

IMPROVING DESIGN OF MICRO-BUSINESS SYSTEMS VIA VSM AND CONSTITUENT ORIENTATION ANALYSIS

Dr. Terence Love

Curtin University of Technology and
Edith Cowan University, Australia
IADE/UNIDCOM, Portugal
Lancaster University, UK

RESEARCH

- ◉ Identify some classic ‘types’ of designs for operational systems for micro-businesses of 1-10 employees
- ◉ Identify promising approaches for re-design of micro-businesses to improve outcomes
- ◉ Analyses use Tellefsen's constituent orientation, Beer's Viable System Model and Cashflow Quadrant analysis

NATIONAL SIGNIFICANCE

- ◉ Most businesses are micro-businesses (1-10 employees)
- ◉ Micro-businesses significant to economy
- ◉ Micro-businesses fare poorly compared to larger businesses
- ◉ New discipline of business process design offers opportunity for radical improvement in fortunes of micro-businesses.

DESIGN FACTORS

◉ **Structural issues:**

- Family circumstances. Type of business and potential for market expansion using e.g. internet. Physical location of business, Business ownership structure (sole trader, limited liability etc)

◉ **Human issues:**

- Family circumstances. Individuals involved in business. Personal attributes and skills of owner/manager. Personal relationships with local businesses and with existing customer base

◉ **Financial issues:**

- Family circumstances. Financial bounds and elasticity. Way of thinking about money. Financial concerns. Reasons for making money.

◉ **Business management issues:**

- vision, mission, strategies, values, power structures (line management, who makes what decisions), business planning versus reactive business development, existence or not of a business process model, reasoning underlying business process model

◉ **Computerised automation issues:**

- use of computer systems for reducing costs of tasks, expertise in using computer systems, expertise in planning and developing use of computer systems in the business, computer systems for improving business administration, computer systems to improve production of output value (computers in manufacturing or service delivery)

CONSTITUENT ORIENTATION

Constituencies of control:

- ◉ Self-employed
- ◉ Business manager
- ◉ Business owner
- ◉ Investor

VIABLE SYSTEMS MODEL (BEER)

