular organization. It is just as likely that an individual will work for more than one organization in his or her career span. The shift in career mobility is due in part to the current business environment. This activity suggests that the business environment may influence an individual's career goals.



## CONTEMPORARY WORK ENVIRONMENT

The corporate environment of today represents a drastic change from the traditional work world. The workplace of today is increasingly being shaped by efforts to make organizations lean and competitive. This objective has advanced a tremendous number of mergers, acquisitions, and buyouts. Many firms are reorganizing in attempts to respond more quickly to the market. Philosophies such as reengineering, downsizing, and right-sizing are being practiced in attempts to address and often improve market place position.

Studies have focused on the processes and outcomes associated with the restructuring of organizations. Many of these investigations have focused on total quality management, empowerment, and the use of work teams. While various organizations are adjusting their workforce by using one or a combination of the aforementioned methods, there has been a variety of outcomes. Byrne (1993) highlights the impact on the current environment; (1) employment growth within the Fortune 500 organizations has remained flat or has declined throughout the 1980's; (2) layoffs and terminations have been the fate of an increasing number of workers; (3) the bulk of new jobs are being created by small or medium sized firms. Fierman (1994) discusses the contemporary work environment and reports that there has also been an increase in the number of temporary workers in organizations. As a result of this shift in the nature and activity of business organizations, individuals are undertaking both involuntary as well as voluntary changes in career selection.

While firms are undertaking many restructuring activities, public sentiment about this corporate behavior is not flattering. Reports indicate that the once held belief that what is good for corporations is good for America, is growing out of fashion with most Americans. Current perceptions indicate that this business edict, which facilitated economic success in this country, is no longer feasible (Heylin, 1996). Corporate executives who are focused on maximizing stockholder wealth by downsizing personnel, consolidating operations, and relocating operations overseas are not seen as conducting business in a responsible way and as a result, these individuals are not being held in high regard. Fawcett (1994) reports on DDB Needham Worldwide's 1993 Lifestyle Study which highlights growing skepticism and frustration between Americans and business organizations. In a survey of 4,000 U.S. adult heads of households, the data reveal that 75% of the respondents believe that most big business organizations are out for themselves. The findings of the study also reveal that approximately 85% of the respondents believe that it is hard to get a good job which is a considerable increase from 65% in 1988.

The reduction in public confidence in organizations also affects the organization's reputation. An organization's reputation is generally developed by way of the communication of the firm's ethics, values, and mission. This process occurs both internally, by targeting employees, and externally by focusing on stakeholders and other external entities with which the organization interacts.

Corporate reputation is roughly composed of three elements: quality, community involvement, and employment practices. As evidenced above, there is increased interest in corporate reputation and the public at large seems to be evaluating corporations negatively.

As reported in Fearnley (1993) Smythe Dorward Lambert conducted research on corporate reputations in 1992. The results of the investigation indicate that 68% of consumers believe companies should be involved in the community and 63% indicate that they would buy from companies that demonstrate a positive environmental practices track record. The results of the study also suggest that corporate reputation influences the consumer's view of what it is like to work for a company. Findings indicate that 69% of consumers are concerned about a firm's employment practices and they indicate that they prefer firms that they believe treat employees well.

The Walker Research Group conducted a 1994 study of consumer attitudes and corporate social action (Gildea, 1994). The results suggest that consumers base their buying decisions on the following: a firm's business practices, how it treats employees, whether it invests in the community, if it cares for the environment, and whether it has a record of stability. Another finding of this survey suggests that there is a correlation between a firm's reputation for social responsibility and employee satisfaction which suggests that this is an important item in regards to recruiting and retaining employees. Employee treatment and business practices were also found to be salient in determining whether a particular company would be a good place to work.

While many organizations are restructuring, and as public confidence in organizations is eroding, there has been an increase in the number of entrepreneurs in the United States. Approximately one million people a year are involved in new firm startups. Many of these businesses are being created as a result of the increase in certain growth industries. These industries primarily consist of technology, financial services, information services, and personal services. Entrepreneurial activity has allowed these areas to flourish over the past thirty years. The increase in the number of new ventures is also due in part to the number of women and ethnic minorities who are embarking on entrepreneurship.

Coupling the shift in the traditional nature of the workplace, which has fostered a change in the notions held about careers, with the increased public skepticism toward organizations, and given the growth in entrepreneurship, a logical question to investigate is, do male and female business students hold traditional expectations about their career paths?

### PERCEIVED OPPORTUNITY FOR OCCUPATIONAL ATTAINMENT

Notions of structural opportunity and individual beliefs about the opportunity structure are explicated in stratification theory (Barber, 1957; Blau & Duncan, 1967). Researchers have recognized the salience of perceived barriers to occupational aspirations and attainment. Kerckhoff (1976) suggests that perceptions of the opportunity structure are critical components involving the formation and maintenance of achievement attitudes about future attainments. Osipow, Clarke and Azy (1976) identify a factor in their factor analysis of vocational indecision which highlights the perception of external barriers to preferred occupational choices.

Although perceived opportunity of occupational attainment seems to be a solid construct that may provide additional insight into one's career selection processes, few

empirical measures of this construct exist. One of the more comprehensive studies is, however, offered by Brinkerhoff and Kunz (1972) and this investigation focuses on scaling the perceived barriers to occupational attainment.

While the number of investigations examining perceived opportunity for occupational attainment is sparse, some studies examine occupational attainment in a broader framework. In his study of the British labor market, Lampard (1995) examines the effects of parents' occupational classes on their child's occupational attainment. The findings indicate that both parents' occupational class has independent effects on the child attaining a service class occupation regardless of the biological sex of the child. The data also reveal that the mothers' occupation had an even greater impact on the occupational attainment of female children. In a study examining the impact of employment breaks on women's occupational attainment, Felmlee (1995) asserts that a break in employment has adverse effects on women's occupational attainment.

Betz and Fitzgerald (1987) emphasize that career choices and behavior are based, in part, on expectations of success in a certain area. As such, perceptions of occupational success also yield insight into career expectations. Northcutt (1991) suggests that the central element in defining the career success of women is achieving one's personal goals. In explaining biological sex differences in perceptions of success Dann (1995) suggests that women may operationalize success intrinsically versus using a male normative approach that tends to focus on salary, position, and status. Researchers (Dann, 1995; Betz & Fitzgerald, 1987) also suggest that career women may have lower expectations for career success since they tend to not strive for the most senior positions as compared to men.

While these studies provide insight into perceptions of occupational success, there appears to be a lack of consistent findings with respect to the relationship between male and female perceptions of occupational success. Many of the reported studies also examine the experiences of men and women who are involved in their careers and currently in the labor force as opposed to those who are embarking on their careers.

## CAREER SELECTION

The career selection literature suggests that more knowledge is needed in understanding the process of career selection particularly during the post secondary educational years. In addition to acquiring general information about the career selection process, additional investigations need to examine whether males and females use similar approaches. Studies focusing on differences in male and female career choices have focused on the early social learning experiences of the career decision maker. Researchers, e.g. Marini (1978) and Brooks (1988) have concluded that women enter traditionally male-dominated occupations less frequently than males as a result of their early experiences.

Upon examination of entrepreneurial career preferences, investigations have yielded similar results regarding men and women. In an examination of individuals who decided not to explore an entrepreneurial career, Ronstadt (1983) revealed that family considerations, time commitments, and lack of role models were important factors. In a study examining

individuals who preferred an entrepreneurial career Scott and Twomey (1988) found that these individuals had been influenced positively by their environment in terms of perceiving that they had the ability to work long hours, were innovative, and had special skills. These studies provide additional insight about career selection and entrepreneurship but they do not examine the relationship of these two constructs during a period in which there is turbulence in the business environment.

### CAREER DECISION MAKING SELF-EFFICACY

Harren (1979) purports that decision making models are conceptual frameworks for understanding how decision makers process information and arrive at conclusions. When these models are applied to vocational behavior, they are regarded as models of career decision making. A decision making model describes a psychological process whereby an individual organizes information, deliberates among alternatives and makes a commitment to a course of action. Taylor and Betz (1983) have developed the Career Decision Making Self-Efficacy scale (CDMSE) which measures self-efficacy beliefs about career decision making, tasks, and behaviors, an extension of Bandura's (1977) concept of self-efficacy.

Investigations exploring the nature of career decision making self-efficacy have yielded a variety of results. Greenhaus, Hawkins, and Brenner (1983) found that occupational and self-exploration, and previous employment account for a significant degree of variance in career decision making. These results suggest that there is utility in self-exploration in decision making. Luzzo (1993) found that CDMSE was of value in predicting career decision making attitudes. The findings of this investigation reveal that career decision making attitudes were significantly predicted by career decision making skills, and age. Luzzo and Ward (1995) explored self-efficacy and locus of control as predictors of vocational congruence. The findings suggest that locus of control is a significant predictor of career aspiration and current occupation congruence. Luzzo (1995) found that career locus of control and CDMSE were correlated with career decision making attitudes and skills. Taylor and Popma (1990) found that CDMSE was negatively related to vocational indecision and locus of control. The results also revealed that CDMSE was positively related to vocational decidedness and occupational self-efficacy. Thus, the literature suggests that students with high CDMSE scores appear to demonstrate strong instrumental attributes, internal locus of control, and higher levels of self-esteem.

Studies have also explored the nature of the relationship between CDMSE and gender. Mathieu, Sowa, and Niles (1993) examined career self-efficacy expectations of women who differ in the tradition of their career preferences. Their results indicate that women with nontraditional, gender neutral, or traditional career preferences scored higher on CDMSE than women who were undecided with their career preference. Gianakos (1995) examined the effects of sex role identity on CDMSE. The study's results suggest that androgynous and undifferentiated subjects' sex role identity was related to CDMSE, number of career exploration behaviors completed, and valuation of particular outcomes in which reward is contingent on workers' abilities. These findings suggest that sex typing may influence the type

of career activities undertaken. Arnold and Bye (1989) examined the relationship between sex and sex role self-concept and CDMSE. The results indicate that self-concept masculinity and femininity both have a positive relationship with CDMSE suggesting that self-concept outweighs biological sex in some aspects of career development. Bergeron and Romano (1994) found significant differences in CDMSE among decided, tentatively decided, and undecided subjects. No relationship was found between gender and the three levels of indecision.

The previously mentioned studies illustrate that CDMSE provides insight into the career development process for those with a more traditional career path. None of these studies, however, have examined CDMSE as it relates to entrepreneurship. Exploring self-efficacy beliefs may prove useful in assessing whether entrepreneurial intentions surface early in one's career, or perhaps during the post secondary years. Moreover, investigating the relationship between self-efficacy beliefs and entrepreneurship is particularly salient as one embarks on and is involved in the process associated with identifying career goals during a period when the business environment is unstable.

## ENTREPRENEURSHIP

Low and MacMillan (1988) define entrepreneurship as the creation of new enterprise. This definition suggests that entrepreneurship is more a process of becoming versus a state of being (Bygrave, 1989). Studies investigating the nature of entrepreneurship have focused on identifying unique qualities of these individuals. Some of these studies focus on traits such as need for achievement (McClelland, 1961); risk taking (Brockhaus, 1980); and locus of control (Brockhaus, 1982) which attempt to distinguish entrepreneurs from other populations. Researchers such as Gartner (1989) have also made efforts to construct personality profiles in order to predict entrepreneurial behavior; however, these efforts have not been successful (Low & MacMillan, 1988).

Bird's (1988) model of entrepreneurial intent focuses on the conscious and intentional act of new venture creation. The model explicates the mind set that directs the actions of the entrepreneur. Bird (1988) defines intention as a state of mind that focuses attention, experience, and behavior toward an object or method of behaving. Moreover, entrepreneurial intention directs strategic thinking and decision making and is a perceptual screen for viewing relationships, resources, and exchanges. This framework suggests that a person's entrepreneurial intent is due to a combination of personal and contextual elements. Personal elements include experience as an entrepreneur, abilities, and personality characteristics. Contextual elements include social, political, and economic variables such as changes in markets, displacement, and government deregulation (Bird, 1988). Boyd and Vozikis (1994) extend Bird's (1988) model to address antecedent factors by incorporating the concept of self-efficacy which they deem influential in new venture creation. Krueger (1993) notes that the degree a person feels capable of successfully creating a business is an important antecedent to forming entrepreneurial intentions. Thus, self-efficacy provides insight into efficacy judgements which influence behavior (Boyd & Vozikis, 1994).

## PURPOSE

Academics and practitioners alike have explored the current business environment from a variety of perspectives. Scant attention, however has focused on how this current turbulent environment is being perceived by male and female business students as they acquire what they believe to be essential knowledge, skills, and abilities needed to begin both the career selection process as well as their careers. The purpose of this investigation is to examine the relationship between male and female business students and their perceptions about the current business environment, opportunities for occupational attainment, career decision making self-efficacy, and entrepreneurial propensity. A second aim of the study is to investigate how to best predict entrepreneurial propensity. The research questions are:

1. What is the relationship between biological sex and Corporate Social Performance?
2. What is the relationship between biological sex and Perceptions of Opportunities for Occupational Attainment?
3. What is the relationship between biological sex and Career Decision Making Self-Efficacy?
4. What is the relationship between biological sex and Entrepreneurial Propensity?
5. How does entrepreneurial propensity relate to Perceptions of Opportunities for Occupational Attainment, Career Decision Making Self-Efficacy, Corporate Social Performance, Biological Sex, and Parents?

## METHOD

Participants for this study included 105 male and 88 female undergraduate business administration students who attend school in the Southwest, United States. These 194 juniors and seniors are also involved in the career selection process. Professors in the College of Business distributed the survey to students who qualified for participation in the study. Participants completed a survey instrument that included both Likert scale and demographic items. The Pearson product moment correlation as well as the multiple regression technique were used to analyze the research questions.

Instruments used in the investigation include: Howell's (1984) Perceived Opportunity for Occupational Attainment (POOA); Parnell, Crandall and Carden's (1995) Entrepreneurial Propensity Scale (EP); Taylor and Betz's (1983) Career Decision Making Self-Efficacy (CDMSE); and Thompson and Hood's (1988) Measure of Corporate Social Performance (CSP). Students also provided demographic information and were asked if either of their parents were entrepreneurs.

Perceived Opportunity for Occupational Attainment (Howell, 1984) consists of three scales measuring items related to education, labor market patterns, and personal factors. The Entrepreneurial Propensity Scale (Parnell, Crandall & Carden, 1995) consists of three factors including: one's perceived level of entrepreneurial education, knowledge and competence concerning new venture operation; one's beliefs concerning entrepreneurial opportunities in

the economy; and, one's confidence in one's ability to access the available opportunities. The Career Decision Making Self-Efficacy Scale (Taylor & Betz, 1983) is comprised of five subscales reflective of career choice competencies: goal selection, gathering occupational information, problem solving, planning for the future, and accurate self-appraisal. Thompson and Hood (1988 ) developed the Corporate Social Performance Scale that assesses the perceptions of actual CSP behavior. The scale is comprised of three stakeholder constructs that assess corporate practices as they relate to: community, employee, and customer.

Alpha coefficient scores were calculated for all of the scales and they are as follows: POOA, .76; CDMSE, .93; EP, .83; and CSP, .81. These scores indicate that all of the measures used in the instrument were reliable.

