

MODE 0 (Mode ZERO)

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Per Staffan Boström

PhD candidate

University of Linköping, Sweden

University of Mälardalen, Sweden

Outlining a Model for Integrated Studies and Strategic Research for “Organizational Development and Growth”, from the viewpoint of innovative research in R&D, in a “sustainable” systemic context

Key words: R&D research, strategic research, organizational sustainability, TBL, decoupling, innovative and learning research, resource management

INTRODUCTION

As a consequence of the impact from the ongoing digitizing in all sectors of society we can foresee an extended need of new types of models to explain sustainability contexts, taking into account history and culture of today. When creating new models for the future strategies, researchers have to take into account various research modes with more longitudinal designs, models or methods that in the end can help strategic decision makers to value the effects from strategy decisions in various organizational contexts, in their respectively agendas of sustainability.

A common research mode for strategic research

Decisions in technology (R&D) research are, *not unlike in other science studies and research*, strategy decisions i.e. *how* contexts, projects, products, resources or concepts shall be analyzed, valued and managed to benefit or fulfill *organizational* ends. Conclusions drawn from experience and methods used in organizational fields and contexts of some corporate R&D may therefore be a potential for use in analyzing and exploring how to conduct strategic and evidence based research in the society – in a science perspective.

Questions frequently now discussed is how, i.e. to what extent strategy decisions in organizational contexts are based on intuition (Moustakas, 1990 and Schön, 1995), on tacit knowledge (Polanyi, 2002) or visualized knowledge of various kind (Eliasson, 2000), on history (Pettigrew, 1992, 1997) or emerged from intellectual capital in narrative or accountable form (Mouritzen, Larsen, Bukh, 2001). Strategy is also developed in stakeholders and environmental perspectives (Jetter, 2003) and as social constructs (Sztompka, 1991). From literature we also know that strategy decisions are not fully rational. Earlier views concerning the meaning “maximizing of output”, are today rather connected to satisfying the benefit of the outcome (Cyert & March, 1958, 1963) and from open system processes (Katz & Kahn, 1966 and Thompson, 1967).

Limits for strategy decisions are the individuals bounded rationality (Simon, 1982); in some

discourse now superseded by “action rationality”(Brunsson, 1985). Organizational limits, as for example of power over resources (Burns, 1999), organizational inertia (Hannan and Freeman, 1984) or information asymmetry and weak accountability are, among other organizational influences, found also in more or less *institutionalized research activities* which unables or delays innovative change and thereby hinders the further emergence of information needed for stretching out research strategies in time – in longitudinal studies - and of /sustainable/ contexts. Responsibility for widening the research contexts is now considered in relation to the legitimacy discussed in R&D decision making, also in extended organizational contexts (Pfeffer, 1982).

Implications of decision making, in R&D as a “core” and often corporate process, is that decisions do not lead to steady state but rather to continuous change (Greiner, 1972). Management and social behavior changes in organizations over time (Sztompka, 1991). Time is considered in the aspect of transparency and in the patterns of change (Van de Ven and Poole, 1995, Hinings, 1997). Various change modes are affecting how decisions are measured or valued (Van de Ven, 1992).

‘Sustainability’ and ‘sustainable’ are high priority topics in *societal* and *academic* discourse of strategic development - as well as in practical contexts such as in industry (and in authorities or NGO’s as well). Common visions and goals for ‘sustainability’ emerges as part of strategy decision making, although they are created from various organizational viewpoints. The report “*Our common future*” published by the UN World Commission on Environment and Development in 1987 discusses the principles and requirements for the global development of society and of corporations/organizations as well. Since then “sustainability” is one main aim in strategic research in various extent of society – in scientific research.

Society reflected in academic discourse of ‘sustainability’ *primarily* focus on the need of legitimate innovative systemic change in individuals /working/ life, on urban development, on creating sustainable infrastructure for individual health and education, but also on the individual, as well as organizations responsibilities and rights as citizens.

Corporations, in industry and other enterprises, focus on accountability and responsibility on various levels and due to the fast ongoing change and continuous transformation of the field in industry, on how to benefit the need of their stakeholders: partners, suppliers and customers; as well as on their owners requests and on handling different cultures in present and future markets.

Both *society* and *corporations* - and their individual actors - though act *in an overall global* environment context. On management levels, strategies for organizational performance of core processes are created for individual as well as company survival; in product, service and market development, in capital development, in human competence development and especially through technology research development, that is for product and service design . An inter- as well as intra-organizational focus on strategies and the role of the organization as creator for building *sustainable values* in creating new resources in terms of products, services and skills (Penrose et al).

On organizational level of society and corporations, with similar ontological and epistemological understanding, the conditions for strategic research is rather connected. A common research mode seems therefore possible to evaluate.

