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STRATEGIC TELEWORK AND THE CONCEPT OF FIT

Robert Thompson
Queensland University of Technology

Neville Meyers
Queensland University of Technology

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Robert Thompson
School of Management
Queensland University of Technology
r.thompson@qut.edu.au

Neville Meyers
School of Information Systems
Queensland University of Technology
n.meyers@qut.edu.au

Abstract

This conceptual paper puts research on individual teleworker outcomes in the context of an open systems model of organisation. It is suggested that the concept of fit might be a useful way of conceptualising the task of designing and implementing effective telework interventions. The paper explores the concept of career anchor (Schein, 1996; 1978) and its potential utility for helping establish fit between individual teleworker and telework context. The concept of career anchor may also help understand the often reported problems in the relationship between teleworkers and their managers. Career anchor may also help explain teleworkers reaction to organisational control systems. The paper includes initial research questions that will provide a program of future research.

Keywords: Strategic telework, fit

Telework in its various forms is an increasingly popular work design intervention. It provides a range of potential benefits (and challenges) for both individual employees and organisations, though the form of telework intervention may impact on the pattern of benefits and challenges (Kurland and Bailey, 1999). If the full potential of telework is to be realised much more attention has to be given to implementation issues, particularly the problem of selecting employees who are appropriate to telework as a work setting. In this context, Meyers (1999) suggested that everyone is not necessarily suited to this work option. The implication for researchers is to discover those characteristics of the individual and the work context that predict successful outcomes for both the individual and the organisation.

One more recent approach to maximising the value of telework arrangements has been to think about telework in its strategic context, a view that has important implications for the successful implementation of telework interventions. In particular, it will be argued, in this conceptual paper, that thinking about telework in a strategic way implies the need to adopt an open socio-technical systems view of organisation (eg. Tushman and O'Reilly, 1997; Scott, 1992; Nadler and Tushman, 1980). An important implication of this view of organisation is the concept of fit or alignment or congruence. Proponents of the open systems view argue that, if an organisation is to be effective, a number of fits or alignments among critical organisational components need to be engineered.

The purpose of this paper is to explore issues related to establishing fit between the individual employee and telework as a work setting and to present a research agenda for elaborating this issue. Clearly, this is not the only fit that must be considered. However, the appropriateness of the relationship between people and telework setting plays a critical role in determining whether strategic organisational goals will be achieved. All that happens in organisations is mediated by the actions of people (Schein, 1998). A misfit between teleworker and work setting, independently of the quality of support systems and so on, has the potential to undermine the value of this potentially important work design option. Moreover, if no distinction is made between those people who fit and do not fit this work design option, research findings on its efficacy will not reflect its true worth. Furthermore, the complexity of people's contribution to organizational effectiveness will ultimately allow a better exploration of the issues related to the concept of fit. The concept of fit or alignment is an important one conceptually, however trying to operationalise it is another matter.

This paper suggests that Schein's (1978; 1996) concept of career anchor has considerable potential for better explaining fit between individuals and telework role, the relationship between teleworker and his or her manager and the relationship between

teleworker and organisational control systems designed to support telework. The paper first explores how a systems view of organisation might contribute to understanding implementation of telework. This is followed by a discussion of telework and those individual factors related to successful telework. The concept of career anchor and its potential for contributing to our understanding of individual and teleworker fit is then considered. In this context questions for future research will be posed.

A Stems View of Organisation

The open systems view of organisation suggests that organisations can best be viewed as elements in dynamic interaction with each other and the environment (eg. Morgan, 1997; Scott, 1992). A large number of open systems models of organisation exist (eg. Miles, 1997; Tushman and O'Reilly; Nadler and Tushman, 1980). These models tend to vary in the labels assigned to the organisational elements considered to be most important for effective organisation. What is common in each of these perspectives, however, is the assumption that effective organisation is the product of congruence or fit or alignment among these elements. Nadler and Tushman (1980: 45) have referred to this assumption as the congruence hypothesis. The congruence hypothesis takes the form, "other things being equal, the greater the total degree of fit between the various components, the more effective will be the organisation". Organisational effectiveness is "defined as the degree to which actual organisation outputs at individual, group, and organisation levels are similar to expected outputs, as specified by strategy". Nadler and Tushman's (1980) model is provided in figure 1.
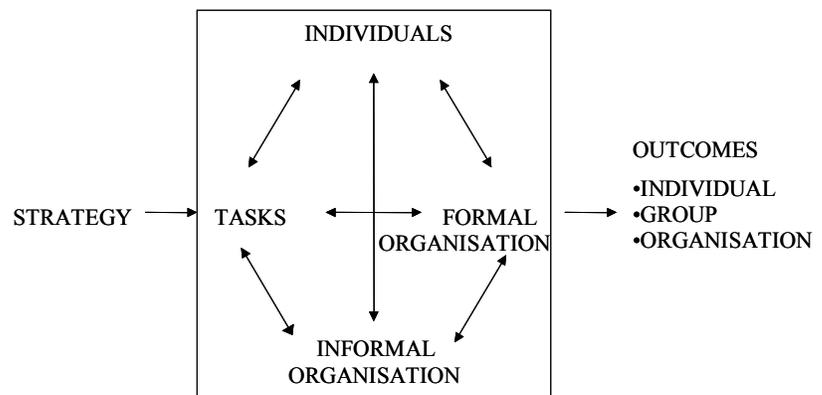

