PROFIT CENTRES AS BARRIERS FOR KNOWLEDGE SHARING

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Abstract

Large organisations are more and more subdivided in sections and profit-centres, of which the manager is responsible for the economic results of that division. When organisations are growing, the evaluation of performance at subsections emphasizes the focus for leaders and managers, and the perspective of the organisational identity may be challenged by sub-goals, which are barriers or directly counterproductive in relation to the goals of the total organisation. It could be a hypothesis that there is a paradox between the short term economic rationality and the effort to exploit and explore organisational knowledge in large corporations.

A number of issues on management of knowledge and knowledge staff are raised and discussed on the basis of two cases of knowledge-based organisations. The perspective is seen from a manager perspective both managers of the whole organisation and of departments and sections.

The knowledge sharing praxis described, and the perception of barriers are related to the structural conditions in growing knowledge-based firms with highly educated knowledge workers.

Keywords: knowledge sharing, managing knowledge workers, communication, networking, community-of-practice.

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Profit centres as barriers for knowledge sharing.

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Large organisations are more and more subdivided in sections and profit-centres, of which the manager is responsible for the economic results of that division. When organisations are growing, the evaluation of performance at subsections emphasizes the focus for leaders and managers, and the perspective of the organisational identity may be challenged by sub-goals, which are barriers or directly counterproductive in relation to the goals of the total organisation. It could be a hypothesis that there is a paradox between the short term economic rationality and the effort to exploit and explore organisational knowledge in large corporations.

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1. Introduction

In a management perspective the issues of knowledge management may be tied to a variety of different tasks. The knowledge sharing is related to ideas of communication, dialogues and organisational knowledge, but also to the ideas of coordination of the work of different specialised groups. The coordination of specialised efforts is part and parcel of the management issues of Taylor (1911) and in Greiners (1972) growth models. The difference in a knowledge perspective is tied to the difficulty of creating a very clear-cut vision of the cake to be divided in a division of labour. There is a need to communicate across boundaries of specialised groups, while the manager may not know exactly how to cut the cake between the participating employees, as she does not have the necessary insight and knowledge. When "Knowledge is of someone about something" (Tsoukas 2000 p. 105), then management is tied to organisational knowledge and to the management both of knowledge personnel and learning processes.

Such empirical problems help visualise some of the theoretical perspectives. Different types of knowledge sharing within groups and teams, as well as dependency on other groups are important for the coordination and management in organisations. The level of identity is focused in this article, to understand the relationship to knowledge sharing. The effort to share knowledge within a group, and the formation of Communities of Practice (Wenger 1998) is just one of the perspectives of identity and knowledge sharing, as to be able to use the experience and sticky knowledge. The level of identity affects the effort to communicate beyond the community and team, as well as to communicate with managers with a different background both in terms of education and experience.

There are different reasons for changing the focus of the group identity. The positive ways are tied to the creation of communities of practice, but at the same time, other barriers are developed in a process of distinguishing the "we" and the "others". When groups of identity are formed at lower level, some of the communication beyond the group is limited. Some reasons for this change may be economic profit centres; other may be subdivisions due to new organisations or to growth, where an identity and coordination to the large group is becoming increasingly difficult.

Growth pains of an organisation stress the emphasis on how to maintain communications and coordination beyond the narrow group. When organisations are growing there is a need to subdivide, and as an embedded part of the subdivision, there is a need to coordinate and communicate across barriers. The need on the one hand to create new identities with the subdivision and on the other hand to maintain the mutual communication is a fundamental part of management models. The knowledge management perspective is not new, but stresses the problems of communication and the types of rationality involved. The organisational and management problems of specialisation and coordination (Greiner 1972, Quinn 1988) are still valid, but the focus is more on what is happening in the drastic change periods, and how to create linkages and communication between groups.

On the basis of studies within high tech small firms in the 1990s (Mønsted 2003) the understanding of the rationale for small innovative firms was based on networks. The boundaries of firms are highly questioned as the relevant unit of analysis, as many projects are not possible to evaluate without an understanding of the network of partners involved (ibid.). The creation of synergies in partnerships is essential, and part of the possible development potential.

A number of issues on management of knowledge sharing and knowledge staff are raised and discussed on the basis of two cases of knowledge-based organisations. Both cases show problems of communication beyond the nearest groups, but for different reasons.