MODE 0; a suggested innovative method for strategic studies in R&D

Overall research topic “*Return of Resources; Strategy and Management Control for a Sustainable Growth - focusing decoupling and the triple bottom line from the economy perspective*”

Resources and systems development

From an economists point of view, being a researcher of organizational /corporate/ strategy, organizations though differ a lot when it comes to /criteria for/ strategy development i.e. how to reach sustainability goals and ends - especially on lower levels of hierarchies. Some organizations are regenerative and some are degenerative, some have more impact on development than others. Seminars and bench-marks **) showed that modern “resource management” - and the managers - though do have one common interest and main aim; they in general aim to make as efficient use of the total organizational resource base as is possible! Even considering large differences, for example differences in how they are facing time due to the organizations *actual* mode of change, it seems that the “resource approach” can be regarded as a general and suitable framework for strategy studies and *strategic research* of what could be labelled or thought of as “organizational sustainability”.

There are still though very unclear definitions of “*organizational sustainability*” - and the criteria for decision makers - established that shall contribute to the development of firm and common *sustainable* strategies for long term development of our world. But from a systemic researcher’s viewpoint, ‘sustainable’ corporations and other organizations, as well as part of them, can be viewed as /core and/ *sustainable*, though continuously changing their resource base, and management systems and thereby also become primary *contributors to the academic discourses* of systems development and systemic change processes.

As in society contexts, the total organizational resource base may be categorized in certain groups and subgroups. In above mentioned UN report they are categorized in three main resource / or capital/ areas; social, financial and natural; also known as the three P.s. (People, Profit and Planet). In some discourse of sustainability these capacities are labelled as “the triple bottoms”- as in the concept of Triple Bottom Line, TBL (Elkington, 1998) In terms of capacities, besides their use in strategy decisions and strategic research, for *future* sustainable development it might be more relevant /and somewhat more tangible and also more like societal accounting/ to categorize them as resources of individuals, in money and in (im-) materials/animals/nature..

In the mode of continuous change of organizations and transformation of its’ resources over time and over several phases (Greiner, 1972 and Holling, 1986), this could be viewed to imply systemic thinking (Poole et al 2004 and Senge, 2004). In sustainability context *three main systems* where /innovative/ change /transformation/ can be studied; are studied; in the social systems, in the monetary systems and in the ecological systems. Various driving forces, individual, financial and technical resources, can be found within the respective system, but with emphasis on its’ certain driving force. Resources in and between the respectively system are not interchangeable.

Three design problems

In order to reach the performance goals of resource efficiency through decoupling in/of the material systems and service development in the social systems, there is a necessity of studying these *three* systems altogether - because they all three have to be regarded in the decision process - though implies a primary need, *problem one*, of a continuous change in and of *continuously altering of the research modes* (Mode 1 vs Mode 2) and research areas (technical-economic vs social - cultural) that researchers use in /organizational and longitudinal/ strategy studies - and *strategic research*.. A second need, *problem two*, occurs due to the necessity of using *various theoretical approaches* when studying different change patterns of organizational change over longer periods. A *third problem* is that since no organization,

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business or industry is like the other one, studies of incremental change in one organization does not imply a possibility to generalize the outcome of the research to another organization even though both are studied in the same context. This means that conclusion from one study has to ‘stand alone’ in its certain context. Theorists of legitimacy **) though claim that certain conclusions *may be generalized* due to organizational strives of copying each other’s successes and that a continuous isomorphism shapes common organizational structures and behaviors. (diMaggio et al, 1983). This forces the researcher to continuously revert to the actual organization/situation in order to validate his/her observations, the more often the more complex phenomena or due to distances, actual mode of change etc. These three problems indicate that there is a need of a “new” theory of methodology, in some respect complementary to deductive and/or inductive approaches, *for the strategic research* which aims to contribute /to the research of / (intentional) organizational change (in sustainability contexts.)

Experience from practice is that “sustainability” though still in large organizations is rather connected with responsibilities solely in ecological - and in best case social considerations, and with political and legal restrictions. The *starting point* of this research modelling is therefore the assumption that *company* decision makers in general actually have restricted view of ‘sustainability’, considering primarily ecological demands of the TBL. A relevant assumption is that by changing key-decision processes *in reality, in real projects* and *at different levels*, the whole company becomes more sustainable, so considering not only the techno/environmental and social factor but also the financial factor. This paper aims is to demonstrate that through a use of a *dynamic* mode of research (Mode 0), decision making processes can easily be transformed in a more sustainable way by *training key actors in reality* - in real projects - as a response to the need of qualitative rather than quantitative and a more *action based* research - even in strategic and longitudinal research..

