Constituent Market Orientation as a Basis for Integrated Design Processes and Design Management

Dr. Brynjulf Tellefsen*, Dr. Terence Love**

*Norwegian School of Management – BI, C/o Department of Leadership and Organization, Oslo, NORWAY, Brynjulf.Tellefsen@bi.no
**Curtin University, C/o Dept of Design, Faculty of BEAD, Perth WESTERN AUSTRALIA, tlove@love.com.au

Abstract: This paper reports research aimed at addressing two problems in developing practical design processes and organisational structures within which design groups operate. The first concerns vision, mission, strategy and their operationalisation, This is a question of the alignment of the vision mission, and strategies of a design group with the vision, mission and strategies of the business organisation in which the group operates in ways that produce successful outcomes. This first problem is at heart a problem of managing business esprit. The second problem, one of organisational planning, is how to devise practical organisational structures for design groups such that in organisational terms, the design groups operations mesh smoothly with those of the business organisation and wider contexts of which they are a part. Extensive research in the area of Constituent Market Orientation strongly indicates that Constituent Orientation and Constituent Market Orientation offer a sound theoretical and practical basis for addressing both of the above problems. This paper describes research that takes the findings of a broadly based Constituent Market Orientation research project relating to business success and applies it to the above problems of vision, mission, strategy and organisational structure as they relate to design groups' coherent operation within their business contexts. Using a cross comparative method the research explored a variety of organisational scenarios for design management such as hierarchical and group managed organisations from the Constituent Market Orientation perspective. From this were identified organisational and management structures likely to be more successful in addressing the above two problems in design organisations. The paper concludes with a short list of heuristics from Constituent Market Orientation research of benefit to design managers.

Keywords: Constituent management, Market Orientation, Design, Task organization, Values, Mission, Strategy

1   Introduction

The recognition that operational integration across business units is important occurred in the early 1990s [1], but in many cases operational integration with management of the design function has been ad-hoc and is frequently regarded as unsatisfactory [2]. In business process terms, design activity is especially important because of its role in: shaping corporate identity [3]; creating the products and services that form the basis of the business's value exchange [4], and improving the efficiency and effectiveness of many other intra- and extra-business processes such as information systems and e-commerce initiatives (see, for example, [5]) Achieving the full potential and efficiency of the many stakeholders and participants involved, however, has been elusive [6-8]. This paper argues, on the basis of extensive research into middle and executive management of Norwegian enterprises [9, 10], that Constituent Marketing Orientation theories offer a useful basis for integrating design management with corporate governance systems to improve organisational efficiency and effectiveness and gain improved value outcomes for stakeholders.

The paper first provides background information about Constituent Market Orientation and its pertinence to building successful relationships between corporate and design functions. The paper then applies Constituent Market Orientation Principles to the design function and its relationships to corporate governance systems. From these analyses, emerge Constituent Market Orientation heuristics for developing organisational processes to improve coordination and integration of design management processes with corporate governance systems that the research findings contribute strongly to business success and profitability.

Throughout history people have worked together to accomplish tasks, make decisions and solve problems too big or complex for one individual. In business contexts, designing is a social process [11-13]. At the highest social integration level, corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders, and provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined (see, for example, [14, 15]).

The design function involves many disciplines [16, 17] and is conceptually and epistemologically complex, especially collaborative designing involving multiple quantitatively and qualitatively based domains [18]. In order to produce value for others, designers basically have to be governed by a process mirroring, and integrated with, the relationships of corporate governance, but limited to the constituents of the design activity and processes in question. Or, the designers themselves have to invent a governance structure and process. This, however, means they act as the owners, main drivers and risk-takers of the design process in business terms, semi-independently of the main organisation. Few designers are likely to be enthusiastic to go down this latter path as it implies that, if the designed outcome is unsuccessful, they do not get paid, and they are also responsible for the business and other costs of the design process.