One case is a subsidiary of a multinational ICT supplier, and the changes in the identity and relation to customers and colleagues during a transition period from the bubble in ICT to the post-bubble period of economic tight management. A close contact with business development over a 3 year period, supervising a Master thesis interviewing, and some meetings and discussions in the firm are the basis for the information of the case-story.

The second case is a rapidly growing business school department, where the need to subdivide in different disciplinary groups changes the profile and even if it creates new identity and responsibility in subsections, it also creates barriers to knowledge sharing across the subsections. The fruitful proliferation of research programmes and new teaching programmes create new units of responsibility, and the rationale of the subunit, may not reflect a rationale of the whole department. Being part of the process of establishing the department, and being head of department for a 3 year period, the case-story has developed as a process in which I work.

The pressures and changing conditions are coming from different sources, but both growth and change of focus play an important role. In both cases identity and sharing knowledge are part of the internal solution and maybe the external problem.

2. Networking in the Knowledge economy.

In the international ICT supplier subsidiary, networking as a means to create customers on the long perspective was a part of the business development. The idea of creating connections, helping technical entrepreneurs, and thus creating the virtuous circle of stimulating growth with mutual obligations by making links to suppliers and venture capital, and by assisting entrepreneurs in difficult upstart periods may develop potential customers. If firms succeed, then they are good potential customers, and if they do not succeed, they are in technology firms somewhere else, and also with a good potential of being customers. The idea of giving away some of the servers, and using "free" time for bothe business developers and technical staff to help was seen as an investment in creating customers. This is a win-win strategy of giving away and creating social capital, and social obligations of repayment later by the clients. Such a strategy is based on a surplus, and on an idea of generating value in the long run.

In a strategic network perspective this is interesting, as the strategy of building up network obligations are developed in non-economic social-psychological relations, but here the economic value of networking is made explicit, though not easily measurable. The active establishment of networks in this process also generate a profile of knowledge of what is happening in the technology field, both with applications and with competitors. A few people and especially one very

active networker built up not only social obligations and thus potential customers, but also access to knowledge of the technology and competitors. The problems appeared, as this knowledge should be "transferred" to other sections of the Danish subsidiary. The active networkers were overloaded with knowledge and interpretations of potential work and customers, but had problems of creating meaning for the other staff to understand the potential, to get knowledge as to act on the dialogue.

At the extreme, the most active networker, wanted a "de-briefing gadget to unload all his information and knowledge to the others", as a "Matrix"-method of learning. The other sections did not have the same insight, as to understand what could be done on the basis of the information. They could not themselves turn this into meaningful knowledge to act on. The potential of technology and customer relations is not yet knowledge, and need knowledge in context to be acted on. The unit in Denmark at this level is a unit, where they find identity, and have both professional and social ties across the organisation. The relationships are stable enough as to allow for getting technical input from other sections of the subsidiary, and create mutual obligations of assistance. The focus is on the external boundaries of the firm, and on the possibilities of expanding business and differentiates to competitors.

Much of the potential developed could develop customers on the long run, but had difficulties of being really exploited by the organisation. The development of customers is only one of the parts of the process, and though it is difficult to measure and difficult to determine the timing for evaluating results, it is possible to monitor.

The case contains problems of

- transferring knowledge from persons to the organisation
- transferring networks from persons to organisation
- timing and evaluation methods

Combining networking and knowledge management opens the perspective of knowledge as a communication, being developed while communicating. Knowledge of customers and processes as personal knowledge is contextual and tied to the community of practice, and it is very difficult to communicate across communities, as the implicit understanding or knowledge of the communication is not available to create meaning out of the pieces of information.

The lack of clear evidence for "closed sales" in the quarterly reports due to the network strategy makes it vulnerable, when the economic crisis hit the sector of both hard- and software. Also in the crisis the virtuous circle is blocked several places. Fewer people are trying to become entrepreneurs, the market change and block, and venture capitalists withdraw. The synergy of the virtuous circle runs out of energy and a number of barriers emerge. It has become very difficult to get finance and to get the package or network around entrepreneurial projects to get over the initial stages. Even if most of the venture capitalists state that projects are much more serious and better prepared now than before the crisis, they still hesitate to invest. The entrepreneurs need the large firms as partners more than ever. But even large firms draw back, and say they cannot afford it for the time being.