A forthcoming continued research aims to demonstrate this. It is proposed to be conducted in an organization where a researcher also have good personal *experience* from practice. Since sustainable decision making have certain impact on technology and product development, and considering the main role in forming innovations that R&D and Marketing processes have, this research will be performed at/in both of those departments and respective processes. In this way obstacles and drivers of sustainability and resource management can be revealed. The study is though limited to automation, energy power distribution and automotive industries. Studies of ‘action rationality’ and stakeholder dialogues as well, included in the analysis of strategy decision processes (my papers in process *) **) of R&D in these organizations, indicate that this proposed research mode is necessary to get further on, in the strategic research process

The purpose with such a research and the need of hypothesis

One purpose with this study, within the frame of a PhD research, is *to evaluate a “new” research model*, through analysis and implementation of a form /and a formula/ for strategy decision making. This is enabled through making information and criteria visible that frame strategies for sustainable talk and thinking, sustainable decision making and sustainable acting in a systemic context, in order to fulfil organizational ends. The studies will build upon a certain “decision” model for *strategy development* modified from the model “hierarchy of business strategy” (Simons, 2000) and in a number of phases; (Grant, 2001) from pre studies to reflections

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Four questions can be raised due to this overall purpose in this first phase of the study

; as a first step; three questions to open up the responsiveness

- *What criteria* have to be visualized in connection to /research about/ decisions and acting which have effect on *organizational performance*?
- *How to* (and why?) integrate the sustainable development concept, the TBL and decoupling, in operations in a way that enhances *efficiency* of resource use and creation at the same time?
- How should actual decision criteria in decisions/acting be *implemented*?
; and as the second step (to open up for problematising of the three main problems discussed above)
- What is a most satisfying way of studying strategic organizational change in order to fulfil organizational ends of efficient *resource management*?

The study aims to visualize criteria needed for “sustainable” talk, (re-) thinking, decisions and actions. One main aim is therefore to find criteria that *contribute to the academic and science agenda* and to “body of knowledge” - but also to practitioners’ clarity about sustainability and/or the ability to act (with less uncertainty) to fulfil sustainable organizational goals and ends. A common language, knowledge and identification of the “triple bottom line”, may contribute to a mutual understanding. In order to continuously value the proposed research model *some grounded hypothesis* are necessary and they shall be reviewed during the study.

These first hypothesis are generated from the above three questions:

H1: Sustainability concept is equivalent to ecological aspects in technology systems at the corporate decision makers’ view

H2a: Decision makers’ views reflect explicit elements from the social systemic aspects of TBL, after a short teaching/training

H2b: Decision makers’ views reflect explicit elements - and demand operational and financial decision criteria - from the monetary systemic aspect of TBL, after short teaching/training

H3: After providing information on TBL’s and resource management “body of knowledge” to decision makers, competitive advantage for the firm by re-thinking those elements in the processes will be considered in the forthcoming dialogues and research.

Present methodologies, theories and impacts

From literature (Greenwood, 1998 and Gibbons et al 2003) we know that Mode 1, generated in a more (post-) positivistic tradition and a more or less major paradigm for strategic research, is used as approach *primarily* in technology and science research and with a more or less deductive methodology, using theory as starting point.. Mode 2 though implies main foci at the social - as well on the technological drivers, as described in the figure below, (Fig 1), but with a more or less inductive approach; analyzing the organization as a social construct and using empiricism as starting point.. A longitudinal study of strategies in /large/ organizations in society -science field, seemingly forces the researcher to clearly distinguish between the various research paths *within* - and *between* - these two modes (within Mode 1 respectively

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Mode 2). This, beside the above three mentioned problems, is mainly due to the fact that a common organizational language and *common* visions, common research strategies and research traditions often are missing - or due to interpretation of contexts in different ways on various levels of the research organization.

Technology/science studies

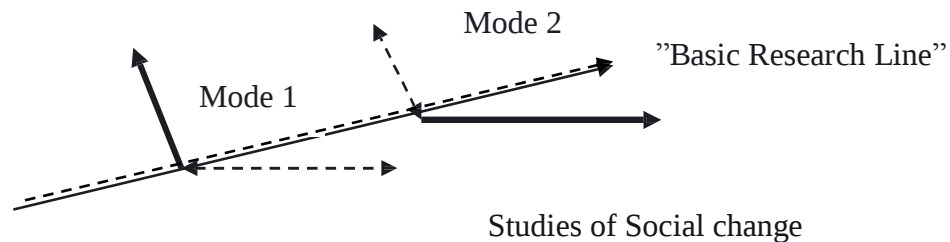


Fig 1 Illustration of main paths for Research Modes (Mode 1 and Mode 2)

Economic (read: financial) impact or influence from “capital development”, economic variables as determinants and/or as results from strategy research of ‘monetary’ systems seems to be always *implicit*, or rather taken for granted - as tacit knowledge - in studies of social systemic change i.e. as in studies of socio-cultural or *socio-economic* patterns. In some discourse the word ‘capital’ is equal to “*resource*” when considering main criteria and conditions for legitimate research. The roots of capital in economy/financial terms - as monetary systemic drivers or as decision criteria in terms of actual financial conditions - are though *not made explicit* and therefore not judged as a *main* determinant, neither in technical systemic research nor in social research. Theorists argue that this is found especially in large organizations, due to the separation of management and control (Fama-Jenssen, 1983) or due to information asymmetry.