Devising management strategies to address this problem has been hampered by the widely acknowledged weaknesses in design theory: conceptual difficulties and poor integration across human and technical issues (see, for example, [19-25]). The lack of integration is especially important between theories about: design team interactions; communications between stakeholders, and interactions between design activities and other organisational, business and commercial processes.

This paper deals with the processes of developing and managing organizational processes tying together the governance and the designing levels, based on Constituent Market Orientation theories of management. The two main processes investigated are the implementation of common organizational values, mission and goals, and the implementation of task-handling systems and processes that most effectively produce the values, fulfills the mission, and achieve common and individual goals of members of the organization.

The paper draws on research that took the findings of a broadly based Constituent Market Orientation research project relating to business success and applied it to the problems of managing upper management values, vision, mission, and strategy as they relate to design groups' successful operation within their business contexts. Using a cross comparative method the research explored a variety of organisational scenarios for design management such as hierarchical and group managed organisations from the Constituent Market Orientation perspective. From this were identified organisational and management structures likely to be more successful in addressing organisational problems relating to design functions. The paper concludes with a short list of heuristics from Constituent Market Orientation research of benefit to design managers.

2   Constituent Market Orientation Theory

Constituent Market Orientation theory focuses on the underlying aspects of the orientations of constituents. That is, it focuses on processes that underpin the amount and direction (orientation) of market-oriented attention undertaken by individuals, groups, business units and organisations that form a business market arrangement of customers, suppliers, and businesses etc.

Constituent Market Orientation has been defined by Tellefsen [9, 26] as:

'An organisational learning circle where members of the organisation identify the current and future needs of its constituents and the factors that affect the satisfaction of their needs, spreads this external information internally in the organisation, and co-operate in order to prepare and implement innovations based on the external information with the aim to improve the need satisfaction offered members of the constituencies. This learning loop will over time promote an organisational culture superior in the ability to produce values for a defined set of constituencies'.

The strength of this learning circle strongly impacts on the ability of the organization to invent, design and commercialise market defined solutions, and is influenced by many factors. The most important of the constituent market orientation factors were derived as a result of two extensive investigations of the top and middle management of large Norwegian firms [9, 27].

The first and perhaps most important group of factors focused around the leadership's ability use the hierarchy (power axis of the organisation) to signal unambiguously their beliefs, values, mission and vision for the organization translated into a vision for the future. In this it was found to be important that the mission must be stated in terms of the benefits (values) to be provided to others: that is, defined as a constituent markets oriented mission. The leadership's vision must contain a picture of the role the organization wants to play in its value-producing network. In articulating their constituent market oriented vision, three activities were found to be important:

- The top leader(s) must signal a strong belief in the value of organizational learning.
- The leaders must back up their directional signals with personal behavior that demonstrates and supports the values they want to be produced.
- Some of the values governing the organization must support a market orientation. These might include, for example, the values of openness, integrity, and seeking mutual benefits from transactions.

The second group of factors centred on the leadership's ability to use delegation of decision-making and the coordination axis for handling tasks. Again, three factors were found to be particularly significant:

- Flatter organization structures. The flatter the organisational structure the closer decisions are made to transactions with the organisation's environment. In turn, this helps with changing the processes of value creation and learning to become transaction and external relations oriented.
- Increased connections on the horizontal axis between task handling systems and Value chains and networks. The more horizontally connected the task handling system is along value chains and networks, the more market-driven and value-focused the organisational and individual learning becomes. The use of hierarchy in task handling is problematic in that it reduces the market orientation and hence the advantages gained by market orientation of processes.

- The avoidance of excessive internal conflict in an organisation. Excessive internal conflict reduces the organization's degree of market and learning orientation. Conflict is reduced through value harmonization between the leadership and the rest of the organisation, the institutions of a conflict handling system, and a culture and practice of extensive open and solution-oriented communication.

