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TEMPORAL NATURE AND CHARACTERISTICS OF CORPORATE ENTREPRENEURSHIP. GROWTH AND RENEWAL IMPLICATIONS

Summary: This paper seeks to advance our understanding of time in the area of corporate entrepreneurship research. It suggest considering time as essential for understanding corporate entrepreneurship on the way to strategic renewal, where the problem is rooted in the reconciliation of time contradictions. Our conceptual model is supported empirically by the results from the survey carried out at the turn of 2007 and 2008 on the sample of 199 organizations. The results support the existence of five separate time contradictions: nature of time; structure of time; temporal frame of reference; experience of time; and time flow. Then we focus on the relations between time contradictions and corporate entrepreneurship. The authors argue that organizations which take our concept into management practice will achieve greater potential for growth and strategic renewal.

Keywords: time, corporate entrepreneurship, growth.

1. Introduction

The increased practitioner and academic attention to entrepreneurship's potential to renew organizations [Miles and Covin 2002] is accompanied by the search for solid theoretical framework and managerially useful prescriptions [Bull and Willard 1993]. We are still lacking the theory of time in corporate entrepreneurship's field. Moreover, we argue that future research should consider cognitive and behavioral factors relating to entrepreneurs in a variety of settings [Ucbasaran et al. 2001], the effect of environmental factors [Aldrich and Martinez 2001], the assessing of entrepreneurship outcomes and taking more multi-level approach [Davidsson and Wiklund 2001], and finally time frame and causality issues [Chandler and Lyon 2001]. The argument that strong entrepreneurship enhances organization's effectiveness is intuitively a powerful idea and question yet to be answered with a wide array of theoretical interests and methodological tools.

2. Dialectical approach to corporate entrepreneurship

Nowadays entrepreneurship is considered a fundamental stimulus of achieving and maintaining competitive advantage. Entrepreneurship is a key source of renewal

and growth of Polish organizations, since entrepreneurial organizations are able to take risk and experiment; they are capable of introducing innovation; they tend to identify the existing opportunities and exploit them before their competitors; they are ready for changes aiming at effective improvement and development in the highly competitive environment. Thus, entrepreneurship acquires special importance in Polish organizations, performing in unstable and discontinued, transforming environment. The dialectical movement is stimulated by competing and/ or surging, isolating and/or specializing, exchanging and/ or communicating, co-operating and/ or organizing. The representation of time and space undertaken by organizational members will determine the amplitude of their thoughts and acts to foster corporate entrepreneurship.

We define entrepreneurship as a process of reconciling opportunities and actions in time and space that is holistic in approach and continuously co-evolve people and venture with its organizational and environmental context. Thus, corporate entrepreneurship seems to involve the transformation of individual ideas into a collective action through the management of uncertainties in the process of reconciling contradictions. Corporate entrepreneurship provides a set of temporary solutions, serving to maintain the stability and continuity of ventures, with keeping adaptability and innovativeness at the same time. A significant role in this process is played by interactive relation between thought (cognition) and action, which is shaped both by positive (learning from success) and negative (learning by failure) feedbacks. Although we distinguish opportunity from action, in our viewpoint both are the necessary parts of entrepreneurial process.

In this definition we emphasized various contributions uncovered in a persistent tension in the field between thought and action: corporate entrepreneurship is an attempt to construct the rational and predictable world in the face of reality that quite often resists it. Because it is opportunity-centered, it enables people to pursue and realize their dreams: the process of the new high potential venture starting, growing, successfully harvesting it, and starting again regardless of the resources currently controlled. Despite the fact that entrepreneurship is a social process conditioned by situational circumstances, often one ignore wider social and cultural dynamics. Especially, it is seen in an underestimated interpretation of the frame of reference by means of which, members of organizations make sense for both, their own behaviors and behaviors of different groups [Thornton 1999]. However, there is much attention paid for normative conformity to social expectations, which creates limits when conducting research for flexible tools combination, which are actively and strategically created and used by group members to make sense of the surrounding world [Lounsbury and Glynn 2001]. All that resulted in peculiar silence, prevailing in the area of social aspects of entrepreneurships, particularly in ignoring social aspects of organizational time. We believe that paying more attention for social dynamics of entrepreneurial time has inward potential to work out theoretical synthesis across entrepreneurship fields, strategic management, and organization theory.