The systemic context

Innovative Resource Management assumes resource efficiency in processes but also in order to account for it, *a systemic context* - and an, in some way *open* systemic context. where companies and other organizations are interacting with stakeholders or other agency networks in a systemic environment.

In this research organizations are viewed as “open systems” (Cyert & March, 1958 and Thompson, 1967) interacting with other systems in this systemic environment. Although the social system and the social contract implies members, individuals *in* the organization, the technological - and monetary drivers are viewed in a (external) network i.e. in a stakeholder perspective. Monetary “kick-backs” are for example seen to be generated from interaction with other systems as them of the customers, suppliers etc.

Systems Integration, or rather applying a systemic perspective in strategic research, also refers to theories of learning and knowledge creation as result of innovative technical development in the sense of marching from “part/components” to “very complex systems (CoPS) (Prencipe A. et al, 2003). This can be found in large technical systems - but also in environmental/urban or social systems - and even in financial systems (i.e. micro to macro) This imply that the contextualization for this suggested model for strategic research consists of various systems

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on various levels of society. The systemic approach also allows to regard systems as framing similar an/or identical development processes *)

A new research design

The purpose with this research model and its relevance

The overall topic for this research model outlined here, is to value it as *an integrated research and /innovative/ change model* - Mode 0 - a basic research model for strategic research which also includes a prototype to a formula for long term, ‘sustainable’ decision making. Implicitly this ‘decision making’ means how to manage “a sustainable organizational performance”. The research primarily focuses on analyzing managements decisions and actions i.e. it focuses on the strategy decision criteria and systemic/process research questions of for Whom?, Why?, What?, How?, When? and on the answers.

Experience from various organizations is that there is a great need of knowledge, more visible and accountable information and clear decision criteria what regards ‘sustainability’ in an extended context, in and of organizations, and its implications on strategy decision making - and thereof in strategic studies. This implies a need of the systemic perspective of organizations also to practice efficient resource management in various development processes.

The specific problem therefore focused in this outline is the *lack of visible information* from three different, integrated systemic contexts - from the same “body of knowledge” - knowledge generated and used in technological, social and financial systems that, apart from intuitive “feelings”, are needed in in more long term and strategy decision processes

A critical assessment

Limits for organizational decision making are of different kind and are often a result of individuals bounded rationality (Simon, 1982), of organizational inertia (Hannan et al, 1984) or from the legitimacy in its’ behavior. This also sets the frames for “how”, or rather “who?” is to manage its resources. And – “what” is the most satisfying way to manage “sustainability” - or rather “who” are involved in this decision processes - and “when” and “why”?! To consider these limits when analyzing processes and peoples behaviors it is therefore relevant in an extended and dynamic, constructive (Lukka, 2002) research mode also to include a *critical* approach. This systemic analysis therefore also imply a certain critical assessment through these procedural or rather process questions.(Pettigrew, 1995 and Hinings 1995) This seems to make this “new” research mode even more relevant for a ‘sustainability’ research.

Suggested methodology; Mode 0 - from the point of view of modern resource management and the ‘triple bottom line’ concept of sustainability (TBL)

The resource approach, in the forthcoming study labelled the “resource management”, here in our understanding in terms of managing the ‘triple bottom’s resources’ according to the concept of the “triple bottom line (TBL)” (Elkington, J). TBL of sustainability, beyond natural resources, and include financial as well as human capacities; i.e. capacities for qualitative versus quantitative growth.

*) Critical assessment in process analysis of R&D (Boström, P.S., 2013, my paper in process)

**) Legitimacy as analyzing Concept in R&D (Boström, P.S., 2014, my paper in process)

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Described in terms of systemic contexts the drivers for technology and human development and change are the main foci from strategic organizational research point of view. Analyzing those drivers are hopefully possible with a common focus of resource management and with an aim to discuss guiding assumptions for reaching resource efficiency - thereby using a “basic research line” where certain common criteria are visible. I propose that this “basic research line” can be labelled Mode 0. Mode 0, compared to my earlier view of the “basic line” (Fig 1) now makes an explicit meaning of economic (read: financial) knowledge i.e. from the integration and/or visualization of the monetary system in parallel to the other two systems..