Figure 1. Nadler and Tushman's (1980) Congruence Model

A brief outline of each element in the model will now be outlined:

☐ Tasks: Tasks are the critical activities, and their characteristics, necessary to implement strategy
☐ Formal organisation: This is the designed organisation. It includes structure (and jobs and roles within this structure), technology, systems and procedures and so on.
☐ Individuals: This includes individual ability, skills, attitudes and values motivation, perception, learning and so on.
☐ Informal organisation: This is the emergent organisation. Where the formal organisation is designed, the informal organisation emerges from the interactions made possible by this designed organisation. For example, the formal structure might include in its design a management role and a teleworker role. However, what cannot be designed, but emerges, is the quality of the interaction between manager and teleworker. The two individuals filling those roles might work together cooperatively or their relationship may be an adversarial one.

Consequently, and by way of illustration, if critical tasks are built into roles in the structure and individuals have the skills and motivation to undertake their delegated roles, and relationships are generally positive and supportive of successful undertaking of those roles, then the organisation will be effective.

The model provides a useful, if abstract map, for considering those elements that have to be managed if implementation of, say, telework designs, is to produce outcomes consistent with strategy. The designers' task is to try to create fit to support successful implementation.

The concept of fit and alignment is becoming increasingly important for IT managers and professionals. Increasingly, IT managers and professionals are being asked to think, not just technically, but organisationally as well. This implies that IT managers and professionals must consider how technical solutions, including work design solutions, align with strategic goals. This alignment, in turn, requires consideration of the implications of IT interventions for formal structure, people and culture. Without this consideration it is unlikely that IT and strategy will be aligned. A critical role for IT managers and professionals, therefore, is to

help organizational managers engineer fit among organisational elements such that strategic organisational goals are achieved. If IT professionals are to provide this sort of help, much more effort needs to be devoted to clarifying the concept of fit.

Despite the value of the concept of fit conceptually, it is much more difficult to operationalise. There has been some effort directed to providing managers and IT professionals with operationalisations of this concept. For example, Miles and Snow (1994) discussed four conceptions of fit, misfit, minimal fit, tight fit, and early, tight fit. The problem is that the concept is more readily identifiable after it has been achieved rather than the process of achieving it. For example, it is often apparent when there is a good fit between people and their work setting. It would be expected that people would perform well and be satisfied in this work context. It is more difficult, however, to determine what variables contributed to this fit or alignment. This paper will explore some of the issues related to this problem.

The discussion that follows requires the adoption of an open systems model of organisation. For the purposes of this paper the open systems model developed by Nadler and Tushman (1980) will be employed to explore the concept of alignment, particularly in the context of individual – work alignment. Tushman and O'Reilly (1997) produced a variation of this model. However, the original contains elements consistent with the orientation taken in this paper. The focus in this paper will be the fit between individual (their career anchor), informal organisation (individual reactions to the manager – teleworker relationship) and the formal organisation (individual reactions to organisational control systems).

The Concept of Telework

A number of labels have been used to describe the situation in which an employee works remotely from his or her manager. These include telecommuting, telework, remote work, distributed work, and virtual work. While there are nuances that ultimately will need to be taken into consideration in arriving at a more complete view of telework, it is intended here to adopt the term telework to refer to "work done outside a central office in which employees are co-located" (Ellison, 1999: 338). However, where other authors have used alternative terms in the context of their papers, these alternative terms will be used.