3. Literature perspective on time in management field

Taking under consideration a multitude of time manifestations, it is surprising how little is done in this research field. On the other hand, pace and proliferation of current research in the field have reached the point, where it is worth reconsidering what we have already learnt about organizational time and make an attempt for integration of all the findings [Ancona et al. 2001]. Following this arguments, we pose two general questions concerning time in organizations on the way to growth and renewal: 1) How should we study an entrepreneurial organization from the temporal perspective?, and 2) How should we introduce temporal dimensions into the research on corporate entrepreneurship ?

So far, generally speaking, time has been divided into two most general categories [Adams 2000]: clock time, real – which exists independently of people and events, understood as objective and absolute; mathematically divisible, linear, homogeneous stream; considered as a resource and tightly connected with means of higher effectiveness for individuals, teams and organizations; social time, subjective – socially constructed and interpreted, important in specific social context; its basic elements are tightly connected with other events or with specific context; important and valuable for individuals, organizations, societies, which socially create it; focus on relations between time and events influences time interpretation; is multidimensional and pays attention to pluralism of views, stakeholders perception and values about time.

Clock time exists independently of social and material forces. From that point of view, reality seems to be ordered and can be easily separated into time and space, which do not interact with each other. The only source for unpredictability is human behaviors and one's false perception of the surrounding world. Meanwhile, corporate entrepreneurship, similarly to many other important processes, is a function of time and localization (place). Time and space are mutually related, where socially constructed variables (social capital, intellectual capital, trust) are getting more important. For that reason, we argue that corporate entrepreneurship should be developed and structured not only with respect to absolute time, but also, crucially, to social time as well.

4. "Time Wheel" of corporate entrepreneurship. Theoretical construction of time manifestations

Specifying both the dynamics and multidimensional nature of corporate entrepreneurship, it is worth reconsidering the paradoxes of time in that process. In line with Lewis [2000] definition, we perceive paradox as contradictory yet interrelated elements – that seem logical when perceived in isolation but absurd and irrational when perceived simultaneously. Therefore, trying to oppose susceptibility to excessive simplification

and over-rationalizing, it is essential to apply broad perspective describing time in five primary dimensions of contradictions. Time assumptions influence the dynamics of corporate entrepreneurship by creating choices and behaviors of individuals and teams or groups as actual or potential entrepreneurs. That is why it is crucial to understand social processes which influence time perception, and give implications for creating favorable conditions for entrepreneurship (see Figure 1). Basing on those theoretical considerations we can derive the following:

> **Hypothesis 1.** Reconciliation of time contradictions has a positive effect on the level of corporate entrepreneurship, which leads to company's growth measured by entrepreneurial management and entrepreneurial orientation scales.

Time in organization is not constant, therefore it cannot be described only by means of amounts – variance among times' possible perceptions creates the potential to explain corporate entrepreneurship nature more profoundly. If organizational time differs, different time perceptions should result in different intensity of corporate entrepreneurship which should lead to different pace of growth and company renewal.