Technology/science studies generated *from theories* as starting point

Mode O Studies of integrated /innovative/ organizational strategy and change *generated from practice* (from “*economic*” criteria)

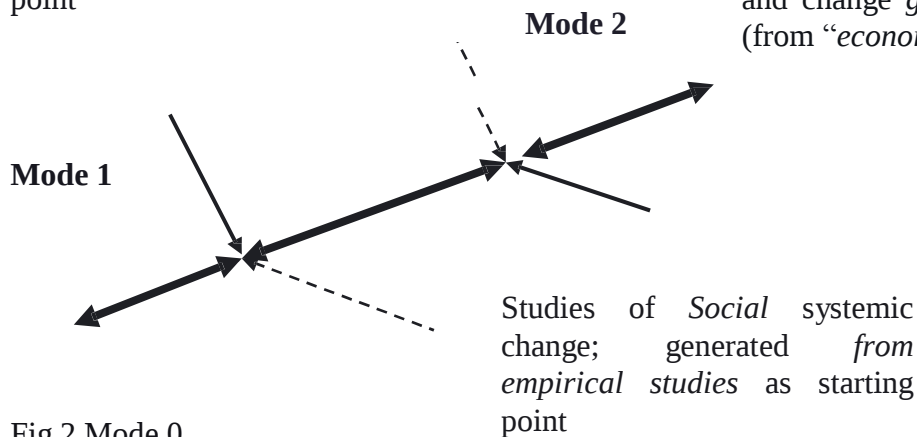


Fig 2 Mode 0

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Guiding assumptions for how to use resource efficiency ***) as main aim for the studies will be learned from evaluating monetary systemic approach and applied to the Mode 0 during the research. Certain characteristics for Mode 0 will be further developed and evaluated during forthcoming strategy studies. The basic assumptions for this Mode 0 that will be stressed in the research are for example about;

- its' grounded principles in terms of always using practice as starting point in strategic research
- its' applicability in various organizations in terms of technical and/or in social systemic contexts
- its' dynamic potential in terms of moving between Mode 1 and Mode 2
- its' ontological and epistemological characters in terms of altering between different theories in various phases of the strategic research - in studies of different characters (deductive/inductive)
- its' relevance in the various phases of the the research (analysis, actions, reflections etc)
- its' “responsiveness” in terms of how management reacts on the use of it in certain projects, decision situations etc. •
- its' potential in development processes; in accumulating knowledge in academic as well as in practice

***) The main “core” and driving force for development and growth, grounded in the “resource approach” as mentioned on top, is the “economic” criteria for efficient management of the organizations resource base. From *monetary /open/* systems we have learned that various kinds of “returns” are regenerative. Other kinds are degenerative or even destructive. Making regenerative - as well as degenerative – research outcome visible /and accountable/ in the three systemic contexts above makes it easier to compare and alter between the various context - and alter between the various contextually applied research modes. An altering between deductive and inductive modes (*problem one*) due to the present phase of the longitudinal study, will be possible. If - from the beginning of the research process - this extended criteria i e the “economic return”-driven process criteria, is made visible, the more efficient and relevant use also of research capacities will be possible. The necessity of referring to various theoretical approaches (*problem 2*) also due to the phase under study (the analytical phase, the implementation or the reflection phase etc) will be more effectively done if the three various systemic contexts - and valid criteria - are clearly visualized. The *third problem* - the difficulty in generalizing from inductive research is possible to overcome if 1) systemic contexts are clearly visible and 2) the “new” research mode includes visible (accountable or operational) decision criteria as well as a suggested solution (a prototype, an account or a narrative etc), that can be evaluated in the various systems - in a repeating pattern.

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THE RESEARCH PLAN

Contextualizing systems, perspectives and foci for the research

The context viewed for this proposed research (Fig 3) is described in terms of systemic knowledge. The three systems also represent three environmental or resource areas where efficient resource management (RM) are of considerable dependence for sustainable development. This dimension of the context may also be regarded as areas including certain assets and transformations and decoupling of products, services, energy, information and skills and viewed from different angles; from a socio-cultural, a socio-economic or a technical-ecologic viewpoint.

The certain perspectives mentioned here are developed at earlier seminars and benchmarks **) and given priorities from managers with certain interests in “sustainability” matters. The main foci, as showed below and from an organizational viewpoint are; *inter-organizationally* on the market perspectives and *intra-organizationally* on the individuals in (project-) management teams.

Focusing talk, decisions and actions as processes in shaping legitimate organizational systemic behaviors (in the respective context), we need to discuss individual behavior i.e. on an individual level. Focusing stakeholders reactions on transformation and/or decoupling of products, services and skills also need foci on individuals. But in order to create methods for accounting and measuring, individuals has to be regarded in a systemic context *where two or more individuals interact*, notwithstanding that even one individual may be seen as a ‘system’. This is due to the fact that legitimacy in organizational development describes *events that take place between two or more situations or parties*.