The question is of course, whether the firms can afford not to do some of this type of business development. The initiatives basically have a longer time perspective of developing customers, and sowing with the purpose of harvesting later on. The idea of not sowing but only harvesting during a crisis is like going back to the stage of gatherers and hunters, and go harvesting during droughts, where everybody around does the same. A statement like "we cannot afford it", also assumes that it

is a luxury or social generosity, rather than interpreted into investments and part of a business strategy.

3. Growth in a cross disciplinary university department.

The department is created as a merger at the Copenhagen Business School in 1995. On the basis of initial discussions, the different sections decided to join in a new department of Management, Politics & Philosophy. The department of strategic management is merged with a group of philosophers, earlier located with the ICT department, and from a research unit 3 people were recruited to build up a political science or public sector and politics unit. A small centre for innovation and entrepreneurship was included as well. A few positions were allocated, and the merger was successfully supported in all subdivisions. Different initiatives to create a joint identity across the disciplines began. The effort was to create a joint platform of interest in management and leadership, and in the process relate the different disciplines to develop bridges across the disciplinary boundaries to create synegies.

Within academia the identity with professionals are often very narrow. There is a constant risk of creating openings between competing groups, where researchers could easily dig ditches. One strategy was to form joint projects across disciplines, and form other kinds of activities to glue people together across disciplines. The other strategy was to expand, both in terms of number of people, number of Ph.D. and external resources in order to avoid competition for resources between the groups. The formation of a doctoral school, at a time, where there were 6 Ph.d. students in the department was a clear motivation to get resources for scholarships. The Ph.D. students in Denmark are salaried young members of staff, and have an office and desk in the department, and this role make them an important part of the research environment. As young scholars they can move, and see perspectives across disciplines, and they do not have to defend old positions.

From the formation of the Doctoral School in Knowledge and Management in 1999 to 2001 the number of Ph.D. students rose from 6 to 19. In 2003 we had more than 30 Phd. Students attached. Some of these are industrial Ph.Ds and only part time in the Department and part time in the firm. Two large research projects, and a number of individual contracts created the economic basis for the rapid growth, and another section of Business Historians moved to the Department. From around 30 people, the department grew to over 100 including the part time project employees.

The two strategies of creating bridges across disciplines and growth have been very successful, and helped the department to form an identity as a joint department. Even if there are major differences between researchers in a very heterogeneous group, both in terms of methods and disciplines, the many young scholars and Ph.Ds, who are not so firmly tied to old boundaries of Social Science have managed to help create a joint identity and provoke new dimensions of the research. A number of books based on the multidisciplinary approach to themes such as: Management, Knowledge and trust became a part of the identity formation, and an occasion to form dialogues and new perspectives on leadership and management.

¹ Mønsted & Poulfelt (eds) 1997: Spørgsmål om ledelse (questions on management) Christensen, P. Holdt(ed) 2000: Viden Om . Ledelse, viden og virksomheden (Knowledge on. Management, Knowledge and the firm)

Bordum & Wenneberg (eds.) 2001: Det handler om tillid (It is all about trust)

The growth and size in itself, and a change of focus with a new head of department, has subdivided units to decentralise responsibility. From 2003 the 5 subunits have been relatively autonomous, dividing the department into groups of: 1) Management, Innovation and Knowledge, 2) Strategy, 3) political science and public sector, 4) Philosophy, 5) Business history. Recruitment and resources for travelling are subdivided in these sections, and a decentralised responsibility from the head of department implies that many of the cross-disciplinary activities and seminars have stopped. The doctoral school is still functioning across the units, and the group of Ph.d. students as young scholars try to keep going some kind of activity and seminars. The number of seminars has risen, and the tendency to feel obliged only to attend seminars in "your own group" is obvious. The doctoral school and an effort to have lunch together are essential occasions to meet, and an effort to keep up the dialogue across the subunits, which have to compete for positions and resources.

