Corporate entrepreneurs or silent followers?

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Abstract
Purpose – The purpose of this research is to explore how employee attitudes affect management behaviour in the corporate entrepreneurship (CE) setting. The paper focuses on the co-evolutionary processes of practices and elements of the social structure, i.e. simultaneous top-down and bottom-up influences.

Design/methodology/approach – Organisation-level data from individuals in the Finnish public-sector health and social care organisation was obtained. The questionnaire comprised Likert-scale attitude statements on different aspects of management behaviour, enabling structures, and individual attitudes. The data analysed consisted of 523 responses. Factor analysis and reliability tests were used to create aggregated measures for different CE antecedents and hierarchical regression analysis in order to test the causal model derived from the previous literature.

Findings – Empirical evidence of the crucial role of individual attitudes and action in CE was found, thus indicating that certain attitude types influence management behaviour. Straightforward communication emerged as the most important bottom-up modality in that it is needed if individual attitudes are to influence managers.

Originality/value – The results challenge and complement previous research in the field of CE in recognising the crucial role of individual employees. The findings suggest that CE is not catalysed from the bottom up by silent followers, even though superiors find them comfortable to manage. It is rather the self-confident and satisfied corporate entrepreneurs with initiative who critically question the existing working modes and thus catalyse CE. Finally, suggestions for further research were offered.

Keywords Entrepreneurialism, Managers, Employees, Innovation, Organizational change, Public sector organizations

Paper type Research paper

Introduction
Global competitive pressure has made all established organisations – large and small, public and private – struggle to find an entrepreneurial orientation at all levels in order to improve performance (Zahra, 1991, 1993; Zahra and Covin, 1995; Wiklund, 1999). Corporate entrepreneurship (CE) is being embraced in order to promote organisational and economic development and wealth creation (Antoncic and Hisrich, 2004), be it as a result of organisational transformation through strategic renewal or the birth of new businesses and ventures within existing organisations (Guth and Ginsberg, 1990; Covin and Slevin, 1991). CE is broadly defined here as entrepreneurship within an existing organisation – regardless of its size – referring to emergent intentions and behaviours that deviate from the customary way of doing business (Antoncic and Hisrich, 2001, 2003, 2004)[1].
Previous studies on CE have concentrated on the phenomenon as it occurs in a certain type of (business) environment and on its organisational antecedents and outcomes. It has typically followed a temporal causal path from antecedents to consequences (Antoncic and Hisrich, 2001, 2004). As CE is rooted in the phenomenon of entrepreneurship it is surprising that the role of the main actor – an individual, a corporate entrepreneur or intrapreneur (Pinchot, 1985) – has not been widely studied. Although the existing literature on management and leadership has identified active employees as exercising autonomy or deviating from prevailing practices (see, e.g. Whittington, 1992) this idea has not been properly introduced or empirically tested in a CE setting.

Some CE studies have acknowledged that innovation champions at different organisational levels take personal risks to innovate within an organisation and are, thus, crucial for business development (Shane, 1994; Day, 1994). However, the models tend to describe and analyse the crucial role of middle managers in promoting this organisational-level phenomenon (Hornsby et al., 2002; Kuratko et al., 2004, 2005), and almost totally neglect the question of how the individual attitudes of any members of staff directly or indirectly affect its organisational and managerial antecedents. The literature on CE recognises only to some extent the employee’s role, as it has concentrated on one-way relationships (top-down) and the interaction between them, when an individual in association with an existing organisation instigates renewal or innovation (Sharma and Chrisman, 1999; Dess et al., 2003). We suggest that there is a research gap, and that there is still much to be learned about the substance and process of CE (Hornsby et al., 2002).

Having considered the theories and relationships more carefully, we propose that the connection between management structures and individuals is more of a two-way street. Previous studies on CE (Heinonen and Toivonen, 2006) have identified the modalities (namely empowerment and a shared vision) that integrate its organisational and individual antecedents. Top-down analysis has revealed the importance of these modalities in the employee-organisation relationship.