In essence, successful market-oriented organizations use the vertical hierarchy (the power and command axis) for vision and value based leadership. Through the channels of this axis, the leadership to develop and distribute a common understanding of what is of value and what is not of value, what is wanted, and what is unwanted. This makes it possible to delegate task-related decision making extensively because all participants have the same measuring rod for success. The horizontal coordination axis is developed for self-service between individuals, business units, team members, and other constituents. Most tasks-related decisions and actions are the result of mutual learning, coordination, and pooling of decision-making power among equals inside and outside the organization. Having a short distance between transactions and decision-making and integration of tasks from the bottom-up also increases the possibility for experimentation and innovation. This is a significant issue for design focused business units. A natural solution for market-oriented organizations is to extensively use temporary and semi-permanent teams as an organizing principle. The importance of these hierarchical and coordination axes is also identified by Beer [28, 29] in terms of the cybernetic efficiency and control (see also [30]). Recent findings by Dias, Subrahmanian and Monarch [31] about organisational structure of successful engineering design organisations add support for this view.

3 Operationalising and aligning vision, mission and strategy

To be successful, an organisation requires a common purpose, accepted by the group performing the overall task [32]. Tasks are best defined, organised and executed if where the relevant group has a shared understanding and accepts a common purpose. Ideally, the group participates in developing a goal hierarchy, a strategy and solutions. These are activities and knowledge that help the group achieve the purpose [33]. In addition to internal management factors, the history, culture and competitive climate influence business outcomes. The processes used for developing this communality of values and understanding is called Corporate Governance. It involves a set of relationships between a company's management, its board, its shareholders and other stakeholders, and provides the structure through which the objectives of the company are set, and the means by which attaining those objectives and monitoring performance are determined.

Ideally, a process of building a governance structure is repeated every time a task is delegated to a group. If the management decides it needs a group of experts for researching and designing an innovation, that group should first go through a governance process for deciding who their constituents are, how to determine their needs, what types of solutions that might cater to their needs, and who has the knowledge to produce that solution (see, also [34]). The effort is then reduced to finding the right incentives to make the constituents participate in the design process. The cooperative design process would normally only accept solutions that provide net benefits to all transaction partners.

In terms of improving organisational learning, the organisational challenge for undertaking the transformation based on successful constituent marketing orientation principles is threefold:

- Creating open, inclusive systems for transferring explicit knowledge between constituents and storing shared memory (single-loop learning [35]).

- Establishing meetings between individual constituents and constituent groups for shared development of learning and transfer of tacit knowledge (double loop learning [35], or generative learning [36].
- Creating a learning environment (Fifth discipline [36] and triple-loop learning [36, 37]).

3.1 Parallel Leadership Systems

The above analyses point to the importance of the leaders in an organisation to identify a specific position on beliefs, values, vision, mission and strategy that they propagate as a holistic business idea through an organisation. At a smaller scale this is also echoed in the role of product champions. Tellefsen and Love [38] indicate that to establish, maintain and communicate a holistic business idea the leadership group needs to construct and manage not only the system for current operations, but also four other parallel systems:

- **The power system:** Ownership that establishes who 'we' are, social legitimacy, authority to make decisions, risk-taking, the distribution of values gained and consumed (including financing of investments, distribution of revenues and costs, liquidity and profits)
- **A system of internal driving forces:** Common beliefs, purpose, values and objectives of the organization
- **A system of strategy making processes:** The processes and systems for developing organization-wide agreement on who 'we' are, our image, who we want to relate to and exchange values with (the stakeholders), who the 'others' are (competition and other constituents), how to compete (defining moral and wanted behaviour) and with what (technology and know-how).
- **Operative management systems**: Management processes and procedures, including methods for task delegation, solving disputes, accountability, value production, value distribution, delegated risk-taking. These systems also include in their role the development and integration of real-world and virtual systems of operations.

4   Heuristics from Constituent Market Orientation for Integrating Design Management with Corporate Governance Systems

The above analyses point to the following heuristics for improving the relationships between organisations' central governance systems and the design function. In most cases, they consist of recommendations for processes that improve the establishment and propagation of a particular holistic vision whilst maintaining the coordinated flexibility to undertake the tasks to actualise that vision.