The success criteria are always individual in academia, and good research performance is evaluated in the annual performance assessments, done in a dialogue with the group manager or the head of department. Just now, from mid 2003 there is a very strong effort of streamlining evaluation methods and even if it is still internationally reviewed articles, other issues tied to teaching and to collaboration with the industry and society are added on. A new university reform stresses a number of production criteria for the scholars, also affecting the Ph.D. students, who have to teach and produce. The expectations to Ph.d.s beyond the thesis and their teaching, are to be able to generate research money afterwards, as there are very few positions in the department. The chance to continue is tied to performance in the external as well as in the internal system.

The problem in such a period is that the internal recruitment is now tied to the disciplinary groups, but the Ph.D.s who are finishing their Ph.D. were recruited as doctoral students on the basis of thei ability to bridge disciplines.

A division of labour, and subdivision of groups have replaced the fear of not being able to create a joint platform of identity,, where the identity is formed. There is then an immediate need to create communications and bridges across the groups, in order to keep the groups together in a department, which is growing to the size of a faculty.

The two cases are both concerned with the change from a relatively informal contacts and establishment of networking as a growth platform. It raises a number of questions as to the strategic networking and need for resources to this level of identity, which is discussed in the following.

4. Profit centres as barriers to communication

During the economic recession there is a heavy emphasis on short-term economic rationality. After some years of a discourse of the network society and the knowledge society, the efforts to share knowledge and to create new ideas in knowledge-based organisations seems to be a luxury, which is on top of "the real job". In advanced innovative or academic organisations the changes may not only change the focus, but also the new type of short time efficiency measures and the types of evaluation criteria may block knowledge sharing. The whole perspectives of the costs of ideas that

are not exploited seem to be stories that are told, but not listened to. Under economic pressure, the focus changes to the effort of finding the cash-cows, rather than exploring innovative ideas.

Large organisations are more and more subdivided in sections and profit-centres, of which the manager is responsible for the economic results of that division. The organising has implication for the interests in different types of knowledge, and may have some serious implications if knowledge about customers becomes individual or subunit property.

In the name of efficiency during the economic crisis in information technology, the large corporation develops further the subsections as "profit centres", which are not so much responsible for the Danish total branch, but as subdivisions responsible to the same subdivision at the European level. Each subdivision such as maintenance, repair, sales of units, consultancy each have their own targets and individual success criteria, and are evaluated as subdivisions in their performance relative to units in other countries.

Even if they work with the same large customers, they compete. The system of coordinating is developed, but not used. To the customer they appear to be one firm, but a case of conflict revealed some of the dilemmas.

The repair unit managed to repair one of the large servers at a large customer. The customer could postpone the investments. But the sales division has already prepared the sale, and were crazy on the repair, as they had hindered sales in reaching the quarterly targets. Repair had reached their target, and claimed the customer was happy, and would feel much more loyal nest time, when servers broke down.

A beautiful conflict of interests, revealing not only, that what they thought they had control of by having people responsible for collecting information on the large customers did not function. Subdivisions did not communicate on plans and potentials and developed problems in the relationships between the different subunits.

The economic conditions since the bubble burst has made it much more difficult for each of the units to meet the targets, staff is cut down and competition at all levels becomes important. The fight for contracts is fierce, and the focus on efficiency is at the subdivision and individual level. This can clearly be necessary, but the analysis raise the questions on whether this is an efficient strategy at the firm level, as a lot of potential business is not communicated to the relevant partners within the firm. Large customers have many contracts and contacts across divisions of the company. Customers may also expect that information provided to one unit is used the other subdivisions of the firm. If this communication about customers is blocked, then a lot of problems of creating synergy, and lots of potential business is lost. The barriers created by the need for efficiency at the sub-unit level, thus are the same that hinders effectiveness, and even efficiency at the firm level and the total brand.

The time perspective becomes a crucial dimension when an economic crisis limits the sales and cut the staff. The short time successes of closed deals per quarterly reports takes up the energy, and the longer time perspective of developing new customers becomes a "luxury", and something you may do if you can do it on top of the short term targets.

The organisational effort to centralise decisions and decentralise responsibility could be perceived as a paradox, but also as a puzzle picture, where both exist, but they are not visible at the same time. Management of knowledge workers are still in focus, but conditions are different than a few years ago, and the type of decentralised responsibility of self-managed knowledge workers appear to be measured much more on the basis of short-term economic successes.