In this paper we turn the analysis from top-down to bottom-up, and we assume that, from the CE perspective, it is relevant to understand not only how employees perceive organisational antecedents (Kuratko et al., 2005), but also how their perceptions and behaviour may affect managerial and organisational antecedents (bottom-up). We do not deny the power of management, but question the presumptions about unidirectional forces from management downwards to employees. We assume that this relationship is at least partially reciprocal, and that there exists some kind of feedback loop upwards (Heinonen and Toivonen, 2007). In other words, we suggest that individual-level employee action causes bottom-up effects (see also Rutherford and Holt, 2007; de Jong and Den Hartog, 2007). Thus, our objective is to analyse how employee attitudes affect management behaviour in the CE setting. Employees in this study refer to members of staff without any managerial responsibilities or duties. We acknowledge that middle managers are also subordinates of higher-level managers, but we do not treat them as employees here.

In the following section we briefly discuss the top-down influences of CE reported in the literature, and then widen the discussion on bottom-up influences in order to shed light on both parties to the reflexive CE process. The methodology section presents the data, the measures and the analytical procedures used, and the results are given in the following section. Finally, we offer some conclusions and suggest both theoretical and managerial implications.
Simultaneous top-down and bottom-up influences on CE

Previous research (Miller, 1983; Kuratko et al., 1990; Guth and Ginsberg, 1990) has identified a set of pre-requisites for CE related to the environment (threats and opportunities), top- and middle-management behaviour (vision, commitment, support and style), the organisation (culture, strategy, structure and working modes), and performance (Heinonen, 1999). Internal organisational factors have also been recognised as important in promoting CE (e.g., Guth and Ginsberg, 1990; Covin and Slevin, 1991; Zahra, 1991; Horneby et al., 1993; 1999, 2002; Thompson, 1999; Antoncic and Hisrich, 2001; Kuratko et al., 2004, 2005), and in particular, the vital role of middle managers in creating an environment that encourages innovation and entrepreneurship has been acknowledged (Hornsby et al., 2002; Kuratko et al., 2005).

Different research perspectives have highlighted the potential of bottom-up processes in an organisational context (Wang et al., 2005; Mumby, 2005; Dutta and Crossan, 2005; Howell and Shamir, 2005). This approach has not been adjusted to CE processes. While managers are involved at all levels, employees seem to remain passive adaptors and mere objects of managerial actions. Many authors have pointed out that leadership theories have been unidirectional models of what a leader does to subordinates (Yukl, 1999; Howell and Shamir, 2005). Silent subordinates just do not fit into the picture of CE, as the main actor is the corporate entrepreneur her-/himself (Pinchot, 1985; Heinonen and Vento-Vierikko, 2002). Underestimating followers’ agency leads CE studies in the wrong direction by emphasising managerial entrepreneurship and forgetting the role of a corporate entrepreneur – the corporate equivalent of an entrepreneur and someone who acts entrepreneurially in an existing organisation (Kanter, 1983; Pinchot, 1985). He/she is an action-oriented and self-determined goal setter who takes the initiative to do things autonomously (Åmo and Kolvereid, 2005).

Many studies have shown that employees may actively try to influence upwards (Olufowote et al., 2005; Farmer et al., 1997), and to get their ideas through in their attempts to develop their work environment (Brunåker and Kurvinen, 2006). They are, to some extent, under the control of their leader, but similarly leaders are affected by employees’ behaviour. People interact with their organisational structures (rules, management) in their ongoing practices. If this is viewed as a process of enactment it gives more room to individual actors. A widely shared view amongst researchers is that structures are both enablers and constrainers of social interaction. (Li and Berta, 2002) According to structuration theory individuals are “at the same time the creators of social systems yet created by them.” (Giddens, 1991, 204). Respectively reflexivity is a central concept in explaining change in social systems: dynamic interplay between actors and structures stems from the reflexive qualities of both parties (Sydow and Windeler, 1998). Here we assume that this reflexive quality is seen in bottom-up processes by active followers.

Challenges in conducting empirical research on the basis of structuration theory are well specified in the literature (e.g., Barley and Tolbert, 1997; Orlikowski, 2000; Pozzebon and Pinsonneault, 2005). It therefore has to be acknowledged that the debate on the relationship between structure and agency is one of the most prevalent and challenging aspects of social theory (Pozzebon and Pinsonneault, 2005). Given this assumption of reflexive social processes in CE implementation, we need to consider the elements or antecedents of CE as outcomes as well as means of influencing, and cannot
accept that the structures exist for the sole purpose of stimulation (Li and Berta, 2002). Structuration theory draws attention to the co-evolutionary processes of ongoing practices and elements of the social structure (Li and Berta, 2002), i.e. simultaneous top-down and bottom-up influences. How does CE fit in with the idea of multilevel social action? Individual- and organisational-level action is explicitly recognised in the literature, but interaction between them is only vaguely specified (see, e.g. de Jong and Den Hartog, 2007). Heinonen and Toivonen (2007) took a conceptual approach to the co-evolutionary processes of CE, but empirical evidence is still non-existent.