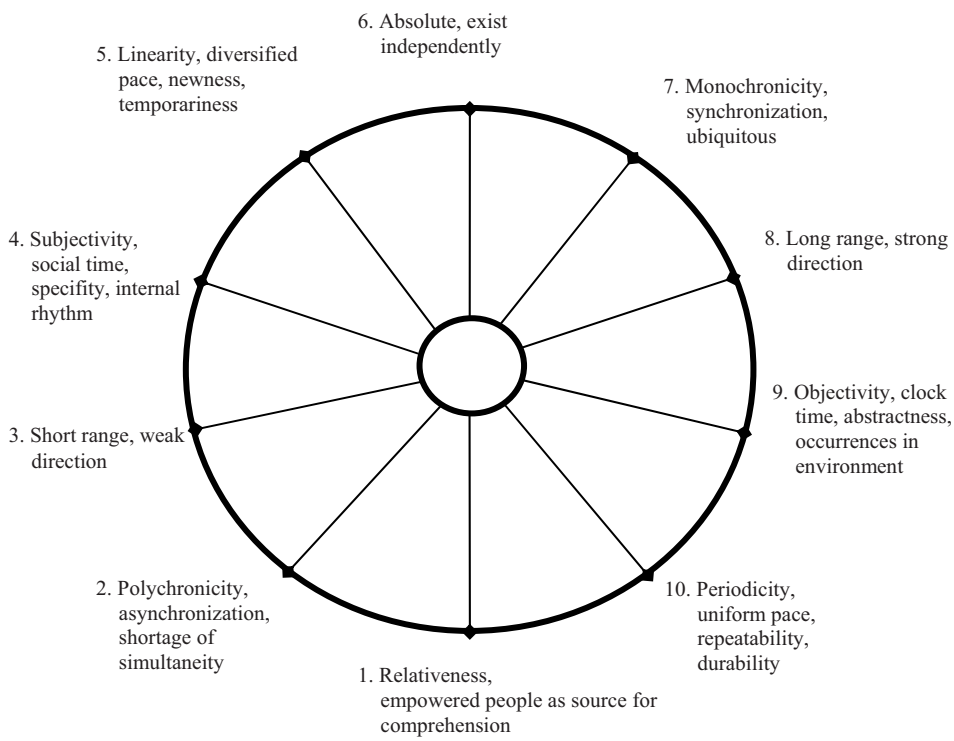

Fig. 1. Time wheel of corporate entrepreneurship – the conceptual model

The following contradictions were formulated on the basis of possible, diverse descriptions of time perceptions seen by organizational members:

- Nature of time – real time, posing fundamental category and existing independently of events, objects, spaces, motion versus epiphenomenal time existing only in relation to them. On the one hand, time as an important variable influencing effectiveness – early perceived and then early opportunities exploration gives better effects. On the other hand, time is a methodological mediator relative to entrepreneurial behaviors learning, or for growing entrepreneurial culture [Ancona et al. 2001].
- Structure of time – time consists of separate units (discrete ones) which can be easily measured, with equal spans versus time as a continuous stream which cannot be divided into separate units and can be identified only by sequences or series of events. On the one hand, the probability of new ventures, venture growth or venture fall is analyzed or compared in equal time units. On the other hand, the attention is focused on opportunities' perception order and on exploration sequence [Mosakovski and Earley 2000].
- Temporal frame of reference – time rooted in the past (existence) versus time reconciled with creating future and long time range (existing in becoming)? On the one hand, there is short time perspective on effectiveness – considered as static, where previous involvement of resources limits the possible area for entrepreneur's decision making. In particular, already possessed strategic resources value (rare, difficult to imitate) influence corporate entrepreneurship strength. From the other perspective, long time effectiveness – considered as dynamic one, stresses the need for development of competencies necessary to explore opportunities. The present realization of entrepreneurial vision allowed for renewing and sustaining the vitality of an organization [Munck 2001].
- Experience of time – objective experience of time, which is based on certain measures, external to individuals versus subjective experience of time, which becomes significant only by interpretations. On the one hand, entrepreneurial pace and rhythm are shaped by external events; on the other hand, entrepreneurship has its own internal social pace and rhythm based on individual perception of opportunities and means to explore them. In that case, time perception can be formulated by strategist-entrepreneur [Holland 2001].
- Time flow – time stream evokes progress in newness, where the past plays a minor role versus regular cycles of recurrent events. On the one hand, each day gives new opportunities, which will shape future in predictable way. Entrepreneurial experimenting separates future from the past. On the other hand, organization, or product's cycles of life or growth phases based on the cause-effect model lead us to recurrent of entrepreneurship intensive levels, not necessary in the same business unit (moving toward the same level of growth by different entrepreneurs or by other organizations) [Zimbardo and Boyd 1999].