Such processes raise a lot of questions of declining efficiency of the capacity of knowledge workers, if they are asked to be exploiting only, and not exploring new fields. The management of self-managed knowledge workers who know better than the manager, may be streamlined and overrule the potential capacity of the knowledge workers.

It could be a hypothesis that there is a paradox between the short term economic rationality and the effort to exploit and explore organisational knowledge in large corporations. The innovation management perspective of managing uncertainty on the boundary of what we know is challenged (Garud et al. 1997, van Andel 1992, Mønsted 2003) and knowledge sharing between departments and units change interpretation to a luxury of cross department communications, which you do even if the managers and knowledge workers do not know how to account for this time. The account for time may hinder cross unit ideas and communication, as it is hard to give priority to knowledge sharing outside the unit of the project where time is accounted for. Such problems are seen in consultancy firms (Poulfelt & Pedersen 2002) and seem to spread into research organisations as well.

The theoretical analysis is based on perspectives of organisational knowledge and communication in organisations (Tsoukas & Vladimirou 2001, Stacey 2001), where knowledge sharing is closely tied to communication and exchange, as well as creation of meaning. Given the barriers and the efforts to overcome barriers, the analysis is supplemented with networking strategies (Mønsted 2003), and types of efforts to use brokers and create aspects of cross-section projects to overcome some of the barriers both internally in the whole organisation and across organisations.

The knowledge sharing praxis described and the perception of barriers are related to the structural conditions in growing knowledge-based firms with highly educated knowledge workers.

5. Knowledge management perspectives

The cases both internally and externally could easily be interpreted in different perspectives such as: sales, strategy or networking perspectives. The knowledge management perspective is focusing on both what is knowledge? How is it created and how is it communicated? Access to customers and knowledge about customers is an essential knowledge both for individual sales agents, and especially for the organisation. If the knowledge about large customers remains individual, the potential for the organisation cannot be exploited.

The communication problem reveals many problems:

- the lack of sharing a specific type of knowledge
- problems of going from individual knowledge to organisational knowledge
- sharing knowledge across communities of practice and sub-divisions
- problems of joint branding of the firm and its "grey boxes".

Technical knowledge is the basis in technology firms, and selling technology need the technical knowledge, but also knowledge on customers, and how to handle the individual customers and specific people within a large organisation. The identification of customer needs and technical development is essential for all subdivisions to know, if activities should be launched.

Sales departments know that customer relations are essential knowledge features, and exploit this. But in the cases of large customers with a broad variety of tasks and services to be delivered, the joint effort of "what we can do for this customer" is essential. It may easily be lost in a fragmented number of individual tasks. It can be very expensive not to work on a joint strategy.

Knowledge in this context is not a "thing", and it is not in one form which can be translated into another form from tacit to explicit (Nonaka & Takeuchi 1995), but knowledge is communication and creation of meaning, in the form analysed by (Tsoukas & Vladimirou 2001 and Stacey 2001). The mutual dependency of the insight of the practice as a kind of tacit understanding is a basis for understanding information and fragments of information about customers, and as such it is essential for understanding the forms and possibilities of creating a joint platform to communicate about possibilities and perspectives, which are not yet, but could become knowledge. The ideas and projects, which are not yet knowledge, but represent potential knowledge and interpretations of different indicators of possible customers and technical possibilities is highly dependent on trust to both ideas and to people in the development process (Woolthuis 1999).

The knowledge management problems in the university department show some of the same features, as the focus in management is creating new units of identification. The coordination of the total unit is both essential internally, but also externally relative to other departments. The successful growth has created internal problems of one kind, but also generated resources, not only externally to the Business School, but also in terms of visibility to the general management of the school. The growth is evaluated as an indication of the innovation, entrepreneurship and partnerships to industry, and thus very positive success criteria at that level of the organisation. The discussion is how the different levels of success criteria and performance are related, and how they are co-productive or counter productive for the synergy and joint effort of the whole organisation. The subdivision of an interesting cross-disciplinary department is necessary due to size, but the problem is how to maintain both the depth of communicating on disciplinary research, and maintain a joint identity and communication to create new ideas on the boundary of the disciplines.