Methodology

Data

The empirical study was conducted in a public-sector, municipal health and social care organisation in South West Finland. The municipalities in Finland (altogether about 400) are responsible for organising a large number of welfare services (e.g., basic education, health care, social and cultural services) for citizens, and for providing the necessary infrastructure in addition to the more traditional administrative functions at the local level. Societal changes such as globalisation, technological development, the need for new skills and competences at work, the ageing of the workforce and of citizens (clientele), and the transition to a service economy affect the organisation of these services. (Heinonen and Toivonen, 2005, 2006) The municipalities face a number of challenges in organising high-quality services with limited resources in a changing society. There is thus a need for organisational renewal and innovation in order to meet the challenges related to finance, competitiveness, and customer orientation, for example (Heinonen, 1999).

Our data were gathered as part of a wider organisational development project involving the search for new innovative approaches to service delivery and focusing on different CE pre-requisites. All the employees of the above-mentioned organisation were asked to participate in the research. The questionnaire was developed with a view to obtaining information on individual attitudes and management behaviour, and it was distributed to nurses and home-help workers involved in elderly care. The data obtained consisted of 569 responses (response rate 72.9 per cent). We excluded the responses of superiors (total 46) from the statistical analysis because we wanted to focus on employees with no managerial responsibilities. We thus ended up with 523 responses for analysis. We gathered this organisational-level data from individuals in the public sector in order to explore the effect of employee attitudes on management behaviour: this bottom-up causal direction has rarely been applied in CE studies.

Measures

The structured questionnaire consisted of the following sections: encouraging management behaviour, enabling organisational structures, and individual attitudes. We derived attitude statements from theories explaining entrepreneurial behaviour within an organisation. Statements related to encouraging management behaviour and enabling organisation structures were developed based on Kuratko et al. (2004, 2005) and Thompson (1999). The following are sample items for both dimensions (see Table I)

Encouraging management behaviour. “Innovativeness and creativity are considered important at my work-place”, “Management behaviour generates trust among employees”, “Employees’ productive activities are rewarded”. 
### Factor analysis I: Encouraging management behaviour

**Factor 1 “Supportive innovative action”**
- Individual working methods are appreciated at my work-place: 0.83, 0.21, 0.12, 0.03
- Innovativeness and creativity are seen important at my work-place: 0.71, 0.20, 0.31, 0.13
- Mistakes are regarded as learning experiences: 0.76, 0.25, 0.07, 0.06

**Factor 2 “Enthusiasm and trust”**
- Management encourages everyone to work for the benefit of the organisation: 0.24, 0.85, 0.24, 10
- Management behaviour generates trust among employees: 0.29, 0.79, 0.26, −0.08
- Management encourages the development of new working modes: 0.20, 0.79, 0.20, 0.19

**Factor 3 “Rewarding”**
- Employees’ productive activities are rewarded: −0.12, 0.22, 0.79, 0.04
- Enough feedback of the work is given at my work place: 0.27, 0.13, 0.73, 0.05
- The employees are encouraged to openly express their opinions: 0.35, 0.34, 0.64, 0.03
- The suggestions made by the employees are implemented at my work place: 0.43, 0.18, 0.60, −0.09

**Percentage of variance explained**

**Cumulative percentage of variance explained**
- 21.39, 42.65, 62.72, 72.01

Kaise-Meyer-Olkin: 0.876
Bartlett’s test sig.: 0.000

### Factor analysis II: Enabling structures

**Factor 1 “Shared vision”**
- My work-place vision guides me in my work: 0.86, 0.24, 0.08, 0.09
- I am familiar with my work-place vision, i.e. the desirable future direction: 0.86, 0.15, 0.10, 0.11

**Factor 2 “Straightforward communication”**
- Issues are discussed openly at my work-place: 0.21, 0.79, 0.13, 0.04
- Things happen quickly at my work-place: 0.27, 0.71, 0.19, −0.01
- It is easy for me to get help in my work: 0.04, 0.63, 0.12, 0.35