## RESULTS

The correlation matrix is illustrated in Table 1. In examining RQ's 1- 4, which inquire about the nature of the relationship between biological sex and CSP, POOA, CDMSE, and EP respectively, there was no significance at the .01 level. The analysis does, however, yield four significant correlations that are significant at the .001 level. Career Decision Making Self-Efficacy has a strong negative relationship with POOA. Career Decision Making Self-Efficacy also has a strong relationship with both EP and CSP. The fourth correlation that was significant at the .001 level is found between EP and Parents.

| Correlations:   | CDSF     | POOA   | ENTPROP                  | CSP    | PARENTS | GENDER    |
|-----------------|----------|--------|--------------------------|--------|---------|-----------|
| CDSF            | 1.0000   |        |                          |        |         |           |
| POOA            | -.2424** | 1.0000 |                          |        |         |           |
| ENTPROP         | -.2509** | .1167  | 1.0000                   |        |         |           |
| CSP             | .3113**  | -.0041 | -.0802                   | 1.0000 |         |           |
| PARENTS         | .0088    | -.0076 | .3361**                  | .0822  | 1.0000  |           |
| GENDER          | .1087    | -.0230 | .1681                    | .0864  | -.1609  | 1.0000    |
| GPA             | .1707    | -.1111 | -.1086                   | .1086  | -.0662  | .1247     |
| N of cases: 166 |          |        | 1-tailed Signif: * - .01 |        |         | ** - .011 |

Table 2 depicts the results of the multiple regression analysis. In examining RQ 5, how does entrepreneurial propensity relate to POOA, CDMSE, CSP, Biological Sex, GPA, and Parents, the  $R$  for the regression equation was significantly different from zero,  $F(6, 159) = 6.56$ ,  $p < .001$ . Three regression coefficients also differed significantly from zero: parents, biological sex, and CDMSE. Altogether, 20% of the variability in entrepreneurial propensity was predicted by parents, biological sex, and CDMSE.

| TABLE 2                               |                      |          |                |             |       |
|---------------------------------------|----------------------|----------|----------------|-------------|-------|
| Equation Number 1                     | Dependent Variable.. |          |                | ENTPROP     |       |
| Multiple R                            | .44548               |          |                |             |       |
| R Square                              | .19845               |          |                |             |       |
| Adjusted R Square                     | .16821               |          |                |             |       |
| Standard Error                        | 9.70242              |          |                |             |       |
| Analysis of Variance                  |                      |          |                |             |       |
|                                       |                      | DF       | Sum of Squares | Mean Square |       |
| Regression                            |                      | 6        | 3705.83307     | 617.63884   |       |
| Residual                              |                      | 159      | 14967.78139    | 94.13699    |       |
| F =                                   | 6.56106              |          | Signif F =     | .0000       |       |
| ----- Variables in the Equation ----- |                      |          |                |             |       |
| Variable                              | B                    | SE B     | Beta           | T           | Sig T |
| GPA                                   | - .073024            | 1.575552 | -.003377       | - .046      | .9631 |
| PARENTS                               | -6.695327            | 1.556855 | -.311110       | -4.301      | .0000 |
| POOA                                  | .068385              | .090137  | .055868        | .759        | .4492 |
| CSP                                   | .023932              | .146936  | .012304        | .163        | .8708 |
| GENDER                                | 3.135581             | 1.563285 | .146265        | 2.006       | .0466 |
| CDSF                                  | - .103986            | .031962  | -.253801       | - 3.253     | .0014 |
| (Constant)                            | 42.382116            | 7.643237 |                | 5.545       | .0000 |

## DISCUSSION

One of the aims of this investigation was to explore the relationship between bio-logical sex and perceptions of CSP, POOA, CDMSE, and EP. The findings of the study indicate that there was no significant relationship between biological sex and the previously mentioned variables. Perhaps a more sophisticated measure such as sex-role identity rather than biological sex may provide better insight into the relationships among these variables. Failing to find a distinct relationship between biological sex and CDMSE is similar to the findings that males and females did not differ in CDMSE as reported by Taylor and Betz (1983). These results suggest that CDMSE may be assessing gender neutral activities.

Career Decision Making Self-Efficacy had a strong negative relationship with POOA and EP. This inverse relationship may be explained by the notion that belief in one's ability to successfully complete tasks centered around career decision making may provide a sense of awareness that may then influence beliefs about opportunities for acquiring one's desired career goal. Becoming more keenly aware of one's capabilities may then have a negative impact on one's perceptions about obtaining a desired job. Having a firm sense of CDMSE may encourage one to contemplate currently desired career goals and perhaps make modifications and then pursue modified goals that will lead to career success. Wood and Bandura (1989) suggest that individuals select activities based on their perceptions of personal



self-efficacy and situations thought to exceed their coping ability are avoided in favor of situations that are more manageable.

In addressing the negative relationship between CDMSE and EP, it may be explained by exploring, perhaps, the perception an individual has with regards to developing and operating a successful enterprise. This perception could prove crucial in determining whether an individual would undertake the new venture process. This explanation is consistent with Krueger (1993) who asserts that self-efficacy sheds light on judgements that influence behavior. According to Wood and Bandura (1989) people develop and strengthen their beliefs about self-efficacy in the following ways: mastery experiences; observational learning; social persuasion; and judgments of their physiological states. Gist and Mitchell (1992) suggest that performance judgments are derived from these four sources and self-efficacy is also influenced by assessing available resources and constraints that may affect future performance. As such, the study's respondents may have considered whether success was possible in developing an enterprise based on their self-efficacy beliefs. Additional considerations in determining the success of a new venture may have included the available resources, or lack thereof, such as capital, human resources, equipment and the like. These considerations appear to be illustrative of the personal and contextual variables identified by Bird (1988).

Career Decision Making Self-Efficacy also had a strong relationship with CSP. This relationship may be present as a result of respondents' perceptions of how businesses interact with their various stakeholders. The inference may be that given corporate behavior with respect to community, employment, and consumer policies and practices, respondents may perceive that they are capable of performing within the scope of current corporate social practices. This relationship suggests that respondents may believe they are confident in their ability to adapt to the established corporate norms and values. More-over, given the perceptions of current corporate practices, respondents may believe in their ability to achieve their career goals.

The fourth significant correlation was found between EP and Parents. The strong relationship between an individual's entrepreneurial propensity and entrepreneurial parents has been documented in the literature. This relationship may exist due to the fact that those with entrepreneurial parents may have the distinct opportunity to observe the skills and behaviors associated with operating an enterprise. Gist and Mitchell (1992) assert that individuals who have the opportunity to assess the skills and behaviors associated with a task can approximate whether they have similar skills and behaviors in order to determine the requirements for reaching the same results. This modeling is enhanced when there is similarity in personal characteristics and capabilities between model and subject and when the behaviors produce consequences or results.

The second aim of this study was to investigate how EP relates to POOA, CDMSE, CSP, Biological Sex, and Parents. The results of the multiple regression equation indicate that this linear combination is successful in predicting EP at the .05 level of significance. Three significant regression coefficients account for 20% of the variance in EP. The most significant coefficients include Parents, Biological Sex, and CDMSE. The *B* scores also provide additional information about the nature of these relationships. These scores signify that, all other things

being equal, an increase in one unit will decrease the parents score by -6.69; increase the biological sex score by 3.13; and decrease the CDMSE score by -.10. In essence, based on this equation, the drivers of EP are clearly parents and biological sex. This finding is consistent with the findings of Bowen and Hisrich (1986) and Shapero and Sokol (1982) as well as other studies that indicate that entrepreneurs tend to have parents who have completed the new venture process. Scherer, Adams, Carley and Wiebe (1989) assert that an entrepreneurial parent affects the career expectations, and self-efficacy of the child who prefers an entrepreneurial career.

## CONCLUSIONS

The results of this investigation yield three salient findings. First, is the relationship between CDMSE and POOA, EP, and, CSP. This relationship provides additional insight into the nature of self-efficacy as one undertakes the career selection process. These relationships highlight the connection between belief in one's ability to address tasks and behaviors as they relate to perceptions of obtaining success in one's chosen career path, choosing an entrepreneurial career, and being aware of the current environment in which organizations operate. The second important finding of the study is that biological sex does not relate to the other variables under study. The implication is that these measures may not be linked to biological sex. The final notable result of this investigation is having entrepreneurial parents seems to be pivotal in predicting EP; thus strengthening support for this notion as it has been reported in other investigations.

The contribution of this study is that it extends the context in which the concept of self-efficacy has been examined to include the entrepreneurial career domain. Boyd and Vozikis (1994) comment that entrepreneurship as a career option has not been examined within career development theory. Likewise, self-efficacy has not been widely addressed within models of entrepreneurship. As such, integrating self-efficacy into frameworks of entrepreneurial behavior provides additional insight into and understanding of the entrepreneurial process.

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# SMALL BUSINESS STRATEGY IN AUSTRALIA

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## ABSTRACT

*Research in business has acknowledged the critical role of strategy for organizational survival and success. In contrast, "little work has been done on small business strategy" (Low and MacMillan, 1988, p. 144). The current study addresses this deficiency in the research by examining the relationship between business strategy and small business success. The Small Business Strategy Typology developed in this study represents an attempt to translate the Miles and Snow Typology into operational statements concerning three aspects of the external environment of relevance to new small businesses: products/services, customers, and competitors. Self-administered questionnaires were distributed to 578 Victorian New Enterprise Incentive Scheme (NEIS) graduates who had completed business training and established businesses before 1994. Factor analyzes of the data using LISREL (7.20) indicated two distinct dimensions in the instrument: Proactive and Reactive Small Business Strategy. Details of each scale and the corresponding items are provided in the paper. Implications for entrepreneurial performance and further research are discussed.*

## INTRODUCTION

The economic and social significance of the small business sector in Australia has been widely acknowledged. Holmes (1988, p. 51) reported that in Australia, "small businesses (less than 20 employees) account for at least 85 per cent of enterprises, employ 45 per cent of the private sector workforce and contribute 33 per cent of the economy's gross domestic product."

Given the importance of small business to the economy and the evidence that small businesses that engage in strategic planning have improved performance (Robinson, p. 1982), the current study aims to investigate further the relationship between strategy and business success. For the purpose of this study, *entrepreneurship*, *self-employment*, and *the establishment of a small business* are used interchangeably according to the definition of an entrepreneur as "one who owns and starts a new and small business (Moore, 1990, p. 275).

## BACKGROUND

Research in business has recognised the critical role of strategy for organizational survival and success. Canon (cited in Higgins and Vincze, 1989, p. 2), in discussing organizational strategy, stated that "of all the contrasts between the successful and unsuccessful business, or between the leader and follower, the single most important differentiating factor is strategy." Many researchers have investigated organizational business

strategy (Greenwood and Hinings, 1988; Hambrick, 1983; Jauch and Kraft, 1986; Jauch and Glueck, 1988; Miles and Snow, 1978; Miller, Kets de Vries, and Toulouse, 1982; Porter, 1985; Shirley, 1989; Snow and Hambrick, 1980; Zahra and Pearce, 1990). In contrast, information concerning the strategic behavior of small businesses is limited (Low and MacMillan, 1988; Olson and Bokor, 1995). The current study addresses this deficiency in the research by examining the relationship between business strategy and small business success based on the assumption that “in small companies, strategies are usually the sole reflections of the owner/operator” (Olson and Currie, 1992, p. 49).

Strategy has been defined in many ways. In the broadest sense, all activities undertaken in a business contribute to the firm’s strategy. The term generally refers to “the overall purposes, goals, and scope of a firm” (Shirley, Peters, and El-Ansary, 1981, p. 37). Therefore, strategy by its very nature is both eclectic and cross-disciplinary.

Some researchers have viewed strategy as an extension of decision-making (Clifford, 1980; Fredrickson, 1984; Hofer and Schendel, 1978; Quinn, 1980). For example, Mintzberg (1978, p. 936), stated that “strategy is a pattern in a stream of decisions,” while Clifford (1980, p. 268) defined strategic decisions as “. . . wide ranging, multi-dimensional and complex and are key decisions in the organization as they affect its overall pattern of development.” Further

(Shirley et al., 1981). More precisely, strategic management refers to “the fit between the internal capabilities of a given organization and the attractive opportunities and significant threats in its external environment” (Harrison, 1986, p. ix).

Although business strategy is frequently discussed in the literature, according to Herbert and Deresky (1987, p. 136), “very little empirical research has been conducted; this is due in part to the methodological difficulties in identifying and measuring business-level strategy.” One approach for studying strategic content has been the development of typologies to classify patterns of strategic behavior (Anderson and Paine, 1975; Galbraith and Schendel, 1983; Miles and Snow, 1978; Porter, 1985). For instance, Miles and Snow (1978) developed a typology based on post-hoc identification of patterns in the product-market strategies of 52 firms in the electronics, food processing industries and 19 general hospitals. In subsequent studies, 16 firms in the college textbook publishing industry were classified by two independent groups of judges based on observations and interview data. Miles and Snow (1978) identified three recurring viable strategies: *Defender*, aims to protect core business, operates in a well-defined but restricted market; *Prospector*, aims to be a market leader; and *Analyzer*, develops strategies very cautiously. Where a business has no consistent pattern of distinctive competence, the approach, labelled *Reactor* has been viewed as a form of strategic “failure” (Miles, Snow, Meyer, and Coleman, 1978).

In the studies conducted by Miles and Snow, administrators were required to assess their organizations' relationships with suppliers, competitors, customers, financial suppliers, government regulatory agencies, and labour unions and were asked to rate *predictability*, from “1”, *highly unpredictable* to “7”, *highly predictable* (Miles and Snow, 1978, p. 200). In a study which examined the measurement properties of the Miles and Snow perceived environmental uncertainty scale, Buchko (1994, p. 422) concludes that “perception of uncertainty may be inherently unstable because environmental complexity and dynamism may prevent individuals in organizations from

developing stable assessments of the environment itself.”  
 a new business for the first time, i  
 business environment would appear *unpredictable*. Therefore rating environmental uncertainty was not considered appropriate for the current study.

The previous studies examined the business strategies of comparatively large organizations and the managerial processes that characterise organizations in each category. For example, *Prospector* organizations “tend to have complex coordination and communication mechanisms, rely on participative and decentralized decision-making, and to a great extent are shaped by the influence of marketing product development executives” (Hambrick, 1983, p. 6). The “administrative domain” the way in which an organization attempts to coordinate and implement its strategies as described by Miles and Snow (1978) is totally irrelevant to small business strategy where in most cases, the owner/manager must be responsible for all strategic decision-making. Robinson and Pearce (1984, p. 128) commented that the “state of knowledge pertinent to the strategic management of small and growing firms is woefully inadequate.” Similarly, Fillion (1990, p. 57) suggested that a framework for entrepreneurial strategic thinking and action needed to be developed. The current study attempts to redress this deficiency.

Several researchers have utilised the Miles and Snow Typology to classify business strategy in small businesses. Williams and Tse’s (1995) study of strategy in the restaurant industry provided evidence for the presence of the four strategy types identified by Miles and Snow (1978). However, Williams and Tse (1995, p. 26) concluded that entrepreneurs lack specialist knowledge of strategic management activities, and allocate very little time to such activities. Using a description of each strategy, Olson and Currie (1992) asked respondents *to select which statement best described their business*. Three of the four statements were in reference to *product/service* strategies; the fourth referred to *responding mostly to pressure from the environment*. The statements were not mutually exclusive and the item was considered inappropriate for differentiating small business strategy. The instrument developed for the current study represents an attempt to translate the Miles and Snow Typology into operational statements concerning three aspects of business strategy which would be relevant to small businesses in the establishment phase: products/services, customers, and competitors.

Performance measures such as profitability, cash flow and market share have been used to indicate business success (Hambrick, 1983). However, there is evidence in the literature that many small business founders establish businesses for reasons other than wealth creation (Boyd & Gumpert, 1987; Gray, 1994; Hamilton, 1987; Johns, Dunlop, & Sheehan, 1989; Peacock 1990). According to Birley (1982, p. 83), the entrepreneur often starts a business “with the declared intention of becoming independent and [then] maintains independence by keeping operational control . . . The strategic goal becomes one of no growth or minimum growth consistent with survival.” In the view of Holmes and Zimmer (1994, p. 97) that an “operational framework that distinguishes growth from non-growth small businesses does not exist,” the current study investigates whether business strategy differentiates between growth and non-growth small businesses.

## METHOD



Based on the suggestions by Emory (1980), the new instrument design process for measuring small business strategy was commenced by drafting a list of statements derived from the literature which described the characteristics of each strategy in relation to products/services, customers, and competitors. The draft instrument, the Small Business Strategy Typology (SBST) consisting of 12 items was tested among academic colleagues ( $n = 20$ ) and the interrater reliability estimate was calculated based on the formula suggested by Goodwin and Goodwin (1985, p. 7), “number of coding agreements/number of coding agreements plus number coding disagreements.” *Agreement* meant that raters concurred on the classification of an item. The resulting mean interrater reliability estimate for the instrument was 0.89, ranging from a low of 0.70 to 1.00. Modifications to items were made as to the results obtained and suggestions for improvements.

Respondents were required to indicate on a five-point Likert scale the likelihood of using the described business strategies. All items in the 12-item scale were rated from *never* (0) to *most of the time* (4). Statements concerning products/service strategies were presented first, followed by customer strategies, and finally, strategies relating to competitors. Statements reflecting each strategy were presented in random order to minimise order bias. Table 1 provides the orientation for each item where the description of the strategy was rated *almost always*. The standardised item Cronbach alpha coefficient for the instrument was .86 which exceeded the Cronbach alpha of .63 for a new instrument developed by Neihoff, Enz and Grover (1990, p. 343) who stated that the result was “reasonable, considering the newness of the scale.”

| Item |   | Orientation |
|------|---|-------------|
| 1.   | Try to be first to offer new products/services                              | Prospector  |
| 2.   | Concentrate on a limited line of products/services                          | Defender    |
| 3.   | Cautiously develop new products/services                                    | Analyzer    |
| 4.   | Develop new products/services in response to what is currently available    | Reactor     |
| 5.   | Strive to be market leader regardless of the competition                    | Prospector  |
| 6.   | Stress better quality, service & prices compared to competitors             | Defender    |
| 7.   | Develop market strategies according to what other operators are doing       | Reactor     |
| 8.   | Find that you are seldom the market leader but you carefully analyze trends | Analyzer    |
| 9.   | Operate in a focused market to protect it from competitors                  | Defender    |
| 10.  | Watch competitors, analyze and learn from their mistakes                    | Analyzer    |
| 11.  | Strive to stay ahead of competitors   | Prospector  |
| 12.  | Try to keep pace with competitors   | Reactor     |

A self-administered questionnaire was developed based on a comprehensive review of current literature (for example: Ibrahim and Goodwin, 1987; Low and MacMillan, 1988; Namiki, 1989; Perry, Meredith and Cunnington, 1988; and Snow and Hambrick, 1980). The independent variables for the study were: Personal demographic variables including gender, age, marital status, and dependents; and professional demographic variables including role models, education, previous

occupation, similarity of previous employment to current business, and duration of unemployment. Quantitative data were gathered concerning the dependent variable, small business success including period in business (months), income (net profit), and number of employees (part-time/full-time).