Competition is important, and stimulation of different close targets as well, but if the competitions move into the organisation and reduce the effectiveness to handle customers and students, then some of the competitive criteria are counterproductive. When organisations are growing and merging with new organisations, the evaluation of performance at subsections emphasizes the focus for leaders and managers to create bridges for synergy. The perspective of the organisational identity may be challenged by sub-goals, which are barriers or directly counterproductive in relation to the goals of the total organisation.

If knowledge is observer dependent, as argued both by Tsoukas (200) and Stacey (2001), then the management of customer relations and customer knowledge is difficult to share and make organisational knowledge, as it does not relate to the same practice of other staff. The problem is whether it is possible to create a joint platform of communication to create meaning in context.

6. Conclusion.

The article stresses the different reasons for changing the level of identity and the level and barriers of internal communication. The change in the focus affects both the formal and informal knowledge sharing and success criteria. The awareness for the level of concern for the synergy to be created, and the interdependency of different groups of knowledge workers are important for the understanding of knowledge management. The way of organising may open or directly block the communication of the essential difference, which makes a difference, as knowledge on customers is so much a competitive factor both between individuals, sub-divisions and firms.

The examples may be interpreted into classic management ideas (Taylor 1911, Yukl 1989) as the need to coordinate every time there is a specialisation or subdivision of a group. But the knowledge management perspective is tied to the need for coordination of knowledge, which is not well defined, but coordination and communication perspectives. The need for decentralised networking, not only coordination by managers, but networking of participating knowledge workers becomes a necessity for the coordination in such organisations of self-managed participants.

The crisis management of short-term harvests may provide immediate returns, but is revealing a serious of weaknesses and lost opportunities both in the short and the long run. Barriers to communications within the organisation create obstacles for communications. If essential communication is lost, then this is a very dangerous strategy.

Literature:

Det' et spørgsmål om ledelse.1997 Edited by Poulfelt, F. and M. Mønsted. Copenhagen: Samfundslitteratur.

Viden Om - Ledelse, viden og virksomheden. 2000 Edited by Christensen, P. Holdt. Copenhagen: Samfundslitteratur.

Det handler om tillid 2001. Edited by Bordum, A. and S. Wenneberg. Copenhagen: Samfundslitteratur.

Garud, R., P. Nayyar, and Z. Shapira. 1997. Technological Innovation: Oversights and Foresights. In *Technological Innovation: Oversights and Foresights*, edited by Garud, R., P. R. Nayyar, and Z. B. Shapira (Cambridge: Cambridge university Press).

Greiner, L. E. 1972. Evolution and Revolution as Organizational Groth. A Company's past has clues for Management that are critical to future Successmodels and growth? *Harvard Business Review*, 1972.

Mønsted, Mette. 2003. *Strategic Networking in small High Tech Firms*. Copenhagen: Samfundslitteratur.

Nonaka, I. and H. Takeuchi. 1995. *The Knowledge Creating Company. How Japanese companies create the dynamics of innovation*. Oxford: Oxford University press.

Poulfelt, F. and N. Jacoby Petersen. 2002. Knowledge Management in Action - A study of Knowledge Management Consultancies. Paper presented at Academy of Management at Denver.

Quinn, R. E. 1988. Beyond Rational Management. San Francisco: Jossey-Bass.

Stacey, Ralph D. 2001. Complex Responsive processes in organizations. Learning and knowledge creation. London: Routledge.

Taylor, F. W. 1911. The Principles of Scientific Management. New York: Harper and Brothers.

Tsoukas, Haridimos. 2000. Knowledge as Action, Organization as Theory: Reflections on Organizational Knowledge. *Emergence* 2, no. 4:104-112.

Tsoukas, Haridimos and Efi Vladimirou. 2001. What is Organizational Knowledge? *Journal of Management Studies* 38, no. 7:973-993.

Van Andel, P. 1992. Serendipity: "Expect also the Unexpected". *Creativity and Innovation Management*, 1992, 20-32.

Wenger, Etienne. 1998. *Communities of Practice. Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.

Woolthuis, Rosalinde Klein. 1999. *Sleeping with the Enemy. Trust, dependence and contract in interorganisational relationships.* Ph.D. Thesis - Enchede: Twente University.

Yukl, G. 1989. Managerial Leadership: a review of theory and research. *Journal of Management* 15:251-289.