**Factor 3 “Empowerment”**
- I can show initiative at my work: 0.11, 0.08, 0.77, 0.15
- I am responsible for doing my work as well as possible: −0.01, 0.10, 0.76, −0.01
- I have sufficient power to carry out my duties well: 0.17, 0.18, 0.69, 0.21
- I am able to develop my work by myself: 0.40, 0.21, 0.69, 0.21

**Percentage of variance explained**
- 17.23, 17.12, 16.96, 10.96

**Cumulative percentage of variance explained**
- 17.23, 34.35, 51.31, 62.75

Kaise-Meyer-Olkin: 0.849
Bartlett’s test sig.: 0.000

### Factor analysis III: Individual attitudes

**Factor 1 “Job satisfaction”**
- I enjoy my work: 0.80, 0.09, 0.10, −0.23
- My work is interesting: 0.79, 0.18, 0.14, 0.08
- I find my work sufficiently challenging: 0.72, 0.12, 0.08, 0.16
- I appreciate my work: 0.71, 0.03, 0.32, −0.16
- I think I play an important role in my work: 0.60, 0.31, 0.19, 0.00

(continued)
Enabling organisation structures. “My work-place vision guides me in my work”, “I have sufficient power to carry out my duties well”, “Issues are discussed openly at my work-place”.

Given the fact that the individual is the key actor in CE, and that individual skills and attitudes describe the capabilities and willingness of any potential corporate entrepreneur to act intrapreneurially (see, e.g. Pinchot, 1985; Carrier, 1996), we based our measures of individual attitudes and skills on the literature on entrepreneurial characteristics and careers (e.g., Dyer, 1994) and the entrepreneurial process (Bygrave and Hofer, 1991; Bygrave, 1993). Sample items measuring individual attitudes included: “I enjoy my work”, “I have confidence in my abilities”, “I come up with new ideas at my work-place”.

We used Likert-scale attitude statements on the below mentioned antecedents (influences) of CE. The respondents reacted to each statement on a five-point scale ranging from 1, “strongly disagree” to 5, “strongly disagree”.

Analysis
Our emphasis in this study is on the interactive nature of managerial and individual behaviour, which could be summarised as follows: entrepreneurial management increases individual entrepreneurial behaviour and, in turn, this change on the individual level leads to increased entrepreneurial management. The interaction between managerial and individual antecedents thus is believed to run in both directions. (Heinonen and Toivonen, 2007) In this study we turned the analysis from the typical top-down to bottom-up in our attempt to analyse how employee attitudes affect management behaviour in the CE setting. We thereby changed the causal direction from individual employee attitudes to management behaviour.

In order to gather some evidence of the measures’ discriminant validity we conducted a series of exploratory factor analyses separately for each section of the questionnaire, namely encouraging management behaviour, enabling organisational structures, and individual attitudes (see Table I for the factor analyses). We used Varimax rotation and Kaiser normalization, the number of factors being determined by an Eigenvalue of over 1. The factor analysis suggested four factor solutions for each section. After conducting reliability tests (Cronbach’s alpha) we developed aggregated measures, forming nine measurement scales using 29 items from the original questionnaire of 40 items. Table II shows the Cronbach’s alpha values, which ranged from 0.60 to 0.86.

Table I.