**) Legitimacy as analyzing concept in R&D (Boström, P.S., 2014, (paper in process)

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Strategic environmental areas for Resource Growth: "Stakeholders", main perspectives and special foci:	Social	Financial	Technical/Ecological
(5) Community perspective (Regional focus)	H	M	H
(4) Owners perspective (Stock market focus)	L	H	L
(3) Partners/Industry perspective. Customers, suppliers' perspective (Market focus)	M	H	H
(2) Organizational perspective. (Internal systemic focus, including organizational learning)	M	H H	H
1) Individual, internal perspective. (Personal knowledge focus, leadership focus)	H	H	M

Figur3: Contextualizing the various perspectives/foci in analyzing complex decision making and RM for research on sustainable systemic development - in two directions. The wide arrows represent the roots of and directions for systemic and process analysis.

(The block letters means H = high priority, M= medium and L= Low priority from pre-study seminars with managers from industry.)

Problems, limits and the aim of the research

The four questions above have to be even more precise in order to be able to handle in the research with reference to the theoretical viewpoint /of RM/ and the “new” model, argued for as a result of previous studies. *)**). While the research is performed, the researcher may considers that the organization’s own driving forces are working and - in the framework of a value-chain model and – the study will be based on “collaborative research”, that is where the respondents are engaged in developing the research process. Already from the beginning of this study the researcher will use a qualitative methodological approach. The researcher also will act according to what Donald Shon (Shon, 1983) characterizes as “the reflective practitioner” - reflecting *in* action rather than on action i e an inductive approach more like in Mode 2 (Gibbons et al, .2001)

*) Critical assessment in process analysis of R&D (Boström, P.S., 2013, my paper in process)

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Research design and methods

This proposed research sets of with an explorative pre-study in order to put some managerial topics and mental models in the foreground. Social, economic and ecologic management systems and/or processes are described and analyzed. Visions, limits and problems related to decisions about “sustainability” are analyzed on organizational level with suitable analyzing concepts or instruments. The study is carried out in two large organizations of different characters, one R&D department and one Marketing department. The research process is planned to be performed in five steps which so far is labelled “the resource dialogue”: The planned “dialogue format” is a first attempt to process the use of Mode 0, i.e. to evaluate the “new” model for strategic research. It is processed in five steps and the processes will be repeated during a longer period of time.

The Resource Dialogue:

Step 1 and 2 Identification of content and contextual preferences

1. Framing the organizational areas, learning about the chosen teams, organizing the research and choosing a number of “practicing areas” to test relevant analyzing concepts and tools.. Questionnaires as well as unstructured interviews are used. Academic as well as company seminars at relevant stages are planned to be held continuously as feed-back and learning seminars.
2. Ideas in management practice. Visions, problems, goals and limits, participants expected results from the research are framed and the need of forming a model for decision making is discussed, process analysis and choosing relevant and real projects to follow.

Step 3 - 5 Analysis, for whom, why, how, what and when? and conclusions.

3. Theory & Analysis. Pertinent theories, ongoing research, officials and literature are explored, discussed and put into context. One or more Resource Analysis are conducted with reference to the chosen context (see Fig 3 above)
4. Empirical validation through actions/activities and testing of the formula in practice in “business cases”.
5. Reflecting on insights gained from the study, and summarizing in reports

It is of great value to have the opportunity to continuously discuss practical implications of the results with people with experience from different organizational settings but outside the research areas. In order to secure such discussions, representatives from other organizations will be asked to form a reference group and a steering group for the project. During the project time the plan is to arrange and/or participate in few meetings, with the specific aim of discussing different experiences. The choice of representatives will give the potentiality to confer about experiences within their various roles in their decision processes and with references to the experiences gained from the project.

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The RESEARCH RESULTS and their utilization

Expected output from future studies and their contribution to strategic research

Academic

These planned strategy studies will result in a doctoral thesis. Some academic articles and reports for professional international organization and management journals are also expected. The study will especially increase the understanding of the complex processes of tacit knowledge in decision-making situations in systemic contexts and regarding “sustainability”, thus enabling *strategic researchers* to influence future research on /resource/management and organizational change in beneficial /sustainable/ ways. A future desirable research is to develop this research mode for even more *dynamic use in strategic research* - in terms of understanding a new paradigm about company /sustainable/ performance based on RM.

The results from this study will be presented at international conferences, and confidently be published and reviewed in 1-2 academic, international journals during 2016-17. The study will also foster links between researchers and practitioners across EU, thus maintaining relevance in strategic academic research and teaching during times of considerable technological, organizational and managerial change. Another implication is the possibility to develop case study material for use in teaching academic courses

Practical relevance

The intention is also to develop helpful tools to practitioners. Since the problems are focused on micro level, on companies and their managers - and only implicitly deals with the global or the “UN-level” - the relevance for practical appliance of the result has increased incredibly. The result will be verified through the proposed “resource dialogue”. Whether the result will get positive or negative response from practitioners, a research in this area is considered as having high practical relevance. Since the topic as such - knowledge about complex decision making on a global level for “sustainable development and growth” - is already established, I see this as a growing area for “science” and its application also in public organizations, in large companies as well as SME’s.