Questionnaires were distributed to 578 Victorian New Enterprise Incentive Scheme (NEIS) graduates who had completed business training and established businesses before 1994, resulting in 255 useable responses (45 per cent response rate). Respondents were no longer receiving income support at the time of the survey. Over three-quarters (77 per cent) of respondents were male. Almost two-thirds (63 per cent) of the sample was aged under 40 years when the respondents started their businesses. Most respondents (71 per cent) had family members or close friends in business whom they regarded as role models. The sample was better educated than the Victorian population with over half (52 per cent) having post-secondary qualifications. Over half of the males (52 per cent) and two-thirds of the females (70 per cent) had been employed previously in white collar occupations and approximately one-third (36 per cent) of respondents had worked for a company where the products, services, or customers were similar to the newly established business. The majority of respondents (63 per cent) had been unemployed for less than one year at the time of commencing the NEIS program.

The majority of respondents (80 per cent) had businesses that continued to operate a least a year after completing the NEIS course. Only 13.7 per cent of respondents had ceased trading (the criterion for business failure in the current study) and 3.1 per cent of respondents had sold their businesses. A further two per cent of respondents had never started in business. Almost half the respondents (49.4 per cent) stated that the net business profit (excluding other sources of income) for the last financial year was less than \$10,000. A further 25.1 per cent claimed that their net profit was between \$10,000 and \$19,999 and only 18.8 per cent had net profits in excess of \$20,000. The majority of respondents (63.9 per cent) did not employ others. Around one-third of respondents (31.8 per cent) had between one and five employees; only 3.2 per cent of respondents had between six and ten employees; and 1.2 per cent of respondents had more that 11 employees (the highest number of employees in a single business was 35).

Descriptive statistics, such as means, frequencies, and standard deviations were calculated to summarise the data using the statistical package SPSS Windows version 6.1. Cross-tabulations, correlational analysis, *t*-tests, and one-way analyzes of variance were used to determine the strength of relationships between and among variables. Factor analysis was used in the study to identify the variables which formed coherent subsets that were relatively independent of one another (Tabachnick & Fidell, 1989).

## RESULTS

Exploratory factor analysis was undertaken to examine the relationships among the items. The correlation matrix generated to assess whether there were significant correlations between items revealed several correlations in excess of .30, which made it appropriate to proceed with factor analysis (Tabachnick and Fidell, 1989). Principal components analysis indicated that the first component with an eigenvalue of 2.8 accounted for 23.4 per cent of the variance. There were

four eigenvalues greater than one and the first four factors accounted for 58.4 per cent of the total variance. The scree plot indicated a break between the steep slope of the initial four factors and the gentle slope of the later factors, suggesting that four factors should be retained.

A rotated factor matrix using the Varimax method was generated to improve interpretation. The critical value for a correlation coefficient at the .01 level of significance was set at .43 as suggested by Stevens (1992, p. 383). Although the loadings for all items on their respective factors were above the set threshold of .43, item 1, *Try to be first to offer new products/services* did not load discretely. Only two items, item 2, *Concentrate on a limited line of products/services*; and item 9, *Operate in a focused market to protect it from competitors* loaded on factor four. According to Bentler and Chou, (1987, p. 93) “every factor that is meant to account for correlations among some indicators must have effects on three or more indicators of that factor.” This comment suggests that it may have been appropriate to reduce the number of factors to three. However at this preliminary stage of analysis, all items were retained for further analyzes.

Confirmatory factor analyzes of the items loading on the four factors were conducted using the generally weighted least squares method of LISREL (7.20). Jöreskog and Sörbom (1989, p. 193) suggested that:

*When the observed variables in LISREL are all ordinal . . . the use of ordinary product moment correlations based on raw scores is not recommended. Instead it is suggested that estimates of polychoric and polyserial correlations be computed and that the matrix of such correlations be analyzed by the weighted least squares method.*

Factor loadings, theta deltas, squared multiple correlations, and standardised residuals were examined. The analysis revealed that a number of items had exceptionally low lambda X values (less than .50): item 2, *Concentrate on a limited line of products/services* (.08); item 3, *Cautiously develop new products/services* (.27); and item 4, *Develop new products/services in response to what is currently available* (.19). These items therefore were excluded. However, items 3 and 4 had loaded on factor three and excluding these items resulted in only one remaining item for that factor. Similarly, excluding item 2 resulted in only one item loading on factor four. The results suggested a two factor model.

In order to confirm the clusters of items in the factor analysis, a series of congeneric models was established. Model fit was assessed by using the goodness-of-fit index and the ratio of chi-square to degrees of freedom where a ratio of less than five indicated an acceptable fit (Bentler and Bonett, 1980; Wheaton, 1987). The congeneric model for items 5, 6, and 11 which had previously loaded on factor one did not adequately fit the data, with a goodness of fit index of .59, and a chi-square of 232.28, df=3, for a chi-square/degrees of freedom ratio of 77.43. The analysis was repeated but included items 1 and 9 which theoretically belonged with the items loading on factor one. Items 1 and 9 were the single items remaining for factors three and four after previous analysis. The congeneric model which included five items produced weighted least squares ranging from .40 to .80, a goodness of fit index of .99 (adjusted goodness of fit index of .96), a root mean square residual of .06, a chi-square of 11.09, df=5, for a chi-square/degrees of freedom ratio of 2.22. There were no

standardised residuals listed. The results indicated that including the additional items provided a much improved fit of the data.

Analysis indicated that items 7,8,10, and 12 which had previously loaded on factor two in the factor analysis produced weighted least squares ranging from .51 to .57. No standardised residuals were listed and the goodness of fit index of 1.00 (adjusted good mean square residual of .01, chi-square of .26, df=2, for a chi-square/degrees of freedom ratio of .13, indicated that the model provided an adequate fit of the data.

Factor one included items such as *Try to be first to offer new products/services*, and *Strive to stay ahead of competitors* which previously had been labelled either *Prospector* or *Defender* according to the Miles Snow Typology and subsequently was labelled *Proactive* Small Business Strategy. The label was selected based on the nature of the items in the cluster and extant literature including the description of a *proactive* entrepreneur as someone who “takes the initiative [to] ensure the firm’s long-term health” (Gore, Murray, and Richardson, 1992, p. 122). Further, Ansoff (1988, p. 228-229) described *proactive* strategy as “a more vigorous strategic behavior [than reactive strategy], . . . forward looking and imaginative.” Factor two included items such as *Watch competitors, analyze and learn from their mistakes* and *Try to keep pace with competitors* which previously had been labelled either *Analyzer* or *Reactor* according to the Miles Snow Typology and subsequently was label

was selected based on the characteristics described in the items for factor two and with reference to the statement that where “decisions are based on a response to problems as they arise: they are merely *reactive*” (Gore et al. 1992, p. 122). According to Ansoff (1988, p. 228-229), *reactive* strategic management is characterised by “trial and error reaction to unsatisfactory performance . . . [and typically] minimises strategic changes.” Table 2 presents the details of the confirmatory factor analysis using the generally weighted least squares method of LISREL.

Unidimensionality was assessed by examining the goodness-of-fit for each factor calculated using a congeneric model in LISREL. The goodness-of-fit index for *Proactive* was .99 and for *Reactive* 1.0 indicating that “each factor had only one underlying concept in common” (Hair, Anderson, Tatham, and Black, 1992, p. 431).

Construct reliability measures were calculated based on LISREL confirmatory factor analyzes,  $(\text{sum of standardised loadings})^2 / ((\text{the sum of standardised loadings})^2 + \text{sum of indicator measurement error})$  where *standardised loadings* were the weighted least squares and *measurement error* was the theta delta scores. The construct reliabilities for the *Proactive* factor (.73), and for *Reactive* (.62) were satisfactory given the developmental nature of the instrument and the comments by Hair, Anderson, Tatham and Black (1992, p. 450) that “the indicator reliabilities should exceed .50, which roughly corresponds to a standardised loading of .70.”

| Item             | Factor Items                                   | $\lambda_x$ | R <sup>2</sup> | TD  | SE  |
|------------------|--|-------------|----------------|-----|-----|
| <i>Proactive</i> |  |             |                |     |     |
| 1                | Try to be first to offer new products/services | .47         | .15            | .85 | .05 |

|                                   |   |                                      |     |                                 |     |
|-----------------------------------|---|--------------------------------------|-----|---------------------------------|-----|
| 5                                 | Strive to be market leader regardless of competition                        | .56                                  | .39 | .61                             | .05 |
| 6                                 | Stress better quality, service, and prices compared to competitors          | .58                                  | .38 | .62                             | .05 |
| 9                                 | Operate in a focused market to protect it from competitors                  | .42                                  | .18 | .82                             | .05 |
| 11                                | Strive to stay ahead of competitors   | .87                                  | .76 | .24                             | .06 |
| <i>Reactive</i>                   |   |                                      |     |                                 |     |
| 7                                 | Develop market strategies according to what other operators are doing       | .52                                  | .19 | .81                             | .06 |
| 8                                 | Find that you are seldom the market leader but you carefully analyze trends | .64                                  | .12 | .88                             | .06 |
| 10                                | Watch competitors, analyze and learn from their mistakes                    | .57                                  | .66 | .34                             | .08 |
| 12                                | Try to keep pace with competitors   | .47                                  | .22 | .78                             | .06 |
| Overall Cronbach's $\alpha = .67$ |   | $\chi^2 = 67.27, df=26, p = <.001$   |     |                                 |     |
| Goodness of Fit Index = .97       |   | Adjusted Goodness of Fit Index = .92 |     | Root Mean Square Residual = .08 |     |

Factors scores were calculated for *Proactive* and *Reactive* Small Business Strategy. A congeneric model was established and factor score regressions were calculated for each item loading on each factor. Each item factor score was divided by the total factor score to give a metric scale. The sum of metric factor scores for all items loading on each factor was 1.0. The raw scores for each case on each item for *Proactive* and *Reactive* were multiplied by the appropriate standardised factor score and the sum provided a factor score for each case on each factor.

In order to compare factor scores for *Proactive* and *Reactive* Small Business Strategy, frequency distributions of factor scores were calculated as well as measures of central tendency such as the mean, mode, and median for each factor. The mean for *Proactive* was 2.78 compared to 2.32 for *Reactive* Business Strategy. The median scores were 2.86 for *Proactive* and 2.28 for *Reactive*. The measure of kurtosis for *Proactive* was -.54 compared to -.08 for *Reactive*. The distribution was negatively skewed for both scales (*Proactive*: -.31 and *Reactive*: -.26).

There was a weak positive correlation (Pearson's  $r$ ) at the .001 level of significance between *Proactive* and *Reactive* Small Business Strategy factor scores. The Small Business Strategy Scale was scored so that 0 indicated infrequent use of the strategy (either *Proactive* or *Reactive*) and 4 indicated frequent use of the strategy. Factor scores for both sub-scales were recoded into three: *low*: 0-1.33 (strategy used infrequently); *medium*: 1.34-2.67 (strategy used sometimes); and *high*: 2.68-4.0 (strategy used frequently).

The relationship among Small Business Strategy and demographic variables including gender, age, previous education, previous occupation, duration of unemployment, and role models was evaluated by obtaining cross-tabulation data. A significant difference was evident between respondents who had previous work experience which was similar to their current businesses and those respondents who did not have similar experience in relation to *Proactive* Business Strategy (chi-square = 9.54,  $df=2, p <.01$ ).

To determine if the mean factor scores for *Proactive* and *Reactive* Business Strategy for a range of demographic variables were significantly different, *t*-tests (where two groups were compared) and one-way analysis of variance (ANOVA) were calculated (where more than two groups were compared). No significant differences at the .05 level of significance were evident for either sub-scale by gender, age, education, occupation, and role models.

The mean difference between *Proactive* Business Strategy scores for respondents with previous experience in a similar field compared to respondents without similar experience was .24,  $t = 2.31$ , ( $n = 231$ )  $p < .05$  indicating a significant difference between the groups in the sample. Levene's Test for Equality of Variances ( $F = .09$ ,  $p = .76$ ) indicated that there was no significant difference in variances between the groups in the sample.

For *Reactive* factor scores, the mean difference was  $-.08$ ,  $t = .88$ , ( $n = 231$ ),  $p > .05$ . Levene's Test for Equality of Variances ( $F = .15$ ,  $p = .90$ ) indicated that there was no significant difference in variances between the groups in the sample. Table 3 presents the *t*-tests for Business Strategy by similarity of previous work experience.

The overall results are consistent with previous studies of the relationship between perceptual variables and business strategies in organizations. "Managers who differ in their personal and organizational backgrounds are likely to have varied cognitive perspectives and, as a result, prefer differ e in discussing how managers bring the skills and conceptual biases of their functional training to bear on strategic problems referred to various professional backgrounds and the relationship to Miles and Snow (1978) Typology. Thus, "firms dominated by production and accounting professionals tend to be cautious, inward-looking *Defenders* in their strategic orientations, while marketing and research and development dominated firms are characteristically *Prospectors*, more innovative and risk-taking." Based on these observations, entrepreneurs could be expected to have differing strategic orientations reflecting differing background experiences.

| Factor                 | Similar Experience (n = 87) | No similar Experience (n = 144) | t     |
|------------------------|-----------------------------|---------------------------------|-------|
| Proactive <sup>a</sup> | 2.64                        | 2.88                            | 2.31* |
| Reactive <sup>a</sup>  | 2.38                        | 2.29                            | -.88  |

<sup>a</sup> 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Most of the time. \*  $p < .05$

Table 4 presents the one-way analysis of variance comparing Business Strategy mean factor scores by three groups of duration of unemployment (less than one year, one to two years, and more than two years) which indicates that significant differences existed between groups for *Proactive* Business Strategy ( $F$  ratio = 3.43,  $F$  probability  $< .05$ ). However, a Scheffé test did not confirm a significant difference at the .05 level of significance.

| Factor                        | Less than 1 year (1)<br>(n = 151) | 1-2 years (2)<br>(n = 50) | More than 2 year (3)<br>(n = 29) | F     |
|-------------------------------|-----------------------------------|---------------------------|----------------------------------|-------|
| <i>Proactive</i> <sup>a</sup> | 2.70                              | 2.88                      | 3.07                             | 3.43* |
| <i>Reactive</i> <sup>a</sup>  | 2.28                              | 2.37                      | 2.35                             | .75   |

<sup>a</sup> 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Most of the time \*F probability = <.05

The relationship between business strategy and business success was evaluated by obtaining cross-tabulation data. Three measures of business success were used: *survival in business*, *net profit* and *employment of others*. A significant difference was evident between others and respondents who did not employ others in relation to *Proactive* Business Strategy (chi-square = 6.11, df=2, p<.05). The results suggest that managers of growth businesses utilize *Proactive* Business Strategies most frequently than managers of non-growth businesses. Table 5 presents the frequency and percentage frequency distributions of respondents for *Proactive* Business Strategy and employment of others. To determine if the mean factor scores for *Proactive* and *Reactive* Business Strategy were significantly different for a range of measures of business success, t-tests and one-way analysis of variance (ANOVA) were calculated. The results indicated that there were no significant differences at the .05 level of significance between mean *Proactive* and *Reactive* factor scores for any of the measures of business success.

| Business Strategy <sup>a</sup>     | Employed Others (n = 86) |       | Did not Employ Others (n = 147) |       | Totals |       |
|------------------------------------|--------------------------|-------|---------------------------------|-------|--------|-------|
|                                    | f                        | %     | f                               | %     | f      | %     |
| Low <i>Proactive</i> <sup>b</sup>  | 4                        | 4.7   | 2                               | 1.4   | 6      | 2.6   |
| Med. <i>Proactive</i> <sup>b</sup> | 27                       | 31.2  | 67                              | 45.6  | 94     | 40.3  |
| High <i>Proactive</i> <sup>b</sup> | 55                       | 64.1  | 78                              | 53.0  | 133    | 57.1  |
| Total                              | 86                       | 100.0 | 147                             | 100.0 | 233    | 100.0 |

$\chi^2 = 6.11, df = 2, p < .05.$       <sup>a</sup> 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Most of the time  
<sup>b</sup> low: 0 - 1.33, medium: 1.34 - 2.67, high: 2.68 - 4.0.

## DISCUSSION

The current study is exploratory in nature and assesses the usefulness of the Miles and Snow typology as it applies to small business strategy across a range of industries. Analyzes of the data gathered from the instrument indicated that a four category classification as described by Miles and Snow (1978) was not appropriate. Instead, two factors, *Proactive* and *Reactive* Small Business Strategy appear to account for the variance in a parsimonious manner. The results are consistent

with previous research which highlighted the temporal dimension of business strategy. Bateman and Zeithaml (1989, p. 72) referred to “a strong past or present orientation . . . a *Defender*-type strategy [which may characterise a *Reactive* strategy] and a strong future orientation associated with a *Prospector*-type strategy” reflecting a *Proactive* strategy in the current study. Further, the current study suggests that a positive relationship exists between *Proactive* business strategy and employment growth and non-growth businesses.