Telework interventions are an increasingly popular work design intervention despite managers sometimes feeling ambivalent about them, even in the context of successfully implemented programs (Watad and DiSanzo, 2000). The popularity of telework can be attributed to a number of potential benefits. For example, there is the potential for significant managerial benefits, including reduced infrastructure costs and increased flexibility (e.g., Kurland & Bailey, 1999). For the teleworker, there are also a number of benefits. These include greater control over when work is done and a greater ability to manage work-family conflicts.

There may also be benefits from a societal and community point of view. There have been concerns raised about the loss of social capital in communities (e.g., Etzioni, 1993). Employees spend many hours away from their communities resulting in a loss of social infrastructure to support those communities. Telework has the potential to significantly reduce the daily drain of people away from communities, providing opportunities for the redevelopment of community infrastructure (Rousseau, 1997)

The environment can also be a beneficiary of telework arrangements. Many cities face growing problems with pollution, much of which is caused by vehicle traffic. Reducing commuter traffic should contribute to the reduction in such pollution (Nilles, Carlson, Gray & Hannemann, 1976).

Despite the benefits, there are also risks and challenges (e.g., Kurland & Bailey, 1999). Telework interventions involve radical, rather than incremental, organisational change (Coulsen-Thomas, 1995) and this brings greater risk. Aligned with this is the tendency for unanticipated and sometimes negative consequences following change efforts. Tenner (1996) probably captures this dynamic best. He argued, in a book aptly titled "Why things bite back", that innovative solutions to problems often produce a "revenge effect". For example, he suggests that an outcome of the paperless office is more paper rather than less.

In a similar vein, Pearlson and Saunders (2001) identified three paradoxes inherent in telecommuting. Firstly, telecommuting provides for both increased flexibility for teleworkers yet there is also a need for increased structure to ensure work gets done. Secondly, telework provides scope for greater individuality or separateness from others yet there is also a need for more teamwork as telecommuters coordinate their activities with those of others. Finally, telecommuting brings more responsibility for managers and more control and more control for teleworkers.

In addition, there is a range of implementation issues. These include the fact that not all work is appropriate to do remotely (e.g., Meyers, 1999), not all managers are suited to manage others remotely, and not all employees are suited to work remotely (Cascio, 2000). There are difficult decisions in choosing the telework option (Igbaria & Guimaraes, 1999).

To sum up, telework interventions are not quick fixes. There are certainly real benefits to be gained from the telework option, benefits that contribute to multiple organizational goals. However, there are also real dilemmas to be managed. Better management of telework, both its implementation and ongoing management, comes from a better understanding of those elements that predict successful teleworking.

Individual Factors and Teleworker Outcomes

Ellison (1999) identified a number of research perspectives on telework. One perspective for developing a better understanding of what makes telework successful is to focus on the individual teleworker. The object is to better understand what beliefs, values, preferences, personality characteristics, and behaviours might predict positive outcomes such as performance, organisational commitment, job satisfaction, coping etc. These characteristics, in turn, will contribute to our understanding of the dynamics of fit between the individual and the telework context.

While it is not reasonable to attribute successful telecommuter outcomes only to individual telecommuters it is also true that telework systems (e.g., communication and information technology systems) and outcomes (eg performance, satisfaction, commitment) are mediated by the actions of individuals. Knowing what personal factors predict outcomes, then, is an important line of research in the telework field. The body of research is quite small though it is growing and there has been some success in predicting teleworker outcomes (e.g. Meyers, 1999; Staples et al, 1999).

Lomo-David & Griffin (2001) sought to identify business students' (i.e., prospective teleworkers) implicit theories of the successful telecommuter personality. 1021 business students from 22 North American universities were asked to rate the importance of a series of provided personality characteristics, thought to be linked to successful telecommuting. Ten main characteristics were found, with three of these characteristics attracting an "important" rating from 98% of the sample. The three characteristics thought by students to be most important for telecommuter success were, "must be able to work independently", "must be honest", and "must be dependable". Additional personality characteristics identified by the students included "must be resourceful", "must have institutional loyalty", and " must be technologically inclined".

Understanding prospective teleworkers attributions of what it takes to be a successful teleworker are useful. It is on the basis of these implicit understandings that students decide whether they, themselves, would be seek out and be successful in such a role. Furthermore, the characteristics identified by the students are consistent with those employers see as important (Lomo-David & Griffin, 2001). However, these characteristics may not be as useful for predicting successful outcomes from an organisational point of view. Some of these characteristics involve significant measurement problems.