Strategic

There are many initiatives that involve and aim at reflecting on “sustainable development” in decision-making in and between organizations. Programs such as the Lisbon Strategy, the Global Reporting Initiative (for management accounting) and also various regional programs of “sustainable growth” indicate the need of a “new accountability” or a “new resource management”. This “new” model for strategic research will contribute in two ways to a better understanding of decision-making processes and its potential links to resource dependency, 1) by implicitly exploring and explaining the bridges between a micro- and macro perspective and 2) through the visualizing of facts and making information about resources and criteria visible and thus making it possible to account for them. This will lead to the leeway to make more long- term decisions and choices of highest strategic importance in a more “sustainable” way (per UN definition).

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ANALYSIS and DISCUSSION

This article more or less argues for the potential use of a new model for strategic research - and for appliance in a practical context as well. Instead of pushing arguments for the use and benefit and potentials of the model, both in strategic and practical contexts, it though seems relevant to try to adopt a more critical aspect when discussing its relevance.

What implications on theory as well as on practice will occur from the use of this model?

To start we have to consider some theoretical implications. *First*, since there is a move from macro to micro (global sustainability through resource efficiency) and vice versa (micro to macro through organizational resource efficiency in individual decision making) when considering the effects of enlarging the context; it has to be verified through theoretical models like for instance systems theory, chaos theory, theory of thermodynamics and other pertinent theories of development and growth/decline. *Second*, moving more or less cyclical between the various modes (Mode 1 and Mode 2) has to be regarded in terms of putting the right questions and then verify (through empirical) the answers to them. *Third*, shifting from one theory to another (within the respective mode) forces the researcher to try to explore how theories are linked together. This can only be done if the context is well defined. A *forth* theoretical implication is that of how to apply or adopt criteria from “monetary” principles i.e the return of “capital” - on other kinds of resources - as the main focus for Mode 0. This requires a well defined and visualized structure (or typology) of the word “resource”. And also how this might be applied on theories of RBV, resource dependency versus present “theories of the Firm” (Penrose, Chandler, Cyert and March etc)

An argument for this “new” model though - which in some way has to be inherent when considering the above mentioned implications on theory - is that the model (and its definitions) as a first priority seeks to visualize (and untangle and make clear) all tacit criteria and all variables influencing the decision processes that are studied. This does not mean though that further critical assessment do not have to be considered in forthcoming research using this model.

What are the practical implications than? Considering that the model seeks to always start from reality - and in an iterative process always revert to practice - the implications on management decisions can be observed at an early stage. In case of negative impact (related to what are defined as sustainable ends for the project) it can always be “corrected” with an immediate decision and action. Another practical implication (which also have implications on theory) is how TIME shall be accounted for. With reference to the theoretical model of Holling and van de Ven regarding time influences on company performance and resource dependency this has to be discussed thoroughly in the organization when establishing goals.

A further implication on practice refers to the tradition within the financial/economic context. Differences in how society and corporations regard and handle monetary systems also imply that certain corrections have to be made if the model shall be applicable on either society level or company level. One aim in this is to make the “economic” formula used in the strategic research model, applicable in both contexts. It is possible if the formula as such is well defined in certain steps - and that its reliability and relevance is verified (often as a percentage).

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Also in practical context this Mode (Mode 0) has its most explicit benefit due to the fact that its primary focus is to visualize fact and criteria (that are already known and used but tacit and/or taken for granted in decision situations). The fact that this research mode always has a starting point in real projects also in some way warrants that negative implications can be avoided at an early stage.

These arguments and critical standpoints shall be further completed when applying this model in forthcoming “business cases”. They all revert to the main questions that have been stated as research question for future research in this area. Those questions are:

- *Is it possible, and if so in what extent, to operationalize an organizations resource base in order to calculate and measure resource growth/decline in and of organizations?*
- *Is it possible to compare benefits of sustainable resource growth in line with the aims to weight financial, social and technical/ecological perspectives - in complex decision making?*
- *What are the risks/gains - and for whom - with such an approach in terms of capability versus increased resource efficiency (productivity and competition) and value adding?*

Using this “new” mode of strategic research - as suggested Mode 0 – future research aim to answer to these questions. Earlier reports*)**) only consider the presumptions or the “grounded” theory of Resource Management. They also tries to explore certain structures and need of “instruments” or tools such as the process analysis. One most important contribution from this research is that *contextualization* has been promoted as a main and very important part of strategic research - and research of strategy development.