The questionnaire relied on self-reporting of strategies by managers and there was no opportunity for external or objective confirmation of their answers. According to Alpaender, Carter and Forsgren (1990, p. 15), “self-reported responses may be prone to bias due to societal norms of behavior.” Therefore a bias may have been introduced as the respondents may have answered in terms of their intended strategy rather than *realised* strategy. The study did not attempt to investigate the potentially moderating effects of variables such as the type and structure of industries and degree of environmental uncertainty in relation to business strategy to preserve the respondents’ anonymity.

There is a need for further development and refinement of the Small Business Strategy Typology instrument. The weak loadings on the items relating to products/services suggest that further clarification is required. Also, replication of the study with multiple samples is required to assess the predictive validity of the instrument. A data base of strategies used by successful small businesses with growth objectives could be developed. Longitudinal studies should be conducted in order to improve the practical utility of the instrument. Further investigation is required to evaluate the impact of the founders’ goals and objectives on business strategy and the resulting effect on small business performance. To participate in the current study, businesses were only required to have survived the first year. An understanding of the impact of business strategy over an extended period is necessary before prescriptive suggestions can be developed.

## CONCLUSION

The typology should be viewed as highlighting two important dimensions of strategic positioning rather than delineating two distinct strategies. The instrument may have practical applications for example, in drawing small business managers’ attention to the need to think strategically. Thus, the instrument may highlight the benefits of utilising business strategies as a management tool for long-term planning. The development of the instrument represents an attempt to operationalize business strategy to improve understanding of small business strategy. The identification and classification of small business strategy provides a foundation for future analysis and should contribute to the development of growth and non-growth business profiles. A possible outcome of the research is the development of a repertoire of strategies for small business to assist founders and managers of emerging business ventures. Finally, encouraging small business owners to utilize *Proactive* strategies may assist them in developing growth businesses.



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# **RISK TAKING PROPENSITY OF U.S. AND FINNISH SME'S: FINDINGS ON SIMILARITIES AND DIFFERENCES**

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## **ABSTRACT**

*Although previous literature has indicated that entrepreneurs, small business owners and managers, worldwide, perceive their roles in making (risky) decisions as rather similar (Masters et al., 1988, 206), it does not automatically follow that their risk taking inclinations are of the same type. The purpose of the paper was to study, both conceptually and empirically, risk taking propensities of entrepreneurs, small business owners and managers. Risk taking propensity was first examined by making a conceptual analysis of earlier literature. Secondly, some 1000 respondents from both the USA and Finland were sampled. A carefully validated questionnaire was mailed to these 2000 Finnish and US entrepreneurs, small business owners, and managers. The response rates were 21 per cent in the USA and 48 per cent in Finland. The instrument utilized was purported to measure the construct of risk taking propensity.*

*The present study set out to discover if there was any difference between American and Finnish entrepreneurs, small business owners and managers. We were also interested in finding out whether respondents would differ significantly in this respect if we classified them by sex, business goals, and different roles in setting up the businesses.*

*In this sample, the Americans were more inclined to assume risks than the Finns. The Americans scored higher also when the respondents were classified according to different background variables. Finnish entrepreneurs, small business owners and managers were more risk-averse than their American colleagues. More specifically, the American males were found to have significantly higher scores than Finnish males but there was no significant difference between U.S. and Finnish female respondents.*

## **INTRODUCTION**

It is very important that deeper investigations are made to better understand the role of entrepreneurial personality and to properly characterize entrepreneurs. One central psychological aspect of entrepreneurship is a human's risk taking propensity. When Douglas N. Jackson (1976) published his well-known Jackson Personality inventory, one of his key dimensions was risk taking. After him many others, such as Brockhaus (1980, 1982), Masters & Meter (1988), and Ray (1986) have explicitly dealt with the issue of risk taking propensity.

For example, Schere (1982) discovered that entrepreneurs have a greater degree of acceptance of ambiguity than managers. The purpose of the paper is to study risk taking propensities of entrepreneurs, small business owners and managers. Firstly, we explore risk taking propensities by using a conceptual approach, i.e. by reviewing and analysing previous literature. Another aim of this part of the study is to express some introductory remarks on the topic of risk taking propensity. Secondly, an empirical survey is carried out by using more than 600 US and Finnish respondents. The research questions are as follows:

- 1) Are there any differences in risk taking propensity between American and Finnish entrepreneurs, small business owners and managers, and if so, what kind of differences they might be?
- 2) Do these respondents' risk taking propensities differ significantly if we classify these people according to sex, business goals, and roles in start-ups?

## LITERATURE REVIEW

Comparatively little in-depth research has been conducted on the general risk taking propensities of entrepreneurs (see e.g. Brockhaus, 1980; Begley & Boyd, 1987). While there is an extensive literature on the measurement of market risks, there is relatively little evidence of literature on the entrepreneurial risk taking propensity. The role of the entrepreneur always involves some form of risk taking. Some writers hold the view that entrepreneurs, small business owners, and managers, worldwide, perceive their role in decision making as rather similar (Boone & Kurz, 1984; Carson, 1985). Yet, entrepreneurs are widely believed to be willing to assume more risks than, for instance, managers and salaried employees (Masters & Meter, 1988, 31). Thus, Bunch (1986, 34) argues: "the antithesis of the entrepreneur is a person who never loses because he or she never puts himself or herself at risk".

Defining risk taking, Baty (1981, 11) thinks that the right question to ask when considering an entrepreneurial venture is: "are the potential rewards commensurate with the risks?" In our view, this definition of risk taking is no more than a "circle definition". On the other hand, Brockhaus (1980, 513) defined risk taking propensity more adequately as "the perceived possibility of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequence than the proposed situation".

A research reviewed by *Venture* (1986, 24) showed that four out of ten entrepreneurs like "taking some chances". However, they seem to take risks after carefully analysing the situation in hand as was shown by Moore and Gergen (1985) in their study of risk taking in business. They showed that individual risk taking usually involved an indication or propensity to taking or avoiding risks, decision-making skills, and experience with risk taking behaviour in an organization. In the words of Moore & Gergen (1986, 72-76), "The process of risk taking involves both making the decision to take a risk and developing a strategy that minimizes the risk. Well-seasoned risk taking requires careful decision making". Meanwhile,

Weiss (1985,1416) suggested that "Taking risks means different things to different people. What one person sees as a threat because he thinks he will fail, another person sees as a challenge because she thinks she will succeed". This was highlighted by a survey conducted by Garfield (1984, 18-20) on the highest-performing U.S. managers. He discovered that they, unlike the other respondents, showed a superior ability to take risks: "They are not content with safe, predictable performance, but rather insist on stretching beyond current levels".

Thus, starting and managing a business is usually seen as risky, although there are situations (like taking up a franchise) where the risk is clearly reduced. Therefore, it is essential for the survival of a business how the entrepreneur perceives and manages risks in his environment (Delmar, 1994, 735). Moreover, entrepreneurial behaviour is a rather special case of human behaviour since an entrepreneur, as an individual, has to control a complex system of risky and uncertain situations. In fact, a study conducted by Scheré (1982) indicated that the risk behaviour of the entrepreneur can be seen as a larger acceptance of uncertainty. Scheré (1982) explored the difference in the ambiguity tolerance between entrepreneurs and managers. He defined *uncertainty as a state of mind resulting from ambiguity*. *Ambiguity* in turn was defined as *a description of a situation characterized by vagueness, unclarity and incompleteness*. Scheré (1982) found that entrepreneurs had a greater degree of tolerance of ambiguity than managers. A low tolerance usually results in stress and other unpleasant feelings in a contradictory situation. However, individuals with high acceptance of ambiguity would expose themselves to higher risks than individuals with low tolerance who would seek well known situations.

In tests of objective risk taking propensity, risk taking in different domains is evaluated (Brockhaus, 1980; Peacock, 1986; Masters & Meter, 1988). The aim of these tests is to establish the general risk profile of the subjects. Cognitive theory seems to support the hypothesis that risk taking is mainly domain specific (Sjoberg, 1978, Heath and Tversky, 1991). Heath and Tiersky (1991, 7) hold the view that the will to bet on an uncertain outcome not only depends on the estimated probabilities and certainty of that estimation but also on the general understanding of the relevant situation. In the words of Heath and Tversky (1991, 7-8), "The consequences of each bet include, besides the monetary payoffs, the credit and blame associated with the outcome. Psychic payoffs of satisfaction or embarrassment can result from self-evaluation or from evaluation by others. In either case, the credit and the blame associated with an outcome depend, we suggest, on attributions for success and failure. In the domain of chance, both success and failure are attributed primarily to luck. . . In contrast, if the decision maker is an 'expert', success is attributable to knowledge, whereas failure can sometimes be attributed to chance".

Heath and Tversky (1991) contend that their theory may explain why a majority of decision makers do not see a calculated risk as a chance. Consequently, an entrepreneur is more inclined to take risks in a domain where she or he is an expert. This means that an individual will be risk averse in areas in which she or he has little knowledge to estimate the probabilities for different outcomes. Despite the findings that entrepreneurs do not have a much higher risk taking propensity compared to the general population, they do take many

risks. Delmar (1994, 738) argues that the reason might be that they have a greater ability to manage risk in the specific domain represented by his or her business venture.

In the field of psychology, risk taking is a core concept of research on sensation-seeking for which Zuckerman (1983) has become well-known. It is also part of Eysenck's extraversion concept, which is a measure of social competence, but also contains a strong portion of impulsiveness. According to Brengelmann (1995, 157), this area of personality has been thoroughly investigated, in relation to risky activities, especially in the field of sports. Nevertheless, little research has been conducted on the effects of risk taking on the use of money, as is the case in entrepreneurial behaviour.

Masters and Meier (1988) conducted a study to determine whether U.S. male and female entrepreneurs would differ in risk taking propensity. They found no differences in the risk taking propensity of male vs. female entrepreneurs. This finding departs from findings published in the prior research literature. Previous studies indicated a difference between males and females in judgment situations, implying that females are less likely to take risks. Other researchers have discussed the motives for risk taking, which usually relate to achievement (Atkinson, 1957; Meyer, Walker and Litwin, 1963; and Shwiel, 1986). Hisrich (1988, 68-73), for instance, cited the need for achievement as one of the main motives for women to assume the risk of starting an independent business.

## METHODOLOGY

A carefully validated questionnaire was mailed to 1000 U.S. entrepreneurs, small business owners and managers and another 1000 to Finnish entrepreneurs. The instrument consists of pairs of statements in a forced choice format and the purpose is to reveal an individual's proclivity for risk taking propensity. Risk taking has been an "entrepreneurial" concept since the time of Cantillion (circa 1700). Still, according to Brockhaus (1987), experts are undecided about the role and characteristics of risk taking propensity.

The instrument used to measure risk taking propensity was the Jackson Personality inventory. This scale consists of 20 forced choice questions. Jackson (1976) has displayed high reliability and validity and exhibited high correlations with self and peer ratings. The idea of the instrument is not to separate respondents into entrepreneurial and non-entrepreneurial ones; rather, to identify the strength of entrepreneurial risk taking preferences. The analysis included descriptive statistics and an analysis of variance as well as t-tests to explore the similarities and differences between American and Finnish respondents.

## RESULTS

The cross cultural data were collected in both Finland and the USA. One thousand respondents from both USA and Finland respectively were surveyed. The US response rate was 21% and the Finnish, 48%. Hence, the data yielded more than 600 useable responses. Basic demographics of the American and Finnish respondents are presented in Table 1.



Table 1: Demographics of Samples

| (May not add to 100% due to missing responses) |                                 | American | Finnish |
|--|---------------------------------|----------|---------|
| <b>Type of Business:</b>                       | <b>Retail</b>                   | 38%      | 18%     |
|  | <b>Service</b>                  | 44%      | 44%     |
|  | <b>Wholesale</b>                | 3%       | 4%      |
|  | <b>Construction</b>             | 9%       | 15%     |
|  | <b>Manufacturing</b>            | 4%       | 15%     |
| <b>Annual Sales:</b>                           | <b>\$100,000 or less</b>        | 36%      | 34%     |
|  | <b>\$100,000 to \$250,000</b>   | 19%      | 16%     |
|  | <b>\$250,000 to \$500,000</b>   | 18%      | 19%     |
|  | <b>\$500,000 to \$1,000,000</b> | 9%       | 14%     |
|  | <b>\$1,000,000 and more</b>     | 14%      | 15%     |
| <b>Number of Employees:</b>                    | <b>10 or less</b>               | 84%      | 78%     |
|  | <b>11 to 25</b>                 | 8%       | 10%     |
|  | <b>26 to 50</b>                 | 5%       | 2%      |
|  | <b>51 or more</b>               | 2%       | 2%      |
| <b>Business Form</b>                           | <b>Proprietorship</b>           | 51%      | 25%     |
|  | <b>Partnership</b>              | 13%      | 38%     |
|  | <b>Corporation</b>              | 36%      | 38%     |
| <b>Age of Business</b>                         | <b>More than 10 years</b>       | 54%      | 50%     |
|  | <b>5 to 10 years</b>            | 38%      | 32%     |
|  | <b>1 to 4 years</b>             | 4%       | 17%     |
| <b>Sex of Respondent</b>                       | <b>Male</b>                     | 68%      | 75%     |
|  | <b>Female</b>                   | 32%      | 25%     |
| <b>Age of Respondent</b>                       | <b>25 to 35 years</b>           | 23%      | 15%     |
|  | <b>36 to 45 years</b>           | 35%      | 29%     |
|  | <b>46 to 55 years</b>           | 24%      | 41%     |
|  | <b>More than 55 years</b>       | 13%      | 13%     |
|  | <b>12 years or less</b>         | 33%      | 73%     |
| <b>Education of Respondent</b>                 | <b>12 to 15 years</b>           | 27%      | 9%      |
|  | <b>16 years</b>                 | 23%      | 3%      |
|  | <b>More than 16 years</b>       | 13%      | 9%      |
|  | <b>Started Business</b>         | 75%      | 81%     |
| <b>Role of Respondent</b>                      | <b>Purchased Business</b>       | 21%      | 13%     |
|  | <b>Inherited Business</b>       | 5%       | 5%      |
|  | <b>Profit and Growth</b>        | 47%      | 21%     |
| <b>Primary Objectives</b>                      | <b>Family Income</b>            | 53%      | 77%     |
|  | <b>Fits Definition</b>          | 22%      | 21%     |
| <b>Carland Entrepreneur</b>                    | <b>Does not fit Definition</b>  | 78%      | 79%     |

In most aspects the samples between the USA and Finland were somewhat similar, but some rather striking differences were also discovered. A proprietorship was a more general business form in the USA than in Finland (probably for tax reasons!). The U.S. respondents had a somewhat longer and higher formal education. An overwhelming majority of Finnish respondents indicated "Family income" as the primary objective of their businesses. This will be reflected in the later empirical results.

The American and Finnish differences in mean scores on the Jackson Risk Taking Instrument are shown in Table 2. It indicates a wide range of scores: from 0 to 19. The deviations of the scores were high (American variance was 27.0 and Finnish variance was 16.0). This, of course, has an effect on t-tests (see Table 4 onwards). It also becomes clear that American respondents have a greater risk taking propensity compared to the Finns. Thus, the Finns tend to be more risk-averse or conservative.

**Table 2: Statistics Describing the Jackson Risk Taking Propensity Scores**

|                    | American | Finnish |
|--------------------|----------|---------|
| Mean Score         | 9.5      | 7.3     |
| Standard Deviation | 5.2      | 4.0     |
| Minimum Score      | 0        | 0       |
| Maximum Score      | 19       | 19      |
| Number of Cases    | 209      | 434     |

The results of an ANOVA between the American and Finnish samples are given in Table 3.

**Table 3: An Analysis of Variance Between American and Finnish Responses**

Dependent Variable: The Jackson Risk Taking Propensity Score

| Source      | Sum of squares | DF  | Mean-Square | F-Ratio | p    |
|-------------|----------------|-----|-------------|---------|------|
| Nationality | 686.63         | 1   | 686.63      |         |      |
| Error       | 12515.24       | 641 | 19.53       | 35.17   | .000 |

This result emphasizes the differences between the nationalities in risk taking propensity. T-tests were also used to explore the similarities and differences in mean scores between U.S. and Finnish respondents. Table 4 shows the t-test results of U.S. and Finnish respondents. A similar significant difference was again found between American and Finnish entrepreneurs, small business owners and managers.

Table 4: T-Test for Differences in Mean Scores

| Group    | Mean | N   | SD   | t    | p    |
|----------|------|-----|------|------|------|
| American | 9.53 | 209 | 5.19 |      |      |
| Finnish  | 7.33 | 434 | 3.99 | 5.42 | .000 |

The mean scores by gender are given in Table 5. American males proved to be much more inclined to take risks compared to the more risk-averse Finns. A significant difference at the .000 level was found. Nevertheless, Finnish females did not differ significantly from their U.S. counterparts. Our results agreed with the bulk of the previous studies conducted to determine whether females would differ in risk taking. Namely, that females appeared to be less likely to take risks than men. On the basis of our study, both U.S. and Finnish females scored lower than corresponding males. Though, in the Finnish sample the difference was very minimal. On the other hand, our results partly depart from the findings of Masters & Meier (1988), who found no difference in the risk taking properties of female and male entrepreneurs. In our sample American male entrepreneurs scored much higher than American female entrepreneurs, but the Finnish sample did not reveal any difference in men's and women's risk taking inclinations.