Recently, there has been a focus on the construct of self-efficacy as a predictor of performance and attitudinal outcomes of teleworkers (Meyers, 1999; Staples et al, 1999). Self-efficacy is a core construct in Bandura's (1997; 1986; 1977) social cognitive theory. Bandura (1997) argues that performance outcomes are a product of a person's "beliefs in [their] capabilities to organise and execute the courses of action required" (3) to achieve those outcomes. For example, to achieve performance outcomes teleworkers must not only have information technology skills but they must also believe they can meet challenges, overcome obstacles, persist in the face of set-backs and so on in the use of this information technology. A person who believes they can use the technology and overcome obstacles etc has high self-efficacy beliefs. A person who doubts their ability to overcome obstacles in their use of information technology has low self-efficacy beliefs with respect to this particular task domain.

By way of illustration, assume two teleworkers who are equally skilled in the use of information technology relevant to their role, but who vary in their confidence in their ability to persist in the face of and overcome challenges. Self-efficacy theory suggests the teleworker with high self-efficacy beliefs related to their use of information technology will outperform the teleworker with low self-efficacy beliefs. In this context Staples, Hulland & Higgins (1999) are developing an IT Self-Efficacy scale designed to differentiate between teleworkers in terms of their beliefs in their ability to use information technology.

The results of the limited research on self-efficacy and teleworker outcomes have been promising (Staples, Hulland, & Higgins, 1999) but somewhat inconsistent (eg Meyers, 1999).

Staples, Hulland, and Higgins (1999) argued, based on Bandura's social cognitive theory, that remote workers with high levels of Remote Work Self-Efficacy would report higher levels of performance, job satisfaction, ability to cope, organisational commitment and lower levels of job stress. They developed and tested a model that specified the antecedents and outcomes of Remote Work Self-Efficacy.

Remote Work Self-Efficacy was defined as "employees confidence that they can work effectively in a remote environment" (760). Staples et al developed fourteen items to measure this construct. By way of illustration, participants in this study were asked to respond to the following statement: "To aid in performing my job, I could": "set objectives that align with the organization's goals", "locate my manager and contact him/her immediately", "use a fax machine to send documents". To test their model, scores on the fourteen items were aggregated to provide a Remote Work Self-Efficacy score.

Staples et al (1999) analysed data from 376 telecommuters in North America. They found support for a revised Remote Work Self-Efficacy model. Remote Work Self-Efficacy predicted self-reports of remote work performance, productivity and performance, satisfaction with management, satisfaction with other job factors, and ability to cope. However, Remote Work Self-Efficacy explained only 31% of the variance that, while consistent with some previous research, suggests that an elaboration of the model might be necessary.

Meyers (1999) also sought to identify the degree to which self-efficacy beliefs predicted telecommuter outcomes, specifically self-reports of productivity, job satisfaction and lifestyle satisfaction. Meyers surveyed 150 telecommuters in Australia and North America and asked for a rating of their level of confidence in their ability to perform thirty-two telecommuting tasks. These tasks were derived from a qualitative study of Australian telecommuters and a review of the telecommuting literature. These tasks included "set my own work priorities as needed", "interact effectively with in-office staff to get help with my telecommuting problems", and "use computer-communications technologies effectively".

Meyers found that confidence in ability to execute only a small set of these tasks had any predictive value, and then only for telecommuter productivity. This set of tasks, which Meyers labelled "task mediation via others" included, "interact effectively with office staff", "cope with uncertainties" and "participate in work meetings". These findings, which are somewhat inconsistent with those of Staples et al (though their analytical strategies were different), suggest that self-efficacy beliefs may be important but that there is something else. Indeed, Meyers concluded that his study "challenges somewhat self-efficacy's claim to explain the main mechanisms of goal-directed behaviour".

Interestingly though, Meyers included in his survey questions about what people thought was important to them about telecommuting. Specifically, he asked participants to rate the degree of importance to them of various personal, work, organisational, and domestic factors. One set of personally important items, that Meyers labelled "importance of control" (included "satisfy needs for independence, autonomy" - the item which loaded most strongly on this factor, "greater control of work outcomes", "save commuting time"), was a good predictor of all three telecommuter outcomes, productivity, job satisfaction, and lifestyle satisfaction. No other factors, work, organisational, domestic, predicted teleworker outcomes.