1. Undertake a Constituent Market Orientation mapping of the organisation 'as is' and in a new form based on findings of Constituent Market Orientation research – for different market orientation modalities. This orientation analysis is necessarily undertaken both at the 'whole firm' level and within design units.
2. At a whole organisation level, establish holistic business case that includes the leaderships' beliefs, values, vision and mission together with an understanding of the role of the design function with respect to these beliefs, values, vision, and mission.
3. Develop a coherent and straightforward means of communicating the leaderships' beliefs, values, vision and mission about the whole firm and design function to managers and personnel throughout the organisation.
4. For design management to establish, in coordination with other management groups, the values, vision and mission specific to the design function groups and teams that echo and coordinate with those of the leadership.

5. To establish appropriate assessment and evaluation feedback processes to identify how well the whole organisation and design function are aligning their vision, mission and objectives, and to identify factors to feedback through the governance system to assess whether the existing vision, mission and constituent marketing orientations are appropriate and whether these need to be revised.

6. Identify parameters of design culture in terms of product style properties that not only align with corporate image but also reflect the long-term vision, mission and Constituent Market Orientation strategies that characterise the organisation as a whole and its innovative outcomes. This refocuses corporate image and product branding processes to also align with the constituent marketing orientation foundations of the leadership, the whole organisation and the design function.

5 References

1. Burgelman, R. A., and Doz, Y. L., The Power of Strategic Integration. Sloan Management Review 42(3), 28-38(2001).

2. Bruce, M., and Davies-Cooper, R., Perspectives on Cross-functional Design- Management Education. Design Management Journal 5(4), 55-59(1994).

3. Hutton, P., Aligning the Organisation Around the Brand (Paper presented to the conference Partnership Conference on Developing and Building a Successful Strategy for Brand Communication, MORI, 2001.

4. Hertenstein, J., Platt, M., and Brown, D., Valuing Design: Enhancing Corporate Performance through Design Effectiveness. Design Management Journal 12(3), 10-19(2001).

5. Grant, R., and Huston, T., Designing Organisations to Implement e-Commerce, Center for Research into Information Technology and Organizations, 2000.

6. CIPD, Products Development Conference: Progress and Problems, in The Innovator, MIT Center for Innovation in Product Development, Cambridge, MA, 1999.

7. D'Hertefelt, S., The battle of the disciplines in designing interactive systems, 2000.

8. Macmillan, S., Steele, J., Austin, S., Kirby, P., and Spence, R., Development and Verification of a Generic Framework for Conceptual Design. Journal of Design Studies 22(2), 169-192(2001).

9. Tellefsen, B., Constituent Market Orientation. Journal of Market Focused Management 4(2), 103-124(1999).

10. Tellefsen, B., Constituent Orientation: Theory, Measurements and Empirical Evidence, in Market Orientation (B. Tellefesen, Ed.), Fagbokforlaget, Bergen, 111-156, 1995.

11. Westerburg, A. W., Subrahmanian, E., Reich, Y., Konda, S., Cunningham, D. P., Dutoit, A. H., Granger, H. L., Marshall, K. C., Milliken, R. C., Monarch, I. A., Neergaard, J. P., Patrick, R. H., and Thomas, M. E., Designing the Process Design Process. Computers & Chemical Engineering 21, S1--S9(1997.).

12. Bucciarelli, L., Design as a Social Process. Journal of Design Research 2(2), (2002).

13. Dilnot, C., Design as a socially significant activity: an introduction. Design Studies 3(3), 139–146(1982).

14. European Shadow Financial Regulatory Committee, Corporate Governance in Europe, European Shadow Financial Regulatory Committee, London, 2002.

15. Encycogov.com, What is Corporate Governance?, Vol. 2003, Encycogov.com, 2003.

16. Friedman, K., Philosophies of design, in Ämneskonferens projekteringsmetodik. NorFA research symposium on design methodology, LTH - Lund Technical Institute, Lund, Sweden, 1999.