Table 5: T-Test Results for the Differences in Mean Scores by the Sex of Respondent

| Group            | N   | Mean   | SD    | t     | p    |
|------------------|-----|--------|-------|-------|------|
| American Males   | 143 | 10.287 | 5.087 |       |      |
| Finnish Males    | 324 | 7.355  | 3.869 | 6.151 | .000 |
| American Females | 66  | 7.894  | 5.075 |       |      |
| Finnish Females  | 110 | 7.236  | 4.360 | 0.876 | .383 |

Tables 6a, 6b and 6c describe the results of the three t-tests on risk taking propensity scores between respondents having different business goals. The two subgroups were Profit and Growth Oriented and respondents whose primary objective was to Provide Family income.

Table 6a: The Business Goals (Profit &amp; Growth Oriented Respondents)

| Group                              | N  | Mean   | SD    | t     | p    |
|------------------------------------|----|--------|-------|-------|------|
| Americans Pursuing Profit & Growth | 99 | 11.576 | 4.899 |       |      |
| Finns Pursuing Profit & Growth     | 89 | 9.888  | 4.476 | 2.469 | .014 |

Table 6b: The Business Goals (Family Income Oriented Respondents)

| Group                            | N   | Means | SD    | t     | p    |
|----------------------------------|-----|-------|-------|-------|------|
| Americans Pursuing Family Income | 110 | 7.69  | 4.760 |       |      |
| Finns Pursuing Family Income     | 335 | 6.669 | 3.573 | 2.069 | .040 |

Table 6c: The Combined US and Finnish Data on Business Goals

| Group                                | N   | Means  | SD    | t     | p    |
|--------------------------------------|-----|--------|-------|-------|------|
| Respondents Pursuing Profit & Growth | 188 | 10.777 | 4.767 |       |      |
| Respondents Pursuing Family Income   | 445 | 6.921  | 3.919 | 9.781 | .000 |

In this aspect, a significant difference was found between the groups. Thus, on this evidence, it appears that both in the USA and Finland, entrepreneurs and small business owners pursuing Profit and Growth have a greater propensity to take risk than entrepreneurs that are merely oriented towards providing family income.

Next, we explored the differences between U.S. and Finnish respondents who had started their own businesses. This is indicated in Table 7.

Table 7: American vs. Finnish Business Founders

| Group                      | N   | Mean  | SD    | t     | p    |
|----------------------------|-----|-------|-------|-------|------|
| American Business Founders | 156 | 9.609 | 5.306 |       |      |
| Finnish Business Founders  | 353 | 7.263 | 3.941 | 4.951 | .000 |

A significant difference at the .000 level was found between U.S. and Finnish entrepreneurs and small business owners who had set up their own businesses. The Americans were clearly more positively oriented towards taking risks.

Let us shift our focus on those entrepreneurs who had either bought their current businesses or inherited them. In Table 8, the results of the t-test suggest that American Non-Founders tend to have a greater inclination to taking risks as compared to Finnish respondents, but no significant ( $p < .01$ ) difference was found here. Paradoxically, Finnish Non-Founders scored slightly higher than Finnish Founders.

Table 8: American vs. Finnish Non-founders

| Group                 | N  | Mean  | SD    | t     | p    |
|-----------------------|----|-------|-------|-------|------|
| American Non-Founders | 53 | 9.302 | 4.886 |       |      |
| Finnish Non-Founders  | 80 | 7.638 | 4.240 | 2.026 | .045 |

## DISCUSSION

The study revealed that U.S. entrepreneurs, small business owners and managers were more inclined to risk taking than their Finnish counterparts. The Americans scored higher also when the respondents were classified according to different background variables, such as business goals, sex, and roles in start-ups. Thus, it seems that Finnish entrepreneurs, small business owners and managers are more conservative and risk-averse than their U.S. counterparts. As regards the gender of the respondents, American males were found to have significantly higher scores on risk taking propensity than Finnish males. Nevertheless, there was no significant difference between female U.S. entrepreneurs, small business owners and managers and their Finnish female counterparts.

Our results agreed with most of the previous studies conducted to determine whether females and males would differ in risk taking propensity. Namely, females appeared to be more cautious to take risks than men. On the basis of our study, both U.S. and Finnish females scored lower than corresponding males on the risk taking scale (even U.S. females scored higher than Finnish males!). Though, in the Finnish sample the difference was minimal. On the other hand, our results depart from the findings of Masters & Meier (1988), who found no difference in risk taking inclinations between U.S. female and male entrepreneurs.

Perhaps this big difference in risk taking propensity between these two nations can be attributed to cultural aspects as well as the personal characteristics of the individuals. We should keep in mind that national cultures are also important moderating variables affecting especially attitudes, leadership qualities, and general risk taking behaviour (Masters et al., 1988, 210). Furthermore, researchers have sometimes tended to explain human behaviour in different situations too exclusively from the personal characteristics of the individuals, rather than as a response to the characteristics of the situation (Delmar, 1994, 739). In reality, human behaviour is highly directed by the situations in which people find themselves (Bandura, 1982; Kahneman & Tversky, 1984). Risk taking behaviour not only depends on entrepreneurs' inclination or propensity for risk taking, but it is usually conditioned by the fact that people find themselves in situations in which they are more prone to risk taking. The difference from "the risk taking ability" approach is that here the behaviour is also directed by external factors (e.g. the threat of market collapse etc.) that influence the perceptions of the entrepreneur. Thus, the situation frames the entrepreneur into a certain kind of behaviour.

Not surprisingly, profit and growth oriented respondents in both countries scored remarkably higher than those whose only target was earning family income. The lower Finnish mean scores can be explained by the fact that the latter subgroup was more dominating. As the final conclusion, we want to emphasize that Risk Taking Propensity should perhaps be studied using a framework including both psychological and sociopsychological dimensions. Situational and cultural factors should not be left aside since our personalities and entrepreneurial behaviours are always products of both inherited and learned aspects.

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# MINORITY PURCHASING PROGRAMS: A REVIEW AND PROGNOSIS FOR THE FUTURE

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## ABSTRACT

*New developments in the minority purchasing programs and possible changes in legislation have created challenges for the next decade. A review of past and present issues relevant to these programs includes examining purchasing studies, judicial decisions, legislation, disparity studies and the future survival of minority business programs. This historical perspective helps illuminate the issues surrounding these controversial purchasing programs. Research into both the efficacy of these programs as well as corporate efforts in these programs points out the need for continuing research if these programs are to be effective and efficient in whatever form they take in the future.*

## INTRODUCTION

The purpose of this literature review is to suggest relevant parameters for discussing the future of minority business programs. The current legislative and court climate is suggesting possible changes which may impact significantly on the way that minority programs in general are developed and supported, both in the public and private purchasing sectors. A synthesis of the literature will examine pertinent constructs to measure these programs. In addition to the literature review, a historical review will also be presented for background purposes.

## OVERVIEW OF MINORITY OWNED ENTERPRISES

The survey of Minority Owned Enterprises conducted in 1987 showed minority firms in the United States grew from 741,640 in 1982 to 1,213,750 in 1987. The majority of growth was seen in the Asian, Pacific islanders and the Hispanic communities. African American firms grew to 424,165 in 1987. Gross receipts of all minority firms totaled \$77.84 billion. All business firms in the United States had receipts totaling \$1.99 trillion. Minority firms contributed 3.9 percent of the national total.

In 1987, 93 percent of the minority-owned firms were classified as sole proprietorships. An examination of the statistical data revealed approximately 80 percent of these firms had no paid employees and 79 percent had gross receipts under \$50,000 (Final Report 1992).



## STATE OF MINORITY-OWNED BUSINESSES

Minority businesses are currently under siege by Congress. There are groups demanding affirmative action because of a protected status. Other groups oppose affirmative action because they feel it results in reverse discrimination (Robinson, Allen & Abraham, 1992). Some individuals feel affirmative action has evolved into a long-term social engineering program of goals, timetables, quotas, set-asides and other forms of preferential treatment (Fixing Affirmative Action, 1995).

The question remains, should government or corporate America give minorities a competitive edge in the bidding process and/or should they go to special lengths to develop and support minority suppliers? Further, should set-asides be available to minorities? These questions were answered in the affirmative during the 1970s and 1980s. However, in the 1990s, the same questions are once again resurfacing (Lowrey, 1995).

In 1988, President George Bush commissioned a study of all federal programs which fostered growth and development of minority business. The Commission's recommendations to the President and Congress included training programs in the Small Business Administration's regulations and procedures, a national investment strategy providing access to capital and credit for minorities, a standard certification process, mentorship programs by prime contractors, and data collection on U.S. export activities. Finally, the Commission recommended that an independent body be established to monitor and review federal and private programs used to promote and develop underutilized businesses (Final Report, 1992).

Congress went on to pass Public Law 103-355 which provided support to minority-owned businesses in contracting with the government (H. 4263, 1994). However, the Republican Congress is presently waging an all-out assault on affirmative action programs. There are some who believe if minority businesses are going to be competitive, the playing field must be level for everyone. Supporters and critics alike believe some changes need to be made in the existing programs. However, these change can be accomplished without the complete dismantlement of all minority programs (Whigham-Desir, 1995).

## THE MINORITY BUSINESS LEGISLATION

Sweeping changes in the purchasing process have created challenges for the 1990s. Both public and private purchasing departments may be responsible for the success or failure of a minority business program, depending on how they approach and define the problem and how well it is supported. Federal, state and local governments, for example, are presently contracting with consultants to conduct disparity studies in order to strengthen current laws (Ward, 1995).

The first act was initiated by the federal government. Executive Order 11458 was signed by President Richard M. Nixon. Its primary purpose was to assist in the growth in minority-owned businesses. An advisory council was appointed for the purpose of serving as a source of knowledge and information to minority enterprises. The promulgation of this order resulted in the creation of the Office of Minority Business Enterprise. This agency was

under the jurisdiction of the Department of Commerce. This office provided assistance in administrative costs to organizations offering support in business development for minority enterprises.

The Federal Procurement Regulations, Title 41, Public Contracts and Property Management of the Federal Procurement Regulation was amended on August 25, 1971. This amendment revised all federal contracts in excess of \$5,000 including a clause which encouraged contractors to utilize minority business enterprise on a best effort basis.

In October 1971, the Nixon Administration strengthened the minority business program by issuing Executive Order 11625, "Prescribing Additional Arrangements for Developing a National Program for Minority Business Enterprise". This order strengthened the authority of the Secretary of Commerce in the development of minority business enterprises. The goal was to provide technical and managerial assistance as well as increase the participation of federal departments and agencies.

The Office of Minority Business Enterprise, in April of 1971, signed agreements with the National Aeronautics and Space Administration (NASA) and the Maritime Administration to increase the use of minority suppliers.

The Public Works Act of 1977 authorized a 10 percent set-aside for minority business enterprises. The Commerce Department's Economic Development Administration (EDA) assumed the primary responsibility for implementing the 10 percent requirement.

During the Carter Administration, Public Law 95-89 was signed on August 4, 1977. This law increased loan disaster assistance and set-aside programs for small and minority businesses. The law also provided an amendment to the Small Business Act requiring a separate reporting on minority businesses to the House and Senate Sub-Committees.

On September 12, 1977, President Jimmy Carter requested the Office of Federal Procurement revise regulations regarding contract awards. This revision would include a plan by prime contractors to involve minority business enterprises (MBEs) and small businesses. Federal Departments were also requested to double their purchases of goods and services from MBEs within a two-year period.

Public Law 95-507 was signed by President Carter on October 24, 1978. This law contained several amendments to the Small Business Act and Small Business Investment Act of 1958. The primary purpose of this law was to increase the size of the Minority Enterprise Small Business Investment Companies (MESBIC) programs and the individual size of the MESBICs.

The law also extended some legislative control over the 8(a) program administered by the Small Business Administration. The law provided if bidders were awarded a contract in excess of \$500,000, (\$1,000,000 for the construction of a public facility), they must submit a plan for setting percentage goals for the utilization of small business concerns and those small businesses considered economically and socially disadvantaged (Giunipero, 1980). In December 1982, President Ronald Reagan endorsed the Minority Business Development Agency which was established in 1969 as the Office of Minority Business Enterprise and renamed in 1977. President Reagan pledged that his administration would support the creation of 60,000 minority firms. In addition, the President promised to support the

expansion of 60,000 existing firms over the next decade. President Reagan also promised about \$1.5 billion in credit assistance and \$300 million in management and technical assistance (Heiman, 1983).

The Appropriation Bill of 1987, Section 1207, stated for the years of 1987 through 1989, the Department of Defense was required to establish a goal of 5 percent for contracts and subcontracts for small and disadvantaged minority businesses (Hartmann, 1988).

In the Fall of 1988, Congress and President George Bush, established and charged the Commission on Minority Business Development with the responsibility of reviewing the operations of all Federal programs which promote the development of minority business. Congress also enacted Public Law 100-535 which dealt with the interests of women in business. A final report was issued in 1991 by the Commission on Minority Business Development. The report addressed capital, subcontracting, certification, entrepreneurial development, international trade, perception and the need for an independent assessment body (Final Report, 1992).

On October 13, 1994, President Clinton signed House Bill 4263 which became Public Law 103-355. This law sought to raise contracts reserved for small businesses from those under \$25,000 to those under \$100,000. This change would provide small businesses with procurement dollars in the amount of \$1,000,000 to \$2,000,000 annually. The civilian agencies would not be required to meet the 5 percent minority contracting goal which presently only applied to the Department of Defense. Other changes included a 10 percent price differential which could be used to increase minority businesses, but perhaps the most important change was the creation of a Small Disadvantaged Business program. This program was very similar to the current "Section 1207" Department of Defense program (H. 4263, 1994).

Senator Bob Dole and others have introduced a bill in the 104th Congress, 1st Session, to prohibit discrimination and preferential treatment based upon race, color, national origin or sex. This bill specifically targets Federal employment, contracts and other federally conducted programs or activities. A similar bill is being introduced in the House of Representatives (S. Equal Opportunity Act of 1995, 1995).

Congress saw the need for minority business procurement and enacted several measures, including the Small Business Act of 1976, and the Local Public Works Capital Development and Investment Act of 1976. Section 8(a), under the Small Business Act, established a policy which required governmental agencies to contract with minority businesses (Plass, 1991).

Set-aside programs were developed on two theoretical assumptions. The first was a redistribution of government business which would increase the long-run competitive advantage of contract dollars to minority-owned firms. Secondly, minority business owners, acting as subcontractors, would develop contractual obligations with prime contractors. As a result of these obligations, the minority business owner would have the benefit of a role model and the opportunity to develop business acumen (Rice, 1992).

During the 1970s, some businesses challenged the Small Business Administration's program because race was used as a basis for awarding construction contracts. Under

pressure, the Small Business Administration revised and incorporated standards related to race or ethnicity.

*Fullilove v. Klutznick* challenged the right of equal protection. The issue was a 10 percent set-aside under the Public Works Employment Act. The Supreme Court found nationwide discrimination in the construction industry. This ruling justified creation of federal minority preference programs (Platts, 1991).

Set-aside programs took a dramatic downturn when the Supreme Court ruled on the case of the *City of Richmond vs. J. A. Croson Co.* The Appeals Court ruled against the City of Richmond's construction program. The Supreme Court upheld the lower court's judicial decision that the city ordinance was unconstitutional. The ordinance stated 30 percent of the total dollar amount of city construction contracts should be awarded to minority firms (Tummala, 1991). The Court declared racial classifications should be subjected to "strict scrutiny". Croson challenged the use of racial classifications in any government program (LaNoue, 1992).

Therefore, as a result of the Croson decision, the establishment of set-aside percentages must be related to past records. Set-aside policies should provide flexibility in projected goals to ensure periodic reviews. Set-aside percentages should be based on a product-by-product or industry-by-industry goal. This procedure prevents the possible distortion of percentage goals (Rice, 1992).

As a direct result of the Croson decision, criteria for justifying and adopting the continuation of set-aside programs has become necessary. The constitutionality of hundreds of set-aside programs was questioned. The court's decision has made disparity studies a necessity in state and local governments (Landers, 1989).

The City of Atlanta reviewed and assessed the City Minority and Female Business Enterprise Program. The study presented economic data including incomes of blacks and whites. It specifically noted nearly 67% of the population received only 47% of Atlanta's total income. The study employed a "utilization percentage ratio" and found marketplace discrimination in bidding opportunities and bonding. Manipulation of bids occurred, price discrimination existed with suppliers, customer/end user discrimination was found, and financing was insufficient. Finally, negative attitudes by customers and buyers tended to stereotype minority business owners (Rice, 1992).