Meyers sought to explain these results broadly in terms of a need for control. This paper offers an alternative explanation of these results, specifically it is suggested that the concept of career anchor, an individual difference variable, developed by Schein (1978; 1996) might provide an elaborated understanding of teleworker outcomes.

Career Anchor Theory

One perspective on the individual that has not received much attention in the telework research literature is Schein's (1978) concept of career anchor. Schein, (1996; 1978) defines career anchor as that aspect of the person's self concept that consists of "1) self perceived talents and abilities, 2) basic values, *and, most important* (emphasis added), 3) the evolved sense of motives and needs as they pertain to the career" (Schein, 1996: 80). Schein has identified eight career anchors, autonomy/independence, security/stability, technical-functional competence, general management competence, entrepreneurial creativity, service or dedication to a cause, pure challenge, and life-style.

Schein suggests that career anchors develop with work experience, people are not always consciously aware of their career anchor, it must be discovered through introspection and self-analysis. Career anchors can, however, have a significant impact on the sorts of work settings a person finds satisfying. Faced with a choice, it is that aspect of the work setting the person would not be ready to give up or would feel most conflicted about giving up, despite possible negative consequences for doing so. This does not suggest that the same work setting cannot satisfy multiple needs. For example, a single work setting might satisfy needs for security, life-style etc. However, the career anchor is that need or value that would cause the person most conflict if there were a forced choice to keep or give it up.

A recent discussion the first author had with an employee of the regional office of a service organisation will illustrate the concept. This employee indicated that a move, along with his family, to Brisbane, the State capital, would advantage his upward career prospects. However, he had decided that he would rather forego the option of upward career advancement into general management rather than give up those aspects of the lifestyle he enjoyed in the regional centre. For this person, lifestyle considerations seemed to anchor his career choice.

Evidence from studies on teleworkers also illustrates the dilemma the concept of career anchor seeks to address (e.g., Brocklehurst, 2001). Researchers suggest that teleworkers might have difficulties with a sense of isolation from the informal networks in a central office, that they might not be visible to those managers who make decisions about career advancement. So where there is choice, the decision to telework means foregoing some benefits in order that other benefits might be obtained.

Many participants, though not all, in Meyers (1999) study seem to be putting more weight on a need or value for autonomy than on beliefs in their own capabilities to undertake telework tasks. This may reflect that their performance, job and lifestyle satisfaction is linked to the satisfaction of this need rather than in their telework self-efficacy. It is not possible to speculate about Staples et al's data, yet it would seem that something other than Remote Work Self-Efficacy is necessary for better prediction of teleworker outcomes.

It is argued here that positive teleworker outcomes may be a product of both perceived self-efficacy, that is, beliefs in one's capabilities to produce the behaviours necessary to achieve outcomes in a telework context and realised career anchor. If a person realises what needs they seek to satisfy by choosing a particular work setting, (e.g., teleworking) and they acknowledge and accept the trade-off of other desirable values and needs, then performance and satisfaction may be higher than for those for whom the work setting does not serve their values and needs or thwarts them. That is, it would be expected that employee satisfaction, commitment, and turnover would be related to the fit between employee needs and the work setting. The consequence of this fit might be sustainable teleworking (Meyers, 1999). It is acknowledged, however, that this conclusion is based on very little data. It does, however, provide a direction for future research.

Very little research on career anchor theory has been undertaken. The reasons for this are not at all clear, particularly as there has been some effort devoted to validating and developing the career orientation inventory (Igbaria and Baroudi, 1993). Certainly, methodology is a potential problem and assessment of career anchor may very well require qualitative methodologies.

The research that has been undertaken seems to have focused on finding the distribution of career anchors in particular populations. For example, Yarnall (1998) was interested in the distribution of career anchors in a large service firm in the UK. She analysed data from 374 employees of this organisation and found that the job security/stability and technical/professional anchors predominated in this organisation.

No evidence of research on the distribution of career anchors among teleworkers was found. However, Feldman and Bolino (2000) have assessed the career orientation of the self-employed and their outcomes. One hundred and fifty three self-employed responded to a mail survey that incorporated Schein's (1990) Career Orientation Inventory. Feldman & Bolino found that the most frequent (46 %) career anchor among this group was autonomy and independence, followed by entrepreneurial creativity (33 %). The remainder chose security and stability (21%). In terms of career outcomes, Feldman & Bolino found that those self-employed with an entrepreneurial creativity anchor reported higher levels of job satisfaction and psychological wellbeing. Those with autonomy/independence anchor reported higher levels of skill utilisation, intent to remain self-employed, and life satisfaction. Self-employed people with security as their anchor reported the least successful career outcomes.