<table>
<thead>
<tr>
<th>Factor 2 “Initiative”</th>
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<tr>
<td>I come up with new ideas at my work-place</td>
<td>0.10</td>
<td>0.77</td>
<td>0.16</td>
<td>−0.07</td>
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<tr>
<td>I make responsible decisions at my work</td>
<td>0.17</td>
<td>0.73</td>
<td>0.08</td>
<td>0.25</td>
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<td>I actively develop myself in my work</td>
<td>0.20</td>
<td>0.67</td>
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<th>Factor 3 “Self-confidence”</th>
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<tr>
<td>I have confidence in my abilities</td>
<td>0.14</td>
<td>0.15</td>
<td>0.79</td>
<td>−0.07</td>
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<tr>
<td>I have different capabilities</td>
<td>−0.02</td>
<td>0.32</td>
<td>0.76</td>
<td>−0.02</td>
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<tr>
<td>Percentage of variance explained</td>
<td>21.94</td>
<td>15.09</td>
<td>13.45</td>
<td>7.18</td>
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<td>Cumulative percentage of variance explained</td>
<td>21.94</td>
<td>37.03</td>
<td>50.48</td>
<td>57.66</td>
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Kaise-Meyer-Olkin 0.866
Bartlett’s Test sig. 0.000
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<td><strong>Dependent variables</strong></td>
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<tr>
<td>1. Supportive innovative action</td>
<td>3.33</td>
<td>0.87</td>
<td>0.10</td>
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<tr>
<td>2. Enthusiasm and trust</td>
<td>3.37</td>
<td>0.92</td>
<td>0.09</td>
<td>0.55</td>
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<tr>
<td>3. Rewarding</td>
<td>2.87</td>
<td>0.83</td>
<td>0.03</td>
<td>0.52</td>
<td>0.59</td>
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<td><strong>Independent variables</strong></td>
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<tr>
<td>4. Shared vision</td>
<td>3.33</td>
<td>0.98</td>
<td>0.09</td>
<td>0.36</td>
<td>0.37</td>
<td>0.40</td>
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<td>5. Empowerment</td>
<td>4.12</td>
<td>0.62</td>
<td>0.05</td>
<td>0.44</td>
<td>0.40</td>
<td>0.43</td>
<td>0.37</td>
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<td>6. Straightforward communication</td>
<td>3.35</td>
<td>0.82</td>
<td>0.09</td>
<td>0.55</td>
<td>0.47</td>
<td>0.56</td>
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<td>7. Job satisfaction</td>
<td>4.20</td>
<td>0.63</td>
<td>0.17</td>
<td>0.35</td>
<td>0.35</td>
<td>0.29</td>
<td>0.37</td>
<td>0.46</td>
<td>0.38</td>
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<td>8. Self-confidence</td>
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<td>0.54</td>
<td>0.05</td>
<td>0.03</td>
<td>0.03</td>
<td>0.01</td>
<td>0.17</td>
<td>0.25</td>
<td>0.05</td>
<td>0.28</td>
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<td>9. Initiative</td>
<td>3.81</td>
<td>0.72</td>
<td>0.11</td>
<td>0.16</td>
<td>0.13</td>
<td>0.19</td>
<td>0.33</td>
<td>0.43</td>
<td>0.21</td>
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<td>5</td>
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<tr>
<td>Cronbach’s alpha</td>
<td>0.78</td>
<td>0.85</td>
<td>0.60</td>
<td>0.86</td>
<td>0.71</td>
<td>0.72</td>
<td>0.82</td>
<td>0.68</td>
<td>0.73</td>
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</table>
We used hierarchical regression, which is a tool for assessing mediating relationships, in order to reveal the relationships between the various constructs and variables. The “predictor variables are entered in sets or variables according to a pre-determined order that may infer some causal or potentially mediating relationships between the predictors and the dependent variable” (Cunninham and Wang, 2005, p. 5). Given our aim to investigate the impact of individual attitudes on different types of encouraging management behaviour, we entered the individual-level variables in a block in the first step of the regression, and then we entered the enabling-organisational-structure variables one by one. All in all, we created five models (A-E) for each of the three dependent variables (see Tables III-V in the following section).

**Results**

We used hierarchical regression to test our proposition concerning the two-way connection between management structures and individuals, and constructed separate equations for each of the three possible ways (i.e. “supporting innovative action”, “enthusiasm and trust”, and “rewarding”) of exercising encouraging management

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<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model A</th>
<th>Model B</th>
<th>Model C</th>
<th>Model D</th>
<th>Model E</th>
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</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>0.37***</td>
<td>0.30***</td>
<td>0.19***</td>
<td>0.25***</td>
<td>0.15**</td>
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<tr>
<td>Self-confidence</td>
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<td>-0.09*</td>
<td>-0.04</td>
<td>-0.11*</td>
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<td>Initiative</td>
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<td>0.00</td>
<td>0.01</td>
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<tr>
<td>Shared vision</td>
<td>0.27***</td>
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<td></td>
<td></td>
<td>0.07</td>
</tr>
<tr>
<td>Straightforward communication</td>
<td>0.480***</td>
<td></td>
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<td>0.39***</td>
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<tr>
<td>Empowerment</td>
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<td>0.20***</td>
<td>0.23***</td>
<td>0.39***</td>
<td>0.29***</td>
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<tr>
<td>(F)</td>
<td>27.97***</td>
<td>32.24***</td>
<td>65.62***</td>
<td>39.83***</td>
<td>49.23***</td>
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<tr>
<td>(R^2)</td>
<td>0.14</td>
<td>0.20</td>
<td>0.34</td>
<td>0.24</td>
<td>0.37</td>
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<tr>
<td>Adjusted (R^2)</td>
<td>0.14</td>
<td>0.20</td>
<td>0.33</td>
<td>0.23</td>
<td>0.36</td>
</tr>
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**Notes:** * \(p < 0.05\); ** \(p < 0.01\); *** \(p < 0.001\)