Entrepreneurs behave in ways consistent with their perceptions and interpretation of reality, most of which are based on social construction invented, not discovered, and developed through interactions with others. Thus, the concepts and values people hold about time of opportunity exploration would distinguish entrepreneurship from other organizational activities. Therefore, time and temporal practices could provide a tangible, observable way for members of organizations to define who is and who is not an entrepreneur. Entrepreneurship deserves regaining its temporal embeddedness. The aforementioned arguments lead us to following:

Hypothesis 2. Time contradictions are reconciled in five dimensions: nature of time, structure of time, temporal frame of reference, experience of time and time flow.

5. Data collection procedures and measures

The empirical research was carried out at the turn of 2007 and 2008. The sample consisted of organizations from the region of Upper Silesia. The random sample of one hundred and ninety nine organizations was constructed. It was then divided according to the activity (in compliance with the European Classification of Industrial Activity), 42% of researched organizations dealt with production, 22% with trade, 9% with transportation, storage and communications, 9% with financial services. Other branches represented less than 5%. The characteristics of organizations by age (years) and average number of employees criteria is presented in Table 1.

Table 1. The characteristics of organizations by age and average number of employees criteria

	Median	Mean	Min.	Max.	Standard Deviation
Age (years)	13	24.5	3	155	30.0
Average number of employees	114	2612.1	2	50 879	8653.2

Source: Authors' own study based on the research data.

While there is a relative disagreement on how to conceptualize corporate entrepreneurship, some commonalities are generally accepted. Many scholars recognize the entrepreneurial orientation construct [Lumpkin and Dess 1996]. The operationalization of the entrepreneurial orientation was developed by Covin and Slevin [1989], who assumed that factors such as innovativeness, pro-activeness and risk-taking act together creating uni-dimensional strategic orientation, and should be aggregated together. Assuming that entrepreneurship is an opportunity-centred

process that enables people to realize the high potential venture regardless of the resources currently controlled, the applicable approach for our stream of thinking would be the idea of entrepreneurial management at the corporate level developed by Stevenson and Jarillo [1990]. This idea places entrepreneurship within broad frames of strategic management and emphasizes opportunity seeking, thus making an entrepreneur independent of the organizational context. Stevenson and Jarillo [1990] categorized behaviors present in the management process and divided them into eight areas: strategy orientation, opportunity, resources, control of resources, management structure, reward philosophy, growth orientation, and entrepreneurship culture.

The tool takes a form of a questionnaire, based on a seven-grade Likert scale. The tool makes it possible to decide whether the researched companies, regardless of their size, are managed in a really entrepreneurial way. Therefore, in our work, we use the tool (after verifying its appliance for our research by means of factor analysis) to determine the level of corporate entrepreneurship in the companies under investigation. The questions were constructed in a way that makes it possible for respondents to evaluate the two dimensions of given contradiction from 1 (very low degree) to 7 (very high degree of agreement with the statement). The questionnaires were addressed to medium- and top-level management. The obtained results were put on a strategic contradictions managerial grid (this idea is concurrent with the managerial grid by Blake and Mouton [1985]). The grid is based on two axes (reflecting each dimension's evaluation) graded from 1 to 7 (see Figure 2). The ability to reconcile a given contradiction is calculated as the distance from the top right corner of the grid (point with co-ordinates 7;7) to the point with co-ordinates reflecting the questionnaire answer (x, y). This distance is calculated for each of contradictions according to the following equation:

$$\mathbf{d} = \sqrt{(7 - x)^2 + (7 - y)^2}$$

According to Figure 2, we may say that the greater value of the distance d is, the weaker effectiveness of an organization in reconciling the strategic contradictions. Thus, the point with coordinates (7;7) reflects the ideal situation (d = 0). The point with co-ordinates (1;1) corresponds to the worst result (strategic contradictions reconciliation profile = 8.49). In order to verify the constructed hypothesis, we analyzed results using SPSS PL for Windows.