It would be interesting to determine the distribution of career anchors among teleworkers, possibly the distribution would be similar to that of the self-employed and whether career anchor predicts successful teleworker performance and satisfaction outcomes.

Career Anchor and Self-Efficacy

Some comment on the link between self-efficacy and career anchors is necessary. As above, Schein (1996) argues that career anchors consist of three components. The first, "self-perceived talents and abilities" seem closely aligned to the idea of self-efficacy beliefs. The second and third components relate to deeper values and needs that might not be as readily accessible to consciousness. From this perspective, career anchor seem to establish, fundamentally, why people might want to choose particular work settings. The answer to this "why" question is not always obvious to the person. Our basic needs and values are rarely

conscious. It might not be clear to us that we have a value until we find ourselves in a situation where it is threatened in some way or we have had an opportunity to reflect on our experience. The work setting provides the person with the means to satisfy needs and motives that would not be satisfied in alternative work settings.

These deeper levels of understanding may be difficult for researchers to access. Certainly, there are instruments designed to identify a person's career anchor (see e.g., Igbaria & Baroudi, 1993). However, there are problems, from a theoretical point of view, if these instruments are administered to people with no or limited work experience. It may very well be possible for these people to respond to the instrument yet there would be some doubt about whether they have enough experience to recognise the deeper needs and values that the concept of career anchor is designed to capture. A different approach to identifying career anchors may be necessary (see e.g., Schein, 1978)

Self-efficacy beliefs, on the other hand, relate to a person's beliefs in their capability to choose and execute a course of action designed to achieve particular outcomes. These beliefs would seem more accessible to consciousness than are values and needs. It might be argued that we are what we believe we do well and that values and needs are simply products of these beliefs. If this is so, the measures of self-efficacy typically used do not seem to capture this well enough. Indeed, there does seem to be a problem with the instruments used to measure self-efficacy. An inspection of some of the items used to measure self-efficacy in the telework studies reported above could differentiate people on factors other than self-efficacy. There would seem to be a need for better measures of these beliefs.

The issue of the link between career anchor and self-efficacy beliefs is worthy of further consideration. If these constructs tap different aspects of a person's experience, then, joint knowledge of them for particular teleworkers should facilitate the prediction of important telework outcomes.

Individual–Telework Fit

The concept of career anchor appears to have significant potential for understanding fit between individual teleworker and the telework context. On the basis of the discussion above, the following research question is posed:

Individuals who have a realised autonomy career anchor will report greater levels of satisfaction with and commitment to the teleworker role than will employees with alternative career anchors.

Individual/Informal Organisation–Telework Fit

In addition to the fit between individual teleworker and the telework role, attention must be given to the quality of the relationship between teleworker and the manager or managers who supervise this person. Problems in this relationship could have serious implications for managers' continued support for this work design option. In terms of Nadler and Tushman's (1980) model this issue is related to the degree of fit between the informal organisation and the task – formal organisation.

In the literature there has been some attention given to managers' concerns with loss of control and their consequent reluctance to initiate or support telework interventions. For example, in a case study on the implementation of a telework intervention, Watad & DiSanzo (2000) report that managers' concerns about the intervention included a "perceived loss of control over employees". In this case organisation this problem was addressed by the introduction of "new restrictive controls" on teleworkers that, they suggested, might have an adverse impact on long-term teleworker motivation. However, little attention has been given to teleworkers' desire or control or autonomy and the impact that this has on the manager-teleworker relationship.

Career anchor theory might be helpful in understanding the motivations of individual participants in these relationships and the implications of these motivations for how mangers and teleworkers relate to each other. This relationship would seem an important research topic because it is both critical to the success of teleworking and has the potential to be problematic (Cascio, 2000). The issue of individual differences on leader-member exchange is beginning to receive more attention in the research literature (e.g., Allinson, Armstrong & Hayes, 2001), yet there is little available on the manager-teleworker relationship. One issue that might be addressed is the implications on relationships of persons with differing career anchors. Are there differences, for example, in the relationships between, on the one hand, managers whose career anchor is, say, general management competence, and a person whose career anchor is autonomy/independence and that same manager and a person whose career anchor is lifestyle?