The latest affirmative action case, *Adarand Contractors vs. Pena*, the Supreme Court considered whether the government set-aside contracts should be limited further (Lowrey, 1995). On June 12, 1995, the Supreme Court ruled Congress must meet a tough legal standard to justify contracting preference or hiring based upon race. This ruling is sure to provoke court challenges against governmental preference programs and fuel the debate on affirmative action. Justice Sandra Day O'Connor was the author of the majority opinion. Justice O'Connor declared a "strict scrutiny of all governmental racial classifications is essential". This, essentially, would distinguish between legitimate programs that redress discrimination and programs that "are in fact motivated by illegitimate notions of racial inferiority or simple racial politics." The jury is still out on what kind of effect this decision will have on the vast federal network of programs (Barrett, 1995).

The Croson decision has seemingly had a large impact on minority purchasing programs at least with respect to set asides and the purchasing programs of state, local and other government entities. Chambers (1991) concludes that the Croson decision was devastating to MBE set-asides, but that governments now had more definitive rules on how to create set-asides that can be upheld. Ward (1994; 1995) has reviewed the impact and found mixed faults with some programs abolished, and others maintained. In addition, he notes the large increase in the use of disparity studies. Theodore (1995) has examined the impact of one set-aside program still in operation in Chicago, illustrating the impact they can have on a local economy. Rice (1995) has examined the use of these studies and has identified several problems with disparity studies as practiced that may leave them open to judicial review. Finally, at least one state, Louisiana, has seen a ruling against set-asides and similar programs. A recent court ruling has stated that the 1984 Minority Business Enterprise Act violates the 1974 constitution.

While Croson has created some furor in the set-aside programs practiced by mainly state and local governments, the Department of Defense 5 Percent Minority Purchase Goal has also come under attack (Menestrina, 1991). In a scathing attack on the program, Menestrina documents five myths about the program and suggests a series of improvements. These include, revisiting the goals and measuring different outcomes, improving data collection, allowing partnerships, dropping SBD set-asides, among others.

#### RECENT RESEARCH IN MINORITY PURCHASING ACTIVITIES

Since many changes have occurred in the minority business programs during the 1990s, business acumen becomes a valuable asset when a minority owner navigates through the purchasing process. Companies are looking at ways of improving their minority business purchasing programs for a variety of reasons. Some may attempt to meet corporate goals, while others may feel it's a social responsibility or just good business. Therefore, the minority business owner's success may come through understanding how buying decisions are made. While most of the historical research has centered on governments and their purchasing processes, certainly a market for some minority vendors, of equal importance are the efforts of corporate America to support and develop minority businesses. Much of the research in minority purchasing activities focuses on corporate initiatives. The major papers are discussed in some detail below.

Giunipero (1981), based on his dissertation research, identified four corporate social responses to minority purchasing. The first was awareness. Upper management must recognize that a minority purchasing program is necessary. Program commitment comes in the form of a formal policy statement.

The second response is commitment. Organizational resources are committed. Corporate goals are set in the form of minority purchases or dollars. A coordinator is appointed, if corporate resources permit, to act as an identifier of information sources and vendors to monitor purchases.

The third response is implementation. In this stage, both purchasing and nonpurchasing personnel are trained in developing and conducting business with minority vendors. Also, performance appraisals are based upon achievement of corporate purchasing goals.

The last response is monitoring and planning ongoing programs. Growth in the minority purchasing program is achieved by increasing minority vendors and developing long-range plans. Some companies provide special payment terms, broaden product specifications, assist minority vendors in securing government loans and provide financial aid through the Minority Enterprise Small Business Investment Companies. Sourcing techniques were developed through corporate directories, brochures and pamphlets, and advertising in minority publications.

Finally, programs were effectively monitored by the establishment of departmental goals. These goals are periodically reported to the minority purchasing coordinator and monitored by top management (Giunipero, 1981).

In 1989, a study was sponsored by the Center for Advanced Purchasing Studies. The primary goals of this study were to determine the impediments of minority purchasing programs, survey how and to what extent minority businesses and purchasing personnel differed on these impediments, determine which activities to overcome impediments were used by minority vendors and which were preferred by purchasing personnel, and identify which criteria were used by minority businesses and corporate purchasing personnel to evaluate the success or failure of program. The last objective was to determine the rank of business values and business value similarity in the purchasing process.

The findings indicate MBEs participating in purchasing programs face a higher set of transaction costs (the administrative costs of conducting business) than do the larger corporate purchasers. These costs relate to dealing with large bureaucratic purchasing units, maintaining quality and performance, business survival, eliminating the possibility of unethical behavior, sending informational brochures and dealing with a sometime hostile environment.

MBEs also favor activities designed to overcome transaction costs. The activities include the improvement of internal monitoring of the purchasing programs, improving the search procedure which makes it easier for the MBEs and corporate purchasing personnel to find one another, and offering financial, technical and managerial assistance to establish work relationships with the corporation.

Both purchasing personnel and MBEs agreed that a better basis for program evaluation will be established by increasing buyer portfolios of MBE suppliers and vendors. The least desirable criterion by both parties was the necessity of fulfilling federal quotas.

Differences were also found in responses related to corporate job titles. Individuals responsible for implementation of programs were less enthusiastic about activities than managers, corporate staff personnel, or corporate executives. This could be due to higher transaction costs by these individuals.

Finally, the minority respondents were well educated. Many reported higher levels of graduate-degree completion. The chosen career as an entrepreneur could suggest advancement in large firms was blocked, or a number of other rationales such as just a

preference to be on their own. Also, the average corporate buyer tends to have a shorter tenure on the job than does the minority vendor. This turnover could contribute to some of the problems MBEs face in dealing with corporate purchasing personnel.

Recommendations were made to improve the direction of these MBE purchasing programs. The first was to make a greater effort to implement the programs and reduce the transaction costs by MBEs and corporate purchasing personnel. This included reducing the complex programs, a better qualified pool of MBEs, improved negotiations, encouraging trust and keeping lines of communication open in both directions.

The second recommendation is to shift transaction costs away from MBEs and corporate purchasing personnel by uncoupling the decision to contract from the higher costs of execution and the monitoring of the contract. This could be done by absorbing the costs through administrative or staff units outside of purchasing. Further these costs could be absorbed by an effective minority purchasing council. Transaction costs could be absorbed through membership dues (Dollinger and Daily, 1989).

A longitudinal examination of the challenge and approaches to purchasing from minority-owned firms was performed by (Pearson, Fawcett and Cooper, 1993). This study examined the impediments inhibiting viable relationships being formed between corporate purchasing personnel and minority businesses. This study used the (Dollinger and Daily, 1989) study as a basis to establish possible trends over time.

The findings revealed that corporate purchasing personnel and minority businesses viewed business realities differently regarding buyer/seller relationships. Further, minority businesses viewed impediments as greater barriers than corporate purchasing personnel. There was a general agreement between corporate purchasing personnel and minority businesses regarding the need to form binding relationships. Minority businesses also need to become more aggressive in pursuing contracts with corporations. Findings also showed both groups are more aware of circumstances that have contributed to barriers in the past (Pearson, et al., 1993).

Minority supplier development will become an integral part of a corporation when the value of the program is documented as a corporate asset. If minority supplier programs survive, in the context of making a contribution to the corporation, the value must be measured and communicated. There are five components which are critical to the development of minority business programs. These components are strategic planning, supplier identification and development, buyer education, program structure and measurement, and internal and external communications (Moore, 1993).

The task of making an effective procurement program and minority vendors is not easily answered. A way to model a successful program is by devising creative approaches in working with minority vendors that will bring added value to the company. Toward that end, Auskalnis, Ketchum and Carter (1995) conducted a best practices study of companies who had minority business programs. A total of 188 respondents to a questionnaire as well as 12 case studies from those respondents are reported. The authors came up with 12 recommendations to improve corporate practice in minority purchasing and supplier development. Not surprisingly, much of the suggestion overlaps the points made by Giunipero (1981).

## WHAT IS THE FUTURE OF MINORITY VENDORS?

From a research perspective, we have some insight on those companies who have well developed strong minority procurement programs. However, as Auskalnis, Ketchum, and Carter (1995) point out, there is a real question on the role of mentoring and how it is done. Given the overall movement in many industries toward reduced supplier bases and different kinds of relationships with suppliers, the how and why of supplier development and the differences in dealing with minority suppliers becomes a major issue and contributor to successful minority supplier programs. Other research initiatives are possible and warranted, such as how can companies define when and where to initiate minority supplier initiatives, and how can minority suppliers use their new found expertise to expand their own businesses.

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# TECHNOLOGICAL TRANSFORMATION PROCESSES AND ORGANIZATIONAL LEARNING -LIMITS TO COLLABORATION

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## ABSTRACT

*The article highlights a surprisingly unsuccessful case on how a crafts oriented company tried to build up biotechnological competences through a joint development project with a research based pharmaceutical company. The failure will be explained due to incompatibility of the routines for organizational search and technological learning. The empirical data consists of a series of interviews conducted over two years from 1992 to 1993. Empirical data further include written material, such as company presentations, annual reports and the company history written by the daughter of the founder (Andreasen, 1984). The paper is a reinterpretation and revision of a chapter in my Danish Ph.D. thesis (Norus, 1995) about technological learning strategies and implementation of biotechnology in small and medium-sized firms.*

## INTRODUCTION

In the process of technical transformation, the management of technological learning is an important aspect of organizational change. For decades, neoclassic economic theory has treated technological change in organizations as a black box. A growing interest in technological change and economic growth has outlined a superficial functionalist view on the processes of technical change, perceiving business firms as following a specific technological trajectory defined by the set of routines and competences generated over the years (Nelson & Winter, 1982; Dosi, 1982).

Organizational competences are to be conceptualized as institutionalized bodies of knowledge, or routines, determined by norms and values originating from professional training systems and institutions. Hence, future decisions concerning technological choices are constrained by organizational routines developed in the past. Therefore, we must view firms as embedded, or specialized, in certain technological repertoires, or paths, that keep them relatively rigid in relation to the implementation of new technologies (Teece et al., 1990; Karnoe, 1995; Nicolini & Meznar, 1995).

Which trajectory to follow is determined by external relations, i.e. formal and informal networks. Thus, the links between individuals, institutions and business firms are important analytical benchmarks, as individual behaviour and interaction form the institutional and industrial patterns that constitute a given technological trajectory. Therefore, we will emphasize social interaction, i.e. interaction binding individuals to individuals, individuals to institutions, and institutions to other institutions (Fruin, 1994; Granovetter, 1992). Emphasis

should be given to the role of individuals or groups of actors, e.g. communities of practitioners in order to identify historical paths in the deployed strategies for search and learning (Constant, 1984; Teece et al., 1990; Rosenberg, 1994; Fouts & Brown, 1995).

#### AN ACCIDENTAL MEETING WITH BIOTECHNOLOGY

Since 1934, Rynkeby has been a product oriented firm with no formal research activities. Technological and engineering problems are solved through extensive network relationships with the Danish dairy sector and machine shops. Over the years, these relationships have evolved, partly due to careful recruitment of dairy technicians. In 1977, the technical director of Rynkeby, a trained engineer, met an old student acquaintance who worked at Novo Nordisk<sup>1</sup>. Talking about their jobs, they also discussed the possibilities of producing protein enriched foodstuffs through the traditional enzymatic process, hydrolyzation. Novo had developed an enzyme, alkalase, that could be used as a catalyst for protein enrichments.<sup>2</sup>

The technical director convinced the owner of Rynkeby, Dagmar Andreasen, to initiate a development project aimed at creating a line of protein enriched fruit juices for the Danish health care sector. The project appeared promising, not only would a protein enriched juice address certain nutrition problems in the elderly care sector, but could also shorten hospital stays for patients, who had undergone surgery. Furthermore, the protein might have other applications (e.g., for pharmaceuticals and as an ingredient in a variety of foodstuffs). Finally, idealistically, the owner of the company believed that, in the long term perspective, the protein might help to solve some of the third world countries' hunger problems (Andreasen, 1984).<sup>3</sup>

In developing the project, Rynkeby had to establish some research and scientific alike relationship to the world's largest single manufacturer of industrial enzymes, Novo Nordisk. Novo Nordisk was to assist Rynkeby technically in building an experimental plant. From this point, Rynkeby should be able to handle the development of a large scale production plant. Since the enzyme alkalase was a well known product, and the process of hydrolyzing soy protein were well described in scientific journals, both Novo Nordisk and Rynkeby thought that development project would only take a few months. Instead it took Rynkeby seven years to learn to master the process. Then the project was stopped despite the fact that Rynkeby had produced loads of hydrolyzed soy protein and launched a series of juices. At that time, Rynkeby's existence was threatened because the protein project had attracted all available resources for years. Rynkeby had forgotten to keep up and develop its "old" core competences.

#### FAMILY BUSINESS

*"My Mother didn't start the company to make money for herself. She started the company in order to utilize a raw material that otherwise would have gone to waste". (Interview with Dagmar Andreasen, former owner of Rynkeby).*

Rynkeby Juice Company was founded in 1934 by the couple Inger Lykkegaard and Rasmus Rasmussen in the village of Rynkeby in Funen, a year with an exceptionally generous

apple harvest. Both were born into entrepreneurial families, and Rasmus was the joint owner of the local metal shop, Rynkeby Maskinfabrik. Being smallholders, the family ran a large household but was unable to utilize the large quantity of apples which they harvested. Seeing all the apples go to waste bothered Inger, particularly in a period of economic recession. Therefore, it seemed more than accidental when the Association of Fruit Growers in Denmark organized a one day course in the production of apple juice in a neighbouring village.

Inger Lykkegaard attended the course, and the following week she established a small production of apple juice, but she had no intentions of expanding her activities to build a company. Rather, like other large households at that time she only intended to produce juice for family consumption. Her idea was to hand over the practical experience to her neighbours and let them make use of her relatively simple tools developed in the machine shop. Nor should the apples of the neighbouring households go to waste. But the neighbours were not interested in making apple juice. However, they liked to drink the juice, deliver the apples and pay the expenses for squeezing the juice out of the apples and pouring it into bottles. Based on the concept of "salary juice", a "primitive" interchange system of goods, a seasonal firm was initiated. The concept of "salary juice", which doesn't exist anymore, meant that the suppliers (households) received juice in return for delivering apples. The surplus was sold to customers in the town of Odense, and later to a retail shop in Copenhagen.

Since the family was already engaged in a metal shop, it was obvious to develop some of the tools and machinery in this shop. However, Mr. Rasmussen, senr., found it a waste of time and resources to develop these tools in the metal shop, but his two sons walked around in the production plant solving technical problems, and acquiring expertise in solving the problems related to the tools applied and technological bottlenecks. They used their experience to improve the tools cumulatively through incremental innovations of the process technology, innovations which they developed in the machine shop. The strategy was based on learning-by-doing, focusing on the development of juice squeezing techniques (Arrow, 1962; Rosenberg, 1982).

The sons were successful and started to sell equipment to other smallholder juice companies that emerged in the 1930s and during World War II. At that time Mr. Rasmussen, senior., invited his sons to become joint owners of the metal shop, and a parallel partnership between the companies was formalized. This technological partnership came to an end after World War II when highly specialized German and Swiss firms took the pace by introducing large scale equipment and process technologies. The era of the smallholder juice companies, to which Rynkeby belonged, came to an end.<sup>4</sup>

## COORDINATION OF MARKET RELATIONS- AN INSTITUTIONAL PROCESS

In 1953, a generational change took place, and the owner's daughter took over the company.<sup>5</sup> She faced two major challenges: improving the image of the products and responding to the rapid technological change. Meeting these challenges required rationalizing of production and expanding the market.

The problems related to production were solved by launching a series of fruit juices. Especially black currant juice became a major core product during the 1950s. Moreover, Rynkeby used free capacity in the production plant to produce stewed fruit and jam aimed at dairies for the production of yoghurt.

It was no easy task getting the consumers to accept the new juices. It had always been Rynkeby's principal concept not to add any flavours, colourings, or preservatives to the juice. This was not, and still is not, the norm among juice companies. Even though everybody agreed that the new juices from Rynkeby tasted better, was of a higher quality, and the price was almost identical with that of other products, the consumers and the shopkeepers were not interested. Therefore, Rynkeby had to target its product towards a new group of consumers by establishing contacts to the catering officers in hospitals and old people's homes. The Danish health care sector became Rynkeby's major customer and as a spin-off effect, the firm was able to reach consumers in general when they were in contact with the health care system. These contacts have been maintained over the years, and Rynkeby is still the major supplier of juices to the Danish health care sector.

In establishing contact to the catering officers at Danish health care institutions, Rynkeby got closer contacts to their customers than had it focused exclusively on retail sale. The firm acquired insight into the eating habits of older people and patients, habits that often turn into deficiency diseases. The close network relations to the health care institutions legitimized the implementation of the biotechnological project.