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<td>0.28***</td>
<td>0.20***</td>
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<td>Self-confidence</td>
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<td>0.00</td>
<td>-0.06</td>
<td>-0.04</td>
<td>-0.10*</td>
<td>-0.11*</td>
</tr>
<tr>
<td>Shared vision</td>
<td>0.28***</td>
<td></td>
<td></td>
<td></td>
<td>0.12**</td>
</tr>
<tr>
<td>Straightforward communication</td>
<td>0.42***</td>
<td></td>
<td></td>
<td></td>
<td>0.30***</td>
</tr>
<tr>
<td>Empowerment</td>
<td>0.34***</td>
<td>0.30***</td>
<td>0.34***</td>
<td>0.19***</td>
<td></td>
</tr>
<tr>
<td>(F)</td>
<td>21.65***</td>
<td>27.66***</td>
<td>44.81***</td>
<td>30.94***</td>
<td>35.21***</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.11</td>
<td>0.18</td>
<td>0.26</td>
<td>0.19</td>
<td>0.29</td>
</tr>
<tr>
<td>Adjusted (R^2)</td>
<td>0.11</td>
<td>0.17</td>
<td>0.25</td>
<td>0.19</td>
<td>0.28</td>
</tr>
</tbody>
</table>

**Notes:** * \(p < 0.05\); ** \(p < 0.01\); *** \(p < 0.001\)
behaviour. In the hierarchical regression analysis the adjusted $R^2$ explained the change in variance. Therefore, examining the change in $R^2$ for the model makes it possible to analyse what types of individual attitudes have the greatest impact on this type of behaviour.

We estimated a model for “supporting innovative action” as a function of the employee’s job satisfaction, self-confidence and initiative, assuming that individual attitudes would predict this type of encouraging management behaviour. Table III shows that job satisfaction had a strongly positive and statistically significant impact, while self-confidence and initiative had no effect. When we added a shared vision, straightforward communication and empowerment to this equation (models B, C, D and E) we found that job satisfaction was no longer the main predictor of “supporting innovative action” management behaviour. Thus, straightforward communication and empowerment seem to mediate the effect of individual attitudes in this context.

Table IV shows a similar pattern between the “enthusiasm and trust” type of encouraging management behaviour and the individual-level group variable. Again, individual attitudes are mediated by the structural variables, and straightforward communication had a clear positive effect.

As Table V shows, individual attitudes had a different effect on the “rewarding” type of management behaviour. Job satisfaction was no longer a statistically significant predictor when straightforward communication, a shared vision and empowerment were entered into the equation. Surprisingly, self-confidence had a negative impact on “rewarding” management behaviour (models A, B, C, D, E).

As expected on the basis of previous top-down analysis of the antecedents of CE (Heinonen and Toivonen, 2006), the results of the hierarchical regression show that individual attitudes were not strongly directly associated with encouraging management behaviour in the bottom-up analysis either. Instead, the items studied could again be divided into three groups representing different types of CE antecedents: management behaviour, individual attitudes, and mediator elements existing “between” the managerial and individual elements.

The enabling structures (mediators) and certain types of individual attitudes influenced the dependent variables (different types of encouraging management behaviour). These results indicate that individual action and attitudes have only limited influence in this regard. Job satisfaction seems to increase “supportive innovative action”
and “enthusiasm and trust”, which is quite understandable as it is hard for managers to be supportive, enthusiastic and trusting if their subordinates are not satisfied and content. However, it is surprising that employee job satisfaction does not seem to directly affect “rewarding” management behaviour when all the mediators are entered into the equation (model E). High self-confidence as a motive and attitude is typically related to entrepreneurial individuals (e.g., Carrier, 1996). The results of this study are somewhat controversial. First, self-confidence turned out to be negatively associated with “rewarding” management behaviour; if employees have high self-confidence they do not see management behaviour as rewarding. It seems that self-confident corporate entrepreneurs are true management challenges, making it difficult for superiors to engage in “rewarding” management behaviour. The negative association between initiative and the “enthusiasm and trust” type of management behaviour further supports this.