There are a number of ways of looking at the manager-teleworker relationship. One approach is to focus on communication behaviour (e.g., Reinsch, 1999). Another approach is to focus on the compatibility or incompatibility of interpersonal needs. Two people are compatible to the degree there is complementarity in their interpersonal needs.

A model of interpersonal functioning consistent with this approach and with the argument of this paper is Schutz' (1958; 1984) theory of interpersonal relationship needs. The model is somewhat detailed and will not be outlined here, except to say that Schutz (1984) suggests that individuals have wanted and expressed needs for inclusion, control, and openness. Schutz has developed measures of interpersonal compatibility that might help explicate this relationship.

The relationship between manager and teleworker is an important one and requires more research attention. It is argued here that the concept of career anchor might help explicate this relationship. At the very least information about the career anchors or subordinates should help managers adapt their managerial style to fit the teleworker. Already managers face a general call for a re-orientation of their approach to managing teleworkers. Cascio (2000) argued, for example, that managers "who need structure and control are unlikely to be effective in virtual work environments".

The following research question is suggested by this analysis

Do managers with a high expressed interpersonal control orientation report more problems in their relationship with teleworkers with an independence/autonomy career anchor than with employees with other career anchors?

Individual–Systems Fit

Teleworker reactions to the technology necessary for effective telework also need more attention (e.g., Morris & Venkatesh, 2000). Teleworkers' use of technology, rather than their creative avoidance of it, is more likely if they accept it. In line with the argument of this paper, there may be value in exploring the degree of fit between teleworker career orientation and their acceptance or creative misuse of the control systems used by organisations to monitor their behaviour.

Mention was made earlier of Watad and DiSanzo's (2000) report of the implementation of a successful telecommuting program. As a part of the telecommuting arrangements the company introduced new restrictive control measures that impacted significantly on the autonomy of the salespeople involved in the program. For example, sales representatives had to account for how they spent 37.5 hours of their week, they had to dial in daily to check e-mail and voice mail messages. Watad and DiSanzo noted of the salespersons that "Their lifestyle changed: The image of salespeople as working independently, without supervision, vanished" (9).

In their evaluation of the potential risks and benefits of these measures, Watad and DiSanzo concluded, "*although limiting employee autonomy may negatively influence motivation over the long term* (emphasis added), an improved, two-way flow of information and more time spent in the field should increase sales commissions" (11).

The concept of career anchor may help managers and teleworkers understand and predict reactions to information technology. As career anchors establish the criteria people use to choose particular work settings, these anchors may help practitioners and researchers understand how teleworkers will react to technologies designed to support telework. Technologies that thwart deeper needs and motives are likely to produce greater resistance, or be circumvented, technologies that facilitate need satisfaction are more likely to be actively adopted.

The following research question is suggested by this analysis

Do teleworkers with a independence/autonomy career anchor report greater levels of dissatisfaction with organisational control systems than do other organisational employees?

Summary and Conclusion

This paper seeks to put the study of successful telework in the context of an open systems model of organisation. The object is to design, as far as it is possible, fit between critical organisational elements. This paper has examined the relationship between individual, informal organisation and formal organisation.

A number of possibilities for further research flow from this paper. For example, it would be important to know something about the distribution of career anchors in the telework population and the extent to which an understanding of the career anchor helps predict successful teleworker outcomes. On the basis of the limited research available, it might be expected that autonomy/independence and lifestyle might dominate. Research should establish this. It would also be desirable to test the relationship between career anchor, self-efficacy beliefs and teleworker outcomes. If teleworkers choose to telework because this work setting provides them with an opportunity to satisfy basic autonomy needs and they have high Remote Work Self-Efficacy then are their reports of performance, satisfaction, ability to cope etc higher than for teleworkers seeking to satisfy, say, basic security needs, which might not be so easily satisfied in this setting, yet also report high self-efficacy? In this context there would also seem to be a need for better measures of self-efficacy in the telework context.

In addition, does knowing the career anchors of manager and teleworker help us understand interpersonal relationship dynamics? Greater knowledge by both parties in the relationship might mean a less problematic relationship overall. Furthermore, does knowledge of teleworker career anchor contribute to an understanding of their reactions to information technology? If teleworkers choose teleworking because it satisfies fundamental needs and technology is a critical element of this setting, then it might be expected that they will also judge this technology in terms of whether it provides them with an opportunity to satisfy these needs.

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