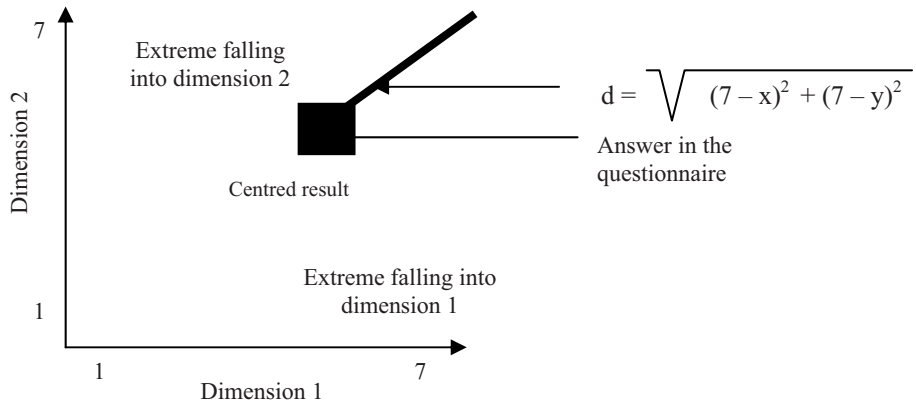

Fig. 2. The time contradictions reconciliation grid

6. Results

During the questionnaire preparations, we based on the literature and our own experience and proposed six question concerning each of time contradictions prepared from dialectical perspective. When carrying out the pilot survey among the MBA students, one part of the questions was changed in order to make them more comprehensible. But still some of them had to be rejected for the purpose of statistical analysis. What is important, all time dimensions occurred to be separate empirical dimensions of the assumed theoretical model Cronbach's alpha for each of the dimensions were higher than 0.71 and the KMO index was higher than 0.69 for each of the dimensions. The obtained results suggest that there are no reasons to reject Hypothesis 2 stating: Time contradictions are reconciled in five dimensions: nature of time, structure of time, temporal frame of reference, experience of time and time flow. In order to find a better empirically grounded evidence for the relation between variables concerning time contradictions reconciliation and the level of corporate entrepreneurship, we assumed that there is a linear relation between them. We carried out the correlation analysis, using Pearson's r and Kendall's tau tests. The results of the correlation are presented in Table 2 and Table 3. All statistically significant correlations obtained positive values (at 0.05 level). There is only one dimension of Entrepreneurial Management where correlations exist not at a significant level (resource orientation). What is also interesting is that the fifth time contradiction – time flow – has no statistically significant correlation with the corporate entrepreneurship scales.

The obtained results suggest that there are no reasons to reject Hypothesis 1. We found the highest positive relation between the level of innovativeness and temporal frame of reference contradiction reconciliation. This might imply that

Table 2. Results of Pearson r correlation analysis between time contradiction reconciliation and corporate entrepreneurship level

	EM – S	EM – R	EM – M	EM – R Ph	EM – G	EM – E C	EO – I	EO – P	EO – R T
d1	**0.18**	–0.03	–0.04	–0.02	0.06	0.08	0.09	0.19	0.15
d2	**0.22**	0.11	**0.20**	0.12	**0.14**	0.11	0.06	**0.17**	**0.20**
d3	0.21	0.01	**0.14**	0.13	–0.07	**0.20**	**0.31**	0.23	0.18
d4	0.08	0.07	**0.24**	**0.14**	0.03	0.00	0.11	–0.04	–0.03
d5	0.10	–0.02	0.07	–0.04	–0.05	0.07	–0.02	–0.06	0.03

Source: Authors' own study.

Table 3. Results of Kendall's tau correlation analysis between time contradiction reconciliation and corporate entrepreneurship level

	EM – S	EM – R	EM – M	EM – R Ph	EM – G	EM – E C	EO – I	EO - P	EO – R T
d1	**0.12**	–0.02	0.01	–0.02	0.09	0.02	0.05	0.09	0.08
d2	**0.13**	0.08	**0.11**	**0.11**	**0.13**	0.09	0.03	**0.10**	**0.14**
d3	**0.14**	0.05	0.04	0.07	–0.02	**0.11**	**0.21**	0.15	0.12
d4	0.04	0.03	**0.14**	0.08	0.04	0.01	0.07	–0.02	–0.04
d5	0.06	–0.02	0.02	–0.03	–0.03	0.07	–0.03	–0.05	0.01

Comment: Where: EM-S – Entrepreneurial Management – strategic orientation,
EM-R – Entrepreneurial Management – resource orientation,
EM-M – Entrepreneurial Management – management structure,
EM-R Ph – Entrepreneurial Management – reward philosophy,
EM-G – Entrepreneurial Management – growth orientation,
EM-E C – Entrepreneurial Management – entrepreneurial culture.
EO- I – Entrepreneurial Orientation – innovateveness,
EO-P – Entrepreneurial Orientation – proactiveness,
EO-R T – Entrepreneurial Orientation – risk taking.