17. Margolin, V., Building a Design Research Community, in Design plus Research. Politecnico di Milano conference (S. Pizzocaro, A. Arrudo, and D. D. Moraes, Eds.), The Ph.D. Program in Industrial Design, Politecnico di Milano, Milan, 2000, 17-19.

18. Beckwith, D., Putting a Hard edge on Soft Values: The Higher Order of Cross-Functional MultiDisciplinary Teams. Design Management Journal 5(4), 10-16(1994).

19. Dixon, J. R., On research methodology towards a scientific theory of design. Artificial Intelligence in Engineering Design Analysis and Manufacturing 1(3), 145—157(1987).

20. Love, T., Social, environmental and ethical factors in engineering design theory: a post positivist approach, in Mechanical and Materials Engineering, University of Western Australia, Perth, 1998, 358.

21. Love, T., A Meta-theoretical basis for Design Theory, in Doctoral Education in Design: Foundations for the Future (D. Durling, and K. Friedman, Eds.), Staffordshire University Press, Stoke-on-Trent, UK, 45-54, 2000.

22. Lovins, A., Institutional Inefficiency: Guidelines for overcoming the market failure that is now causing widespread energy waste. Designing A Sustainable Future (35), 16(1993).

23. O'Doherty, E. F., Psychological Aspects of the Creative Act, in Conference on design methods (J. C. Jones, and D. G. Thornley, Eds.), Macmillan, New York, 197–204, 1964.

24. Pugh, S., Engineering Design - Unscrambling the Research Issues. Research in Engineering Design 1(1), 65-72(1990).

25. Hubka, V., and Eder, W. E., Theory of Technical Systems, Springer-Verlag, Berlin, (1988).

26. Tellefsen, B., Market orientation and partnership learning in product development and design, in Industrial Organization and Business Management (S. Ilstad, Ed.), Tapir Akademiske Forlag, Trondheim, 396-405, 2001.

27. Tellefsen, B. (Ed.), Market Orientation, Fagbokforlaget, Bergen, (1995).

28. Beer, S., The Viable System Model: its provenance, development, methodology and pathology, in The Viable System Model: Interpretations and Applications of Stafford Beer's VSM (R. Espejo, and R. Harnden, Eds.), John Wiley & Sons, Chichester, UK, 1989.

29. Beer, S., Brain of the firm: the managerial cybernetics of organization: companion volume to the heart of enterprise, Wiley, Chichester, (1981).

30. Hutchinson, W., Systems Thinking and Associated Methodologies, Praxis Education, Perth, WA, (1997).

31. Dias, W. P. S., Subrahmanian, E., and Monarch, I. A., Dimensions of Order in Engineering Design Organisations. Design Studies 24(4), 357-373(2003).

32. French, W. L., Bell, J., C. H., and Zawacki, R. A., Organization Development and Transformation; Managing Effective Change, Richard D. Irwin, Inc., Boston, MA, (1994).

33. Aranda, E. K., Aranda, L. A., and Colon, K., Teams; Structure, Culture and Politics, Prentice-Hall Inc., Saddle River, NJ, (1998).

34. Hall, J., Six Principles for Successful Business Change Management. Management Services 43(4), 16-18(1999).

35. Argyris, C., Double Loop Learning in Organizations. Harvard Business Review 55(September/October), 115-25(1977).

36. Senge, P. M., The Fifth Discipline. The Arts and Practice of Learning Organizations, Doubleday Currancy, New York, (1995).

37. Argyris, C., Knowledge for Action, Jossey-Bass, San Francisco, (1993).

38. Tellefsen, B., and Love, T., Constituent Market Orientation and Virtual Organisations, in Working for Excellence in the E-conomy (S. Stoney, and B. J, Eds.), We-B Research Centre, Edith Cowan University, Scarborough, WA, 195-204, 2001.