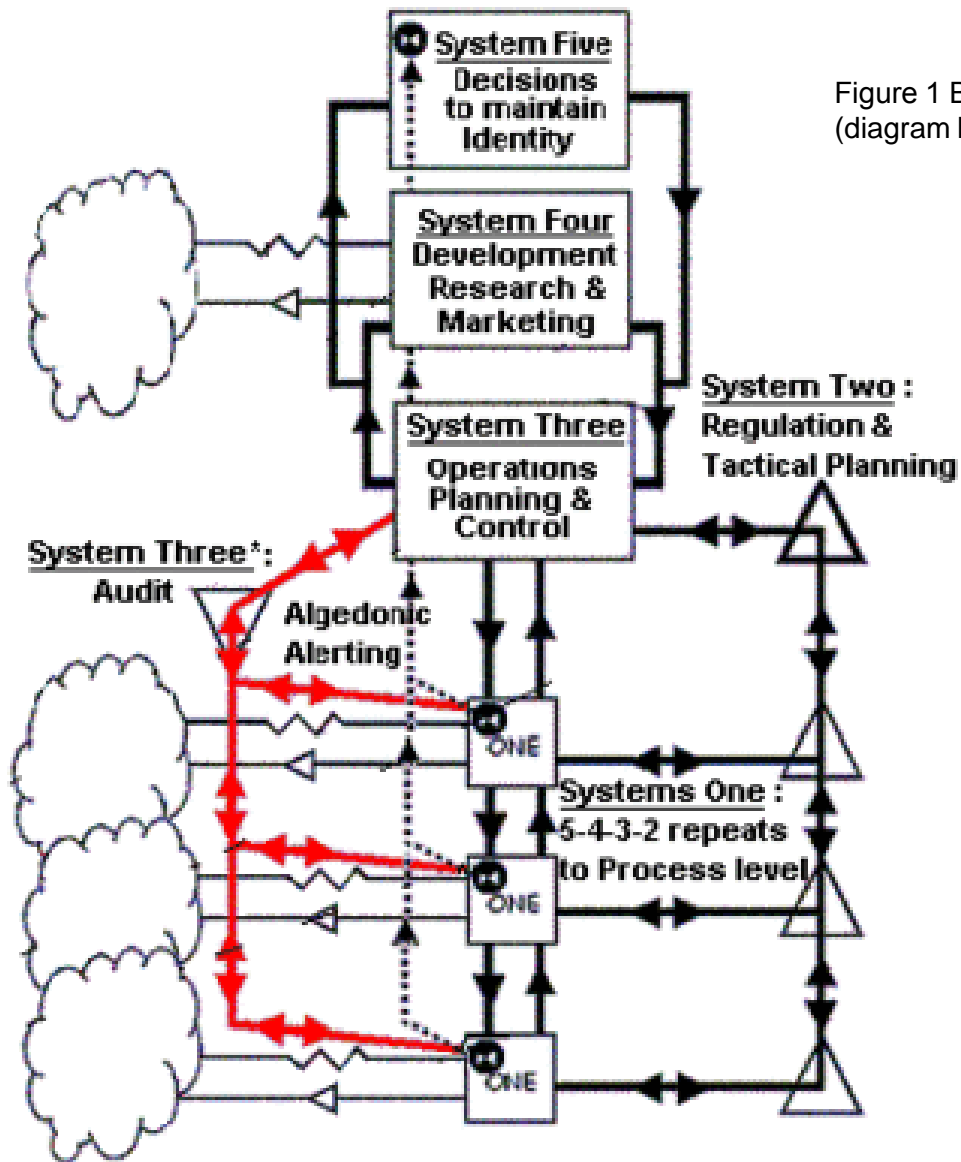


Figure 1 Beer's Viable System Model
(diagram by Green, 2007)

‘SELF-EMPLOYED’ BUSINESS

- ◉ Primary focus is Systems 1 - providing the services and products the business sells.
- ◉ Typically Systems 3, 4, 5 and System 2 are relatively weak or non-existent.
- ◉ Often, Systems 3, 4, 5 and 2 outsourced to professionals such as accountants and business advisers
- ◉ Classic pathology:
 - stagnation, poor growth, undirected business activity with weak processes and accidental cash-flow problems

‘BUSINESS-MANAGER’ BUSINESS

- ◉ Shift in emphasis towards System 3.
- ◉ Typically, Systems 2, 4 and 5 neglected as before.
- ◉ Classic pathology:
 - Tendency to use algedonic fast action loop for all management activity
 - Crisis-managed organisation.

Seen for example in not-for-profits where System 1 employees are promoted to operational management roles without management training

‘BUSINESS OWNER’ DRIVEN BUSINESS

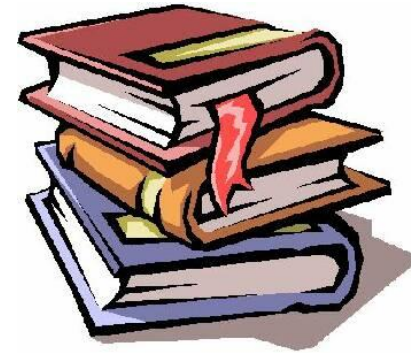
- ◉ Change of focus to Systems 4, 5 and 2
- ◉ Systems 3 and 1 managed by employees.
- ◉ Improved response to business environment (systems 4 and 5).
- ◉ System 2 (auditing) provides system 3 (and 4 and 5) with ongoing information about how the micro-business is functioning.
- ◉ Classic pathology:
 - Poor communication between systems 4 and 5 and systems 1, 2 and 3
 - lack of understanding of the business
 - weak operational manager.
 - business can travel in a different direction from the intended strategy until crisis occurs.
 - Example: small franchising chains where franchisees do not accurately implement the franchising model

‘INVESTOR’ DRIVEN BUSINESS

- ◉ Primary concern is to create high return on investment via management at Systems 5
- ◉ Focus is ‘whole of system’
- ◉ Classic pathologies:
 - Sub-systems missing, illusory - or deviant and displaced by alternative systems
 - Poor inter-system communication and control
 - organisational function is subverted to divert resources or profits elsewhere, i.e. managers, staff and sub-contractors line their pockets
 - Failures as ‘whole of organisation’ malfunctioning or corruption