#### ROUTINIZATION OF TECHNOLOGICAL LEARNING

*"Every time we have invented new machines, equipment and processes we have learned something. But we have never been able to sell our knowledge. Often we have witnessed that our competitors have imitated us successfully and turned our inventions into innovations," Dagmar Andreasen (1984:100).*

Competition and rapid technological change in the juice industry forced Rynkeby to invest continuously in new process equipment. However, the conditions for investing in the necessary technology were not always present but the problems were solved through the development of new process technology in user-producer (Lundvall, 1985; 1992) networks, especially to dairies, and machine shops producing machinery and equipment for dairies. Therefore, to ensure the exchange of experience and knowledge, Rynkeby deliberately employed dairymen and dairy technicians. This networking was not a oneway relationship from which only Rynkeby benefitted. The firm also solved some very important development problems for the dairy sector, e.g., within the production of fruit yoghurt.

Rynkeby got the idea to develop a process that would allow dairies to produce fruit yoghurt in a sterile environment. The whole project took place as a learning-by-using oriented technological strategy (Rosenberg, 1982). The purpose of the project was to enable Rynkeby to fill jam into a special metal container that could be fitted directly onto a dairy machine producing yoghurt in continuous batches. The development of the hardware was coordinated

with a major dairy equipment producer, Pasilac.<sup>6</sup> The process innovation was adjusted by Rynkeby to fit into the local dairy in Tyrstrup.

The division of labour was organized in a way that left it to Tyrstrup Dairy to market the new fruit yoghurts, whereas Rynkeby produced the jam. Through this development project, Tyrstrup dairy held the position as the leading producer of fruitbased yoghurt in Denmark for a long period.

The explanation behind Rynkeby's external network relations to dairies and machine shops closely connected to the dairy sector was the almost identical nature of the production equipment. Moreover, traditionally Rynkeby has employed a large number of dairymen and dairy technicians, and personal relationships have promoted these networks which have been reinforced by a shared set of values for how to solve technical problems based on a common educational background. At the same time, this specific generation of dairy technicians developed a collective strategy in response to anticipated problems concerning their traditional job markets in the beginning of 1960s. Therefore, the close collaboration between Rynkeby and the local dairies in the neighbouring towns can be interpreted as the creation of an internal job market. Add to this that both industries had emerged from the co-operative movement and thus shared the same destiny and antecedents (Rosenberg, 1994).

This shared set of values legitimized the institutionalization of a set of routines and practices for search and technological learning. The strategic decision-making concerning technological development were based on a learning-by-doing and learning-by-using philosophy. No formal research networks were established prior to the implementation of the biotechnological project. This does not imply that Rynkeby was unfamiliar with new scientific knowledge, merely that research was left to supplier networks.

From a resource perspective (Pfeffer & Salancik, 1979; Pfeffer, 1987), the extensive local networking activities with the dairy sector concerning technological development and technical problem solving in the early phases of Rynkeby's development, combined with the close contacts to the hospital, (which added to generate a positive image), can be seen as the means of producing necessary resources for surviving in the larger context. The local environment of businesses and institutions is interpreted as a mediating meeting place, or an experimental laboratory, where new ideas can be launched and tested before they are exposed to the larger national context.

### THE PROTEIN PROJECT

#### "TECHNOLOGICAL TRADITIONALISTS" GO FOR THE BIOTECHNOLOGY

*"I expected that it would have taken maybe half a year before we could handle the process, so I supported Ole Moller. At that time, I didn't have a clue of the task we went into. Nor did Ole Molter. Today, seven years later, we are able to manufacture a protein drink.... We have later learned that large multinationals with huge financial resources and the best R&D facilities have tried -and failed "(Dagmar Andreasen, 1984:103)*

The implementation of the protein project was in harmony with the basic ideas of Rynkeby, developing high quality products which from a nutritious perspective were healthy. Even the attitude of finding alternative ways of utilizing raw materials more "rationally" to avoid wasting foodstuffs was respected. Add to this that the process of hydrolyzation was well documented in scientific journals. Since 1963, Novo had produced the enzyme "alkalase".<sup>7</sup> Rynkeby had strong traditions in the development of process technologies and could make use of its strong network relations in the dairy sector. Therefore, nobody viewed it as a serious problem to upscale the process from an experimental test plant to a large scale production plant.

When the project had been approved, the technical director was made the head of a small development group, and not until the production plant was about to be established was a production manager brought to the company from the outside. The development group exploited existing facilities, laboratories, sales-force, and the machine departments. In almost any sense, the protein project was fitted into the existing organizational structure from the very beginning.

Before the development group was formalized, the management of Rynkeby announced its intentions - internally as well as externally. The project was treated as a golden egg about to hatch. From all over Europe, important industrial leaders came to Rynkeby to see how this small "aggie company" was about to develop the foodstuffs of the next century. Rynkeby used the project to demonstrate its superiority over its competitors and its ability to match almost any challenge in the business. These arguments helped legitimize the project's implementation and justify its incorporation into the existing organizational structure.

Nobody regarded the new "research based" network relations with Novo Nordisk as a problem. Novo Nordisk was treated and regarded as having the same institutionalized behaviour as other external partners. This was indeed a misinterpretation that caused problems due to the mismatch of mutual expectations.

## THE JOINT PROJECT

The cooperation with Novo meant that indirectly Rynkeby was coupled to the evolving field of biotechnology at a very early stage. The development of industrial enzymes is one of many promising areas of biotechnology as enzymatic processes make it possible to upgrade raw materials and turn them into finished products. These enzymes offer alternative ways of making products that previously could only be manufactured by conventional chemical processes. From a nutritious point, industrial enzymes enable companies to make new, better, and more accurate products.

The area of enzymology and the development and production of industrial enzymes have become a Danish specialty thanks to an exceptional institutional climate and historical circumstances. The pioneering research in enzymatic processes in yeast and barley in the 1870s at the Carlsberg Laboratory was the starting point (Holter & Moller, 1976). Moreover, Chr. Hansen's Laboratory was the first company in the world to launch an industrial enzyme - chymosin in 1874.<sup>9</sup> This has led to a growing interest in research and development of enzymes

from both public and private R&D institutes, and in turn to a demand for engineers, pharmacists, and laboratory technicians with basic skills in enzymology.

Later on, Novo Nordisk took over the leading role of Chr. Hansen Laboratory and, has by far become the world's largest producer of industrial enzymes. According to the Kirk-Othmer Encyclopedia of Chemical Technology, Novo Nordisk has taken one-third of all available industrial enzymes to the market place from 1950 to 1993.<sup>10</sup>

Evidently, not only a new technology was about to be implemented but also a completely different type of company to which Rynkeby was about to establish new relations, a company that solved technological problems through scientific solutions. Moreover, a company that had internalized R&D departments which had institutionalized a set of practices and relationships with the scientific community. The everyday living is set on formula.

### FROM THEORY TO PRACTICE - TURNING THE STONES

The task of bringing the process of hydrolyzation of soy protein from an experimental plant into a production process proved more difficult anticipated.<sup>11</sup> Novo Nordisk assisted in setting up an experimental plant and helped producing protein by having a technician on site. The opinion of Novo Nordisk was that from that point Rynkeby should be able to handle the project, and assistance was reduced to advisory consultancy over the phone and, of course, access to buy the required amount of enzyme.

According to Novo Nordisk's on site technician, Novo allocated more attention to the project than was usual for similar projects.<sup>12</sup> This is not Rynkeby's opinion. Its version of the story is that Novo Nordisk deserted the project when realizing all the non-scientific problems connected to upscaling the process. Moreover, Novo Nordisk had problems producing a homogeneous quality of the enzyme, resulting in that the enzyme added a bitter and unpleasant taste to the juices.

It is beyond doubt that the bitter taste was caused by the break down of soy protein into chains of peptides. Peptides that appear at the end of the chains will per se be bitter. As to the unpleasant taste, the two companies are of a different opinion. Even though Novo Nordisk had scientific evidence to support their arguments, they replied by accusing Rynkeby of having stolen the idea.

There are two ways of interpreting the conflict. First of all we can look at the project in a sort of chronological order from the perspectives of the companies involved. The enzyme that Novo was selling was as such a finished product. Therefore, Rynkeby was regarded as one of many customers. Moreover, the enzyme alkalase is only one of many industrial enzymes marketed by Novo. From the point of Rynkeby, this was not the case. They had to build up new technological competences in order to develop a series of new products. Therefore, they had to start from scratch. Thus, the two companies' preconditions, attitudes, and interests underlying the collaboration were very different. Second, the two companies have different traditions for developing new products and processes. Novo Nordisk is a research dominated firm, whereas Rynkeby is based on craftsmanship and learning-by-using. Over time, both



companies have institutionalized traditions of stability and mutual trust relations between business partners.

The problem about the bitter taste was only one of many practical problems. According to almost all of the informants, it was in the intersection between the theoretical possibilities and the more production specific problems where the protein project ran into serious problems. Because of the novelty of the basic idea behind the project, it was impossible to find experts possessing the skills, or experiences, necessary to upscale the process. Therefore, all practical problems had to be solved through trial-and-error processes.

When a problem was solved, the development team happily claimed that it was only a matter of weeks before Rynkeby would be able to handle the process, and then new problems occurred. The optimistic and enthusiastic tone was undiminished and the project was allocated more and more resources. After a while, however, the positive attitude within the organization started to cool off.

*"At a certain point, money managed the project instead of the idea...A firm like Rynkeby that has existed for 60 years has its ups and downs. The protein project was no exception. When we have faced a crisis, we have reduced costs. We have never had a project like the protein project which has been more favored in terms of money at the expense of other projects. We had to do it that way. But at a certain point, you are forced to make a decision. Therefore I'm sure that internal problems made us decide to stop. The organization couldn't handle it anymore. We couldn't raise the necessary capital. If we could have found the money internally, we would have continued..."*

*When the expected earnings didn't materialize and expenses constantly increased, we faced internal problems, especially with our catering sector that traditionally has earned the money. Even though the project primarily was aimed at these people, they felt their resources were wasted". Knud Jespersen, Head of Quality Dept.*

Due to internal pressure, Rynkeby marketed three protein enriched juices before the development project was completed. The taste of the juices differed from one batch to another, and both their protein percentage and quality varied greatly. Rynkeby did not realize what kind of product they had developed and the salespeople marketed the juices through the traditional channels, the catering officers within the health care system. In hospitals and other health care institutions, beverages are served by nurse's aides and their preference was clear: they preferred the traditional juices and as a result, there was no demand for the new juices.

In the mid-eighties, the Danish health care sector was subject to major budgetary reductions, and since nobody seemed to know anything about the protein enriched juice, and the price was twice that of traditional juice, it was the first product to be cut out despite the fact that doctors, who had examined the protein enriched juice, had demonstrated that feeding patients who had undergone surgery protein enriched juice would reduce the number of days they would have to stay in hospital. Thus, the juice could have been used positively to reduce the high welfare costs. Instead, the juice was difficult to get hold of at the hospital pharmacies, as the pharmacists did not regard it as a drug and therefore were unwilling to keep it in stock.

During this period of having difficulties in selling the products, Rynkeby actually succeeded in solving the technical problems and produced loads of protein for inventory. Some protein was sold to a Dutch meat factory, and some was used for the three new protein enriched juices.

All in all, Rynkeby had developed a promising product of which many people had great expectations, but in which no consumers seemed interested. The sales organization followed the same procedures as when selling traditional juices. However, it must have been clear that the product was completely different from traditional juices. Nevertheless, when potential customers, interested in using the protein as an ingredient, asked questions about the technical specificity of the products, the sales department was unable to furnish them with the necessary information.

After this during 1984, the project was gradually put to an end and the involved employees allocated to new activities. Today, 10 years later, only one of these employees still works at Rynkeby. Even today they believe in the idea. They argue that Rynkeby launched the product too early. And they all agree that a technical sales organization should have been established and the activities should have been separated in a subsidiary. This was impossible as the project was to be regarded as Rynkeby's contribution to the survival of mankind.

### HISTORY REPEATS

*"I can still have a good laugh that our small "low technology" firm was able to develop a protein project. And we reached the same result in seven years as thirty people did afterwards at Novo Nordisk during a five-year period." Niels Østerberg, Division Manager in Rynkeby*

When the project was stopped, Rynkeby tried to sell its knowledge and machinery<sup>13</sup> but neither Novo Nordisk, MD Food nor Arhus Oilmill was interested. Why should a company invest in process equipment to implement a project which was well known from a theoretical perspective. The knowledge that Rynkeby had gained was regarded as useless and worthless. They could themselves create the whole process, even better than Rynkeby which was without a formal research base.

Nevertheless, Novo Nordisk took up the project and started from scratch to develop a process. The development project was separated in a special division, "Food ingredients Team". The aim was identical to Rynkeby's, to develop a series of juices with a protein content of 3.5%, corresponding to that of milk. Moreover, Novo Nordisk shared the idea of developing a product that could be sold as a food ingredient, and of course they wanted to develop some pharmaceutical products.

After five years, the Food ingredients Team had developed a process for producing hydrolyzed soy protein under the brand name Pro-Up. Over a five-year period, Novo Nordisk invested approximately 75 million DKK compared to the 15 million DKK Rynkeby invested over a seven-year period.

Today, the production plant is today located at Novo Nordisk's site in Copenhagen. The subsidiary of Novo Nordisk, Ferrosan, has launched a series of juices that are marketed under the brand name Top-Up. Pure protein is also sold as a semi-manufacture for producing juices and syrups. But the Food ingredient Team did not survive as an autonomous group at Novo Nordisk. The dream about making a food ingredient and some pharmaceutical products was not realized.

According to Rynkeby, the result of Novo Nordisk is not impressive, even though Novo Nordisk claims to have developed a better product of a different chemical structure. According to Rynkeby, the juice merely tastes better because Novo Nordisk has added artificial flavours. This was impossible at Rynkeby. Under no circumstances would the owner agree to any compromise on this vital issue. Why develop a health product and then later destroy it by adding artificial flavours? No way.

## DISCUSSION

*"The social construction of business structures and practices means that not only are they a product of collective beliefs, conventions and moral codes which vary between societies, but also the nature of economic practices and ways of achieving success are, dependent on dominant conceptions of economic practices and rationalities" (Whitley, 1992a:123).*

One must admit that from a superficial functionalistic (rational) view on technological change, the case of Rynkeby should have been a success, a role model for small and medium sized Danish firms in how to take risks and manage technological development and change (Kvistgaard, 1990). It turned out not to be.

Even if the protein project had succeeded, such a techno-economic analysis would have lacked central elements about the nature of Rynkeby, and maybe also the nature of Novo Nordisk. Our argument is that the hidden explanations of the failure have to do neither with the problems related to the manufacturing process nor with the problems of marketing.

The case of Rynkeby demonstrates the internal and external problems of implementing a new technology. Financial and marketing problems, as well as internal organizational resistance to organizational change, prevented Rynkeby's exploitation of biotechnology at a very late stage in the development phase. The organizational routines that over time had become institutionalized as norms and values had embedded the firm in its specific business logic/recipe similar to the other cases presented, a logic different from its supplier's, Novo Nordisk, R&D-based recipe/logic rooted in routines. Therefore, the case can be seen as an illustration of the dynamics and tensions between two very different business logics/recipes that were brought to collaborate.

The inherent contradiction in this case is that the decision to build up biotechnological competences can be interpreted as both right and wrong. It was perfectly in line with the basic attitude of the firm - to produce healthy juices with no artificial flavouring - and the new products were launched to public institutions in the health care sector, a sector within which Rynkeby, for historical reasons, had access to information about user needs. The decision was

also in line with the central element of producing better products and that raw materials should not go to waste.

From a business systems perspective, the case demonstrates two main points: 1) That economic actors are socially embedded, or situated, in a way that constrains and guides patterns of economic action that are considered more appropriate and likely than others; and 2) History matters, or more precisely, the history of the firm paves the way for future economic decisions. On the one hand, this functions as a limitation when path-breaking activities are needed. On the other hand, past decisions and routines map out and keep the firm in a defined technological trajectory, or a set of core competences. The protein project was doomed to fail due to central aspects concerning the nature of the firm which were underestimated (Whitley, 1992b).

Focusing on the technological learning strategies and the composition of competences of Rynkeby, it was not perfectly clear that Rynkeby should build up biotechnological competences into their organization. Nor was the partnership with Novo Nordisk obvious as the two companies are part of different business recipes. Whitley (1992a) claims that due to the social constructiveness of the business recipes, the best practice is context dependent. Rynkeby aimed at a best practice, where competitiveness and resource dependent aspects led the company into a technological trajectory guided by the establishment of user-networks to the public health care institutions and to metal shops with strong ties to the dairy sector. A co-operative system has thereby appeared, a system which has reinforced network relations which have turned out to combine learning-by-using with an incremental technological philosophy.

On the other hand, Novo Nordisk is institutionalized in a business recipe where technology is equal to research and development. The establishment of research relations is regarded as a necessity to an image that signals three important messages: growth, science, and vision.

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#### ENDNOTES

- 1 One interesting thing about the engineer from Novo Nordisk is that he meanwhile has become a professor at the Technical University. As a professor he has been a key figure in the conceptualization of two public R&D-programmes; the Danish Biotechnological R&D Programme 1987-1990 and The R&D-programme in Food Technology 1990-1994.
- 2 Alkalase was first brought to the market in 1963. The process of hydrolyzing soy protein was well described in scientific journals.
- 3 For a period in the 1960s, Dagmar Andreasen was a member of the Parliament, representing the Social-Liberal Party. Moreover, she has written several books and articles on social issues.
- 4 The number of companies in Denmark was reduced from more than 100 in the 1940s to 2-3 in the beginning of the 1990s.