Straightforward communication was found to be the most important mediator variable. A lack of it inhibited the impact of individual attitudes on encouraging management behaviour, which demonstrates the strong impact of enabling structures. Adding these mediator variables into the equation diminished the predictive power of individual influences, thereby confirming the need for mediators in order for individual attitudes to influence management behaviour.

In order to further explain the interaction between the variables measured we cross-tabulated some selected variables based on the results (Figures 1-3). We did this in order to broaden the one-sided view of individual attitudes in the CE setting. Some interesting insights emerged indicating that the role of individuals is, indeed, multidimensional and richer in nuances, as indicated in our hierarchical regression analyses.

The finding of a negative association between self-confidence and “rewarding” management behaviour is better understood if empowerment is simultaneously taken into account (Figure 1). Highly empowered and highly self-confident employees who cannot accept low empowerment generate “rewarding” management behaviour. If self-confident employees are not empowered they are merely a problem to the management and, indeed, their action does not encourage “rewarding” management behaviour.

Another interesting finding concerning the negative association between initiative and the “enthusiasm and trust” type of management behaviour emerged when job

![Figure 1. Interaction between the variables. The effects of self-confidence and empowerment on “rewarding”](image-url)
satisfaction was simultaneously taken into account (Figure 2). Initiative negatively affected this type of behaviour only when employee job satisfaction was also low, indicating that job satisfaction is more significant than initiative. Higher job satisfaction inhibits negative influences and there was hardly any difference between employees with low and high initiative in relation to encouraging management behaviour. It seems to be hard for managers to show enthusiasm and to trust employees who are not satisfied with their jobs, even if the employees are active in using their own initiative. The managers are likely to sense the criticism of employees, which in turn decreases their trust and managerial enthusiasm. A similar pattern seemed to emerge with “rewarding” management behaviour, which is also generated by job satisfaction and initiative (Figure 3). “Passive” dissatisfied employees with low initiative are challenging from the CE perspective in that they feed neither “rewarding” nor “enthusiasm and trust” type of management behaviour.

Conclusions and discussion
Acknowledging the crucial role of innovative individuals (see Kuratko, 2005; Hjorth and Johannisson, 2006), we set out in this paper to question existing straightforward
CE models presenting a temporal causal path from managerial antecedents to consequences (see Antoncic and Hisrich, 2001, 2004). Our study offers a diversion from the traditional dualistic thinking found in the literature on management and leadership (Barley and Tolbert, 1997; Hung, 2004), according to which management is the subject and employees are the objects. We wanted to empirically explore the relationship between leaders and subordinates in a CE setting, and we developed our ideas by integrating the research fields of leadership and (corporate) entrepreneurship, as suggested by Gupta et al. (2004), for example. In converting our direction of cause-effect analysis from the traditional top-down to a bottom-up approach we aimed to explore the role of the key actor – a corporate entrepreneur – and the influencing modalities (enabling structures) through which some individual influences may finally pass and affect the organisational structure and management in the CE process (Heinonen and Toivonen, 2007). We justify our approach in that CE is employee- and action-oriented by its very nature.

Our findings indicate that management behaviour is, indeed, influenced by certain types of individual attitudes, as our empirical evidence on the crucial role of individual attitudes and action in CE shows. Self-confident corporate entrepreneurs with initiative critically question the current working practices. They influence encouraging management behaviour, and eventually also entrepreneurial behaviour, from the bottom-up in the corporate setting. Job satisfaction seems to be an important factor in explaining the impact of individual attitudes and action on management behaviour. Discontented employees are hard for managers to support, especially if they have initiative and are self-confident. Our study suggests that managers as human beings are more likely to support contented followers than critical, self-confident change agents. This implies challenge in terms of promoting CE in that the self-confident individual with initiative is a crucial asset. A true corporate entrepreneur is not a follower, and does not necessarily make it easy for managers to exercise encouraging management behaviour. On the contrary, managers are likely to restrict the activities of corporate entrepreneurs even though strong empowerment would be needed.