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REFERENCES

- McLain Smith, D. (1985) *Action Science*
Jossey-Bass Publisher, Oxford, San Fransico
- Brunsson, N. (1985) *The irrational Organization*
Wiley, N Y
- Burns, J. (1999) *The dynamics of accounting change: inter-play between new practices, routines, institutions, power and politics*
Accounting, Auditing & accountability Journal, 13, 5, 566-596
- Cyert, R and March, J (1958) *The role of expectations in business desicion making*
Administrative Science Quarterly3, 307-34
- Cyert, R. and March, J. (1963) *A Behavioral Theory of the Firm*
Prentice-Hall, Englewood Cliffs, N Y
- Di Maggio, P.J. ad Powell (1983) *The iron cage revisited;Institutional isophormism and collective rationality in organizational fields*
American Sociological Review, 48, 147 - 160
- Eliasson, G. (2000) *Making Intangibles Visible: The Value, the Efficiency and the Economic Consequences of Knowledge*
in: Buigttes-Jacquenip-Marchipont, 2000, Competitiveness and the Value of Intangible Assets
Edvard Elgar, 2000, Cheltenham, UK
- Elkington, J. (1998) *TBL The triple Bottom Line*
SustainAbilityPubl., London
- Fama, E.F. and Jensen, M.C. (1983) *Separation of ownership and control*
Journal of Law and Economics, XXVI
- Gibbons et al , (1993) *The new production of Knowledge*
Sage, London
- Giddens, A. (1984) *The Constitution of Society*
Cambridge, Polity Press
- Greenwood, D.J. and Levin. M(1998) *Itroduction to Action research*
Sage, Thousand Oaks, CA
- Greiner, L. (1972) *Evolution and revolution as Organizations grow*
Harward Business Review, Jul-Aug, 37-46

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Overall topic “Return of Resources; Management Accounting and Control for a Sustainable Growth - focusing decoupling and the triple bottom line from an economists perspective”

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- Hannan, T. M. and Freeman, J.(1984) Stuctural inertia and Organizational Change
American Sociological Review, 49, 2, 149-164
- Hinings, C.R. (1997) Reflections on processual research
Scandinavian Journal of Management 13. 493-503,
- Holling, S (1986) The resilience of terrestrial systems; local surprise and global change
in Clark, W.C. & Munn, R.E.; Sustainable Development of the biosphere, IIASA, Laxenberg
- Jetter, A.J.M. (2003) Educating the guess: Strategies, Concepts and Tools for the Fuzzy Front End of product Development
RWTH Aachen University, Technologie and innovationsmanagement, Aachen, GERMANY
- Katz, D. and Kahn, R.L. (1966) The social psychology of organizations
Wiley & sons, Inc
- Lukka, K (2002) The key issues of applying the constructive approach to field research
Europen Accounting Review 2002, 11:4,
- Mouritzen. J., Larsen, H. T., Bukh, P.N.D., (2001) Intellectual capita and the capable firm:: narrating, visualizing and numbering for management knowledge
Accounting and Organizing Society 26, 735-762
- Moustakas, C. (1990) Heuristic Research; design, Methodology, and Applications
SAGE Publications, Newbury Park, Calif
- Pettigrew, A. M. (1997) What is a processual analysis?
Scandinavian Journal of Management 13, 337-348,
- Pettigrew, A. M. (1992) The character and significance of strategy process research.
Strategic Management Journal 13, 5-16
- Pfeffer, J. (1975). Organizations and organization theory
Pitman, Marshfield. Mass.
- Poole, M.S. and Van de ven, A.H (2004) Handbook of organizational change and innovation
Oxford University Press

MODE 0; a suggested innovative method for strategic studies in R&D

Overall topic “*Return of Resources; Management Accounting and Control for a Sustainable Growth - focusing decoupling and the triple bottom line from an economists perspective*”

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- Polanyi, M. (1962) Personal Knowledge towards a post-critical philosophy
Routledge Kegan Paul Ltd
- Penrose, E.T (1959) The theory of the growth of the Firm
White plains, NY
- Prencipe A., Davies, A. and Hobday, M. (2003) The business of Systems Intergration.
Oxford University Press
- Simon, H. A. (1982). ” Models of bounded rationality” Volume 2: Behavioral Economics and Business Organizations”
The MIT Press, Cambridge, Massachusetts, London
- Schön, D. A. (1983) The reflective Practitioner; how professionals Think in Action
Basic Books, Inc., Publishers, N Y
- Senge, P. (1990) The Fifth Discipline: the art and practice of the learning organization,
Doubleday
- Sztompka, P. (1991) Society in action: The theory of social becoming
University of Chicago Press, Chicago, IL
- Thompson, J. D. (1967) Organizations in action
McGraw-Hil, Inc.
- Van de Ven, A.H. (1992) Suggestions for studying strategy process: a research note.
Strategic Management Journal 13, 169-188
- Van De Ven, A. H. and Poole, M. S. (1995) “Explaining development and change in organizations”
Academy of Management Review 20, 510-540