CASE STUDY 1

MICRO-PUBLISHING BUSINESS



- ◉ Systems 1:
 - Interacting with authors
 - Interacting with retail buyers
 - Interacting with institutional buyers
 - Interacting with printing organisations
 - Freight management
 - Internet sales
 - Advertising and promotion - interactions with potential customers
 - General administration (banks, tax, building lease, website hosting etc)
- ◉ Systems 1 undertaken by owner/manager except for advertising and promotion which is subcontracted. Systems 2 & 3 automated via accounting software, and internet-based ecommerce software. Systems 4 ad-hoc
- ◉ Orientations of *business manager* and *self employed*. No evidence of *business owner* or *investor* orientation. (unsurprising because primarily a knowledge-based business not dependent on substantial capital investment)
- ◉ Design failure modes:
 - complexity at Systems 1 requires good System 3 management and failures at this level lead to failures of disorganization.
 - too many tasks undertaken by single individual.
 - weakness in systems 4 and 5.
 - strategy doesn't respond to environmental changes , systems 4 and 5 not available for guiding business growth and tends to stagnation.
- ◉ Design opportunities:
 - Delegate tasks at System 1
 - increase automation
 - more attention to systems 3, 4 and 5

CASE STUDY 2

FAMILY PLUMBING BUSINESS



- ◉ Provides licensed plumbing services to domestic premises with occasional light industrial work and plumbing in new constructions. Husband -wife partnership with children (now young adults) employed by the business.
- ◉ Systems 1 comprise:
 - Providing plumbing services on customers premises
 - Dealing with customer phone calls
 - Advertising and promotion
 - General administration (banks, tax, building lease, suppliers, website hosting etc)
- ◉ Plumbing is a licensed trade and subject to training and standardization - reduces the management load at Systems 1 and 3 and the activities of System 2.
- ◉ Systems 1 distributed between participants with advertising outsourced. Systems 2 and 3 jointly undertaken by husband and wife. All administrative activities undertaken by wife. Systems 4 and 5 activities undertaken sporadically by husband and wife,
- ◉ *Self-employed* orientation. Additionally, an *investor* orientation in which the profits from the business are invested elsewhere. This is a classic strategy.
- ◉ Design weaknesses:
 - Licensing directs business process, strategy, mission and operational management
 - Reduced flexibility and ability to quickly change direction and adapt to new market conditions
- ◉ Design opportunity:
 - a multi-pronged approach in which strengths and financial stability of plumbing business is complemented by a new high risk- high gain business

CASE STUDY 3

RENTAL BUSINESS



Buys residential property to let. Income from letting contributes to costs of purchasing and improvements. Primary profit is increase in value of properties.

- ◉ *Investor* orientation. The aim is to make profit on selling whilst minimising costs.
- ◉ Systems 1 processes:
 - Buying and selling properties
 - Letting and upgrading properties
- ◉ System 3 coordinates mainly the letting and upgrading. Much of Systems 1, 2 and 3 outsourced and automated. The focus of the couple owning the business are primarily on Systems 4 and 5.
- ◉ Design weaknesses:
 - poor information
 - Poor timing of feedback.
 - systems 4 and 5 see only a simplified snapshot
 - sub-optimal strategies imposed on Systems 1, 2 and 3.
- ◉ Design opportunities:
 - improve the quality and timing of information for Systems 4 and 5
 - Attenuate information to Systems 3, 4 and 5

DESIGN CHECKLIST

- Is the drive for the owner manager to be:
 - Self-employed?
 - Business manager?
 - Business owner?
 - Investor?
- Does the business employ family?
 - In what capacity?
 - Does it depend on them for purchases?
- Opportunities for automation of
 - Behaviours?
 - Paperwork?
 - Services?
 - Manufacture?
 - Sales?
- Opportunities for delegation:
 - Existing staff?
 - New staff?
 - Outsource?
- Limits and bounds
 - Location?
 - Family?
 - Skills?
 - Financial?
 - Markets?
- New market opportunities:
 - Local?
 - Distant?
 - Electronically accessible (internet etc)?
- SWAT analysis
- Porter 5 Factor analysis
- Sub-systems
 - Current?
 - Missing?
 - New?
- Business structures
 - Sole trader/partnership/limited liability/cooperative/not-for-profit

QUESTIONS?

COMMENTS?