- 5 In 1981, the Danish brewery Carlsberg took over 50% of the shares. Carlsberg's engagement in Rynkeby was the beginning of a deliberate generational change over a period of 12-15 years. In 1986, the owner stopped as managing director, and in 1988, she sold the last of her shares. Today, Rynkeby is fully owned by Carlsberg, but it has full autonomy over its decisions concerning investments. Carlsberg does not intervene or interfere with Rynkeby, as long as the firm yields a reasonable profit.
- 6 Pasilac later on changed its name to Danish Turnkey Dairies (DTD).
- 7 In 1963, Novo Nordisk launched Alkalase, which is of special interest for this paper (Kirk-Othmer Encyclopedia 4th ed., 1991:570).
- 8 The machine department at Rynkeby was established after the partnership with the family metal shop came to an end. The machine department is the closest that Rynkeby came to having established a formal R&D department.
- 9 Chymosin is used in the production of cheese. Chr. Hansen's Laboratory extracted Chymosin from calves' stomachs.
- 10 Recently Novo Nordisk has placed the world's largest production plant for industrial enzymes in North Carolina, USA.
- 11 As shall be clear from the case description, the story reminds you of Kidder's (1981) book: *The Soul of the New Machine*. The only important difference is that the computer team in Kidder's book succeeded in their task.
- 12 One of the interesting things about this lab technician is that he later on became production manager at Rynkeby. Today, he is employed as production manager at Danpo - a poultry factory.
- 13 To compare, Rynkeby invested approximately . 15 mio DKK.

# LARGER CUSTOMERS, LARGER ORDERS: IMPLICATIONS FOR SMALLER SALES DEPARTMENTS

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## ABSTRACT

*Small firms often attempt to grow by attracting bigger customers and/or larger order sizes. A frequent strategy is to add additional sales personnel with the explicit goal of capturing larger buyers. Hypotheses useful in defining the impact of this type of strategy on sales departments in smaller companies are presented.*

*Predictions are tested with data collected from a national sample of sales engineers in the construction services industry. Results suggests that with larger customers come the need for more formalize sales behavior, a greater incidence of team selling, more reliance on approved vendor lists and formal bidding, and a greater role of price negotiation in vendor selection. Adjustments in sales management practice necessary for successful selling to larger buyers are also recommended.*

## INTRODUCTION

A common benchmark in the evolution of many smaller firms is the successful attraction of larger accounts. Successful recruitment of the first large order is very frequently the turning point for a smaller business. The principal thesis of this article is that the solicitation of larger customers by smaller companies has dramatic impact on the small firm's selling operations and upon sales management practice within the small company. In general, three major changes are expected. The firm's selling process, that is, the manner in which the affected sales people conduct their activities, will change. The buying process, that is, the way in which the customer interfaces the selling organization, will also change. And finally, the combined impact of these two changes will necessitate significant alterations in selected sales management activities.

## A REVISED SELLING PROCESS

When pursuing the larger buyer, the sales person may, for the first time in the selling organization's history encounter a customer buying-center (Hunt & Spea, 1995). The new sales person must now interact with a group of people, each with a unique role in the buying organization, but all influencing vendor selection. Buying centers in larger organizations demand more systematic selling procedures (Wotruba & Simpson, 1992). As the seller



approaches larger customers, increasingly formal and sophisticated buying centers become the norm.

The need to deal effectively with sophisticated buying centers will require adjustments in the selling process, as least as that process applies to larger accounts. Hanks and McCarrey (1993) argue that as an organization experiences increasing market acceptance it must scale up by hiring additional sales people, and this growth will involve increased formalization of organizational processes. Sales people will be called upon to make presentations to buying center members, utilize team selling approaches to successfully interact with different members of customer buying groups, and develop more systematic procedures for use with each step of the selling process.

Other researchers have uncovered the link between sales growth and formalization of the selling process. Increased formalization may manifest itself in greater emphasis on written proposals and/or oral presentations (Roebuck, Sightler & Brush, 1995). Wotruba and Simpson (1992) describe the need for a special sales organization to accommodate large accounts.

Team selling is also a characteristic of the selling process directed at larger customers. Sales teams are needed to address the different specialties within the customer's buying center, as well as to reflect different organizational levels of participants in the purchasing process. Research suggests that larger buyers expect increasing levels of service, and the sales team is the vehicle for meeting those service demands (Moon & Armstrong, 1995).

That the selling process becomes more systematic when larger buyers are the focus is evidenced by considerable contemporary investigation. Dion, Easterling and Miller (1995), studying large purchasing organizations, concluded that sales person personality type does not significantly contribute to performance with larger buyers. And earlier (1986), Avila and Fern found larger buyers demanding more predictability and control in the vendor selection procedure.

The need for sales presentations, team selling and systematic selling procedures derive from the presence of buying-centers within larger customers. Smaller buyers do not have elaborate or sophisticated buying-centers. Vendor selection among small accounts is less formal and involves fewer people; perhaps only one person. However, as the smaller sales organization seeks growth by selling to larger accounts these new sales process factors become significant. Three hypotheses impacting upon the small organization's selling process appear relevant:

- |     |  |
|-----|--|
| H1: | As smaller organizations pursue larger customers and larger order sizes, sales person contacts with buyers will include formal sales presentations.  |
| H2: | As smaller organizations pursue larger customers and larger order sizes, sales person contact with buyers will include team selling.                 |
| H3: | As smaller organizations pursue larger customers and larger order sizes, sales person personality will become less important in the selling process. |

## CHANGES IN BUYER BEHAVIOR

Larger businesses often play by different rules than smaller ones when choosing suppliers. Purchasing becomes more formal and subject to procedure. Only selective and preapproved vendors may be allowed to bid. Carefully determined criteria are then applied in choosing among the approved suppliers. The successful small company must know how to meet the demands of an organized buying process that so often characterizes larger customers (Brown & Brucker, 1990). Perhaps the ultimate in formalized buying behavior associated with larger customers is the process known as systems-selling (Dunn & Thomas, 1986). Under a systems-selling arrangement a large customer promises to buy a significant portion of its requirements from a single supplier in exchange for the supplier's promise to maintain a ready inventory and to provide continuous service. The buyer is not troubled with locating and negotiating with multiple suppliers or initiating a new contract with the same vendor whenever inventories need replenishing. And the supplier, assured of a large buyer with reasonably predictable inventory needs, is able to reduce its total safety stock inventory and reduce the number of sales calls. Frequently system-selling participants are linked electronically (Lenders & Fearon, 1993). Both parties reduce paperwork and administrative expense.

When systems-selling works both parties do benefit. But, as desirable as a systems-selling arrangement might be for a small business seeking bigger customers and larger orders, it undoubtedly brings pressure on prices and gross margins. Part of the expectation from the purchasing organization is that the supplier will rebate some of the savings which accrue from the system-selling arrangement in the form of price reductions. Indeed, the system-selling negotiation may involve open books, that is, sharing pricing information, information on costs and margins. The inevitable result for the seller trying to secure a system-selling contract with a large buyer is a greater emphasis on pricing as a supplier selection criteria. Expectations about bid solicitation and pricing emphasis can be stated as the following two hypotheses.

- |     |  |
|-----|--|
| H4: | As smaller organizations pursue larger customers and larger order sizes, potential customers are more likely to invite or solicit bids only from preapproved vendor lists. |
| H5: | As smaller organizations pursue larger customers and larger order sizes, the role of pricing becomes increasingly significant to buyers.                                   |

A central premise of this writing is that smaller companies pursuing growth by attempting to attract larger customers will encounter purchase behavior different from that characterizing smaller customers. Differences occur principally because of the existence of large customer buying centers and because of system-selling arrangements between large buyers and their carefully selected suppliers.

A second tenant of this writing is that buying centers and system selling also bring about changes in the selling process that are unique to larger customers. Buying centers increase the need for more formal sales presentations and team selling, while decreasing the importance on sales person personality. System-selling results in bid invitations only, and greater pressure on pricing.

## TESTING THE MODEL

Respondents from a national survey of building contractors who offer asphalt paving services provided data to test the model's five hypotheses. Asphalt paving contractors were selected because their sales people serve both large developers and small builders. Among buyers in this industry there is a clearly identified separation between large, multi-unit commercial developers and small infrequent buyers needing a small project.

With the exception of the few large organizations that build and maintain State and municipal roadways, paving contractors are an industry of small companies, most with annual dollar sales of less than 10 million. The number of sales persons employed by each organization is also quite small.

From two waves of mailings to a national probability sample of 500 building contractors, 146 sales engineers responded, an acceptable response rate of almost 30%. Sample members were systematically chosen from a sampling frame of 1500 addresses acquired from a commercial mailing list vendor.

Twenty-one survey items were used to collect data surrounding the study's five hypotheses. All were derived from previous studies (Withey & Panitz, 1995; Spiro & Weitz, 1994.) Lists of the study's measurement variables appear with the findings in Tables 1 and 2. Sixteen items were used to measure selling process variables, hypotheses 1, 2, and 3. Five items capture the two buyer behavior variables, hypotheses 4 and 5. Survey items were presented across five point Likert scales. The entire scale contained a .88 coefficient of internal consistency.

Respondent organizations were sorted on the basis of numbers of sales engineers and type of customer served. Eighty one were part of sales organizations with fewer than four sales people who call on small commercial accounts. Sixty five were part of organizations with four or more sales people that dealt with large commercial contractors. T-Tests of means were applied to each survey item to determine significant differences between the two groups. Results of the analysis are contained in Tables 1. and 2.

## FINDINGS

Sales people working in larger sales organizations do appear to be involved in formal sales presentations with their customers to a greater degree than are members of smaller sales organizations. Higher mean scores were recorded by the larger sales organization on all three indicators of the need for formal sales presentations. One of the three indicators, the incidence of making presentations in the customers' office, was statistically significant at the .05 level. The other two indicators, while not statistically significant, did have mean scores in the direction of the hypothesis. Overall, the data do offer support for the first hypothesis: as smaller organizations add sales people in an effort to attract larger customers, contacts with buyers are likely to include formal sales presentations.

The proposition regarding the use team selling also received support from the data. The need for multiple sales calls and the incidence of presentations to several individuals are

also more likely to characterize larger sales teams than smaller ones. As Table 1 indicates, mean scores are not different enough to reach high levels of statistical significance, but are clearly in the direction of the hypothesis.

**TABLE 1**  
**SALES PROCESS DIFFERENCES**

| Hypothesis and Item   | Small Dept. (N=81) | Large Dept. (N=65) |
|---|--------------------|--------------------|
| <b>H<sub>1</sub>: Formal Sales Presentation Needed</b>  |                    |                    |
| Lengthy Planning for Sales Presentation   | 4.35± 1.64         | 4.66±1.34          |
| Customer Has Facilities for Presentations*  | 3.67± 1.86         | 4.57±1.89          |
| Presentation Made in Customer's Office**  | 4.04± 1.99         | 4.35±1.85          |
| <b>H<sub>2</sub>: Sales Persons engage in Team Selling</b>                                    |                    |                    |
| Presentations to Several Individuals*   | 3.02± 1.64         | 2.53±1.92          |
| Multiple Sales Calls Required*  | 3.64± 1.78         | 4.22±1.99          |
| <b>H<sub>3</sub>: Personality and Non-Selling Activities Less Important in Buying Process</b> |                    |                    |
| Each Customer Requires a Unique Approach**  | 5.19± 1.15         | 5.33±1.51          |
| Vary style with situation**   | 4.82± 1.67         | 5.32±1.71          |
| Use Same Basic Approach to Most Customers**   | 3.39± 1.85         | 4.00±1.87          |
| Treat my Buyers Pretty Much the Same*   | 3.72± 2.06         | 4.38±1.94          |
| Change Presentation When Necessary  | 6.08± 1.09         | 5.93±1.12          |
| Easily Use a Variety of Sales Approaches  | 5.63± 1.30         | 5.40±1.38          |
| Can Easily change Sales Approach  | 5.43± 1.45         | 5.48±1.30          |
| Listen to Customer's Questions  | 6.58± 1.22         | 6.40±1.56          |
| Deviate from Planned Presentation to Answer Customer Questions'                               | 5.13± 1.68         | 5.09±4.67          |
| Observe Body Language*  | 5.48± 1.63         | 4.98±1.94          |
| Change Presentation Based on Customer Body Language/Facial Expressions*                       | 5.02± 1.87         | 4.61±1.86          |

\* P<0.1 \*\*P<0.05 \*\*\*p<.01 levels of significance

The notion of whether sales person personality diminishes as a small firm reaches out for larger customers turns out to be less than clear. Of the eleven variables used to measure this relationship, only four were able to significantly separate the two groups of sales people. Two support the hypothesis, two do not. As predicted, members of larger sales organizations take a more systematic stance with their buyers. More than their counterparts in smaller organizations, they claim to treat all prospects the same, and use the same selling approach

with each buyer. On the other hand, these same respondents also score higher on measures of adaptability and flexibility with buyers, suggesting their personality is important when reacting to prospective buyers.

Further, the two survey items addressing the issue of body language, while not significant discriminators across the groups, did produce responses in a direction opposite of that predicted. Reacting to body language signals from buyers is believed related to personality and was predicted to have a diminishing role as sales force size expanded.

Inconsistencies in the data from this study do not allow acceptance of the hypothesis that sales person personality becomes less important as small sales firms staff up to attract larger buyers.

The study tested two predictions relevant to the behavior of prospective customers as they are approached by smaller sales organizations seeking larger buyers. The first was the tendency of larger buyers to request bids from possible suppliers, the second was the prediction that price negotiation would become more significant to the buyer-seller relationship. Results are summarized in Table 2.

Table 2 data suggest that larger sales organizations do interact with buyers who solicit bids more so than do smaller sales groups. Of the four measures used to identify this trend, all but one produced mean responses supporting the hypothesis. Being on an approved vendor list, bring part of this bidding process, and being willing to reveal component parts of a bid were all characteristic of the larger sales group.

| Hypothesis and Item  | Small Dept. (N=81) | Large Dept. (N=65) |
|--|--------------------|--------------------|
| <b>H<sub>4</sub>: Customer Tends to Invite/Solicit Bids</b>            |                    |                    |
| Customer Will Invite Bids**  | 5.96±1.56          | 6.49±0.85          |
| Clearly show How Bid Determined  | 4.03±1.96          | 4.12±2.07          |
| Know How Customer Learned About Company                                | 4.30±2.12          | 4.23±2.03          |
| Company Will be Thoroughly Checked Out*                                | 4.44±1.75          | 4.73±1.74          |
| <b>H<sub>5</sub>: Pricing is more significant in purchase decision</b> |                    |                    |
| Importance of Price to Customer***                                     | 5.09±1.56          | 5.77±1.51          |
| *p<0.1 **p<0.05 ***p<.01 levels of significance                        |                    |                    |

Lastly, the one survey item used to measure the role of pricing in the purchase decision clearly differentiated between the two groups. Members of the large sales departments reported scores on this measure significantly higher than members of smaller departments. The hypothesis claiming increased significance of pricing by buyers interacting with larger sales departments is supported by responses from this group of sales people.

## IMPLICATIONS FOR SALES MANAGERS

Four of the five hypotheses examined in this study were supported. As smaller sales departments add additional members with the goal of attracting bigger customers, changes in both the selling and the buying process do occur. The selling side is marked by a greater incidence of formal presentations to prospective buyers and more reliance on team selling. Buyers rely more on a formal bid process and exert more pressure on price negotiations. The only proposition not fully supported by data in this study was the one alleging less importance to sales person personality as relations with larger buyers increase. Results on this issue were mixed; some personality variables were still relevant as larger customers were encountered, some were not.

Findings in this study conform well with the tenants of the buying center model and the concept of systems-selling. Sales presentations and team selling to multi-members of customer buying centers do become important when large customers are approached. And, consistent with system-selling, greater use of formal bidding procedures and more stringent price negotiations does occur with larger buyers. These findings suggest that new skills will be required of sales people dedicated to attracting larger accounts to their organizations. Further, changes in sales management practice can be expected to address the need for the acquisition of the new skills (Shipley & Jobber, 1994).

Thorough training in the theory and practice of buying center management and systems-selling will be a starting point. In addition, specific emphasis on professional proposal writing and techniques of effective oral presentation will be useful. Reward systems that encourage efforts to get the selling organization on approved vendor lists will be instituted.

Successfully attracting large accounts will also mean shifting pricing decisions closer to field sales people. Sales people representing smaller companies in search of large accounts will need training on how to negotiate price with large company buying centers. Understanding of and skill in price/cost analysis will be crucial.

It is anticipated that this study will provide impetus for future investigations on these same issues. Especially useful will be data from a broader range of industries so that extrapolations beyond the construction setting will be possible. Sales growth by attracting larger buyers is a goal a many smaller companies. Preparing for attainment of that goal will be assisted by continuation of research presented in this study.

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