Straightforward communication emerged as the most important bottom-up modality, and this did not arise in the previous top-down analysis. On the other hand, a significant top-down modality, namely a shared vision, (see Heinonen and Toivonen, 2006), did not emerge in this analysis. This suggests that straightforward communication forms a channel for transmitting individual ideas to the managerial level, whereas the respective top-down channel from managers to employees is a shared vision. Straightforward communication makes it possible for employees to be heard, and thus to actively influence management behaviour. If no such atmosphere exists within the organisation it is more difficult for employees to influence and promote CE.

It is most interesting to observe that the direction of the causal relationship is reflected in the nature of the phenomenon studied. Methodologically our findings challenge the positivistic thinking of the existence of a one-and-only empirically measured reality and truth. The implementation of CE varies depending on whether the management or the individual perspective is taken as a starting point in the analysis.

Our study suggests that CE is not a result of different managerial or individual antecedents, but that it may emerge as an outcome of mutually reinforcing pairs or
bundles of factors. The different perspectives are complementary rather than competing. Our results thus both challenge and complement previous research in highlighting the crucial role of individual employees in the CE process. They also suggest that CE is not catalysed from the bottom up by silent followers, even if they are easy for superiors to manage: it is rather driven by truly self-confident and satisfied corporate entrepreneurs with their own initiative, who critically question existing working practices.

Limitations
This explanatory study explores CE within one public-sector, particularly municipal organisation in health and social care. We sought no empirical generalisability to a larger population, but rather attempted to empirically test the strength of our theoretical thinking in turning the causal direction from top-down to bottom-up in the CE setting. We chose this particular municipal organisation because it wanted to focus on the challenges it faced in introducing CE as a developmental tool. Although the empirical results are at least indicative of the situation in other municipal organisations, statistical generalisation was not our ultimate goal.

Implications and suggestions for further research
Even though this study stresses the importance of bottom-up forces (influences and modalities), future studies should also further explore the respective top-down modalities. Alternatively, we could ask whether there are complementarities among the managerial and individual elements. As far as complementary theory is concerned, it is just as relevant to study whether “entrepreneurial individuals cause entrepreneurial leadership” as whether “entrepreneurial leadership causes entrepreneurial individuals”. Both causal directions are worth investigating depending on the context (see Bresnahan et al., 2002). We therefore suggest that it is worthwhile attempting to integrate individual-level and organisational-level factors of CE, and to find empirical links between top-down and bottom-up influences. It would also be interesting to find out whether different combinations of individual and managerial elements produced different consequences, and whether it was possible to identify ideal combinations of encouraging management behaviour, enabling organisational structure, and individual employee attitudes in different organisational contexts (e.g., private and public organisations of different sizes) and external environments. Finally, further attention should be given to identifying different modalities and measuring their mediating or catalysing effects in the CE process.

This study also has clear managerial implications. For instance, it is evident that individual attitudes and action, encouraging management behaviour, and enabling organisational structures are all needed in order to foster CE in an organisation. On the basis of our findings we suggest that these antecedents or elements could form mutually reinforcing pairs or compatible bundles of factors facilitating CE. Organisations that are capable of successfully combining managerial and individual elements could be expected to produce more innovations than others, and thus to be more entrepreneurial (Heinonen and Toivonen, 2007).

It is also noteworthy that individual attitudes as such appear to have only a limited direct impact on encouraging management behaviour, and that modalities are needed
in order to integrate it with individual attitudes. In this respect our findings emphasise the role of straightforward communication. Finally, it seems that true corporate entrepreneurs are hardly silent followers who are easy to manage. On the contrary, they are satisfied, self-confident and active actors who question existing working practices. This makes corporate entrepreneurship a substantial challenge for any manager.

Note
1. Antoncic and Hisrich refer to the concept of intrapreneurship, not CE per se. We acknowledge that (depending on the studies) CE and intrapreneurship may not be understood as exact synonyms, but represent slightly different phenomena of organisational renewal or change (see, e.g. Sharma and Chrisman, 1999; Amo and Kolvereid, 2005). We treat the concepts interchangeably in this study: the slight definitional difference is not of crucial importance because the focus is on the process of CE, not on its exact form or guise.

References


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