Source: Authors' own study.

the creation of organization's effectiveness mostly depends on developing proper culture of innovativeness, entrepreneurial thinking, entrepreneurial seizing, shaping, recognizing, interpreting, and pursuing opportunities. Positive, but low relations were found between entrepreneurial culture, reward philosophy and growth orientation. There is also a relatively high relation between strategy orientation, management structure, pro-activeness and risk-taking. Basing on those analyses, we can therefore contend that in the researched sample of businesses there is a positive relation between time contradictions – understood as five separate dimensions – and corporate entrepreneurship as an opportunity-centered mode of management leading to organizations' growth.

7. Conclusions and future research directions

To summarize our contribution, we would like to emphasize that we do not attempt to provide a fully exhaustive framework on time and corporate entrepreneurship. Rather, we try to provide another point of view for research on time and suggest avenues of future research. Future researchers may find new categories and subcategories as the set of contradictions considered expands and the field progresses. We are aware of many questions that remain unanswered. Some consolation lies in the ability to emphasize research problems, and basing on their results it is worth stopping when considering temporal dimensions of corporate entrepreneurship, more precisely: How should we in the epiphenomenal dimension form time nature, reconciling real time with epiphenomenal time? Who is supposed to be responsible for that? How should we experimentally form the temporal frame of reference, integrating the past, the present, and the future? How should we organizationally (administratively) reconcile the objective and subjective experience of time? How should we specify the flow of time and pace of organizational changes at a behavioral level? Finally, to achieve congruence with complex entrepreneurship practices one should take time seriously as a strategic resource. Temporal analysis of corporate entrepreneurship issues and tensions, multidimensional theoretical framework of time and some more empirical data, would increase arguments which concept of time we must use to increase effectiveness on the way to organization's renewal.

The main objective of this paper was to advance our understanding of time in entrepreneurship research. With a temporal framework of corporate entrepreneurship, we attempted to provide a new and practical way to approach this issue. Our purpose was to present dimensions of time contradictions based on the literature research (nature of time, structure of time, temporal frame of reference, experience of time and time flow) and then empirically verify them. We wish to explore the meanings of time and time contradiction framework, addressing temporal issues in renewing and growing organizations. We believe that we have proposed some basic attempt to temporal dimensions of corporate entrepreneurship that can be further explored and explained on the way to growth and renewal.

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TEMPORALNA NATURA I CHARAKTERYSTYKA PRZEDSIĘBIORCZOŚCI ORGANIZACYJNEJ. IMPLIKACJE DLA ROZWOJU I STRATEGICZNEJ ODNOWY

Streszczenie: Celem artykułu jest pogłębienie wiedzy o czasie w obszarze badań nad przedsiębiorczością organizacyjną. Uważamy za kluczowe dla rozwoju i strategicznej odnowy organizacji, opartej o przedsiębiorczość organizacyjną, uwzględnienie sprzeczności czasu w tym procesie. Zaproponowany model koncepcyjny został pozytywnie zweryfikowany w trakcie badań na przełomie 2007 i 2008 roku na 199 organizacjach. Rezultaty potwierdziły istnienie pięciu sprzeczności czasu: natura, struktura, czasowy układ odniesienia, doświadczanie i przepływ. Następnie wskazano na relacje pomiędzy godzeniem sprzeczności czasu a przedsiębiorczością organizacyjną. Twierdzimy, iż organizacje które uwzględnią zaproponowaną koncepcję w praktykach menedżerskich osiągną wyższy potencjał rozwoju i odnowy strategicznej.