

## Entrepreneurship as a self-organizing ecological process

D. List

University of Adelaide, Centre for Development of Entrepreneurs, School of Management, GPO Box 2471,  
5001 Adelaide, SA, Australia  
dennis.list@adelaide.edu.au

### Principal Topic

This paper argues that entrepreneurship on a small scale can usefully be studied in terms of industrial networks as well as individual businesses. Within a certain industry, in a certain region, businesses may come and go, but the industry as a whole can remain sustainable. The key proposition is that entrepreneurship in such a situation can be viewed as an ecosystem of self-organizing entities, with the foresight of the various parties acting as a force for sustainability. The foresight that impels some businesses to enter the industry may be counterbalanced by foresight that impels others to leave. From the literature on self-organizing systems, five criteria were established for viable self-organization: purpose, capacity, holarchy, social networking, and sustainability through feedback mechanisms.

### Methodology/Key Propositions

As an example of the processes involved, this paper presents a case study of very small businesses - Bed and Breakfast (B&B) proprietors in South Australia - to determine to what extent the ecosystem model proposed here fits. This industry was chosen because it was both highly unregulated (with minimal barriers to entry and exit) and also does not stand on its own, being dependent on a network of related businesses. If any industry forms a self-organizing ecosystem, this would be one of the most likely candidates.

The study included a total of 52 businesses, divided into approximately equal groups in each of three areas of South Australia; the Adelaide metropolitan area, Kangaroo Island, and the Barossa Valley. These three areas were chosen to be contrasting: a metropolitan area, with much competition from hotels and beachside accommodation (Adelaide), a wine tourism area with no strong seasonal peaks or troughs, and easily accessible by a large population (Barossa), and a more isolated area to which day trips are scarcely possible (Kangaroo Island). As there is no official definition of B&B, and as it shades into another tourism sector referred to in South Australia as "self-contained accommodation" a broad definition of the sector was used, covering both sectors. In each of the three sampled areas, around one third of all Bed and Breakfast establishments (using this broad definition) participated in the study. Though the primary purpose of this study was to investigate the use of yield management, the focus of this paper is on the viability of the industry as a system.

The research method selected as most appropriate was the Consensus Group Technique: similar to focus groups, but with more involvement by participants in setting agendas and determining outcomes, thus with more verifiable findings - though clearly remaining a qualitative method. Consensus groups have three main stages: agenda confirmation, discussion (almost identical to a focus group), ending with issues clarification and voting. The output is a set of statements agreed on by participants, with most statements typically reaching a consensus threshold of being agreed to by around 80% of those present. In this study, six groups were held: two in each of the three areas studied.

The research questions addressed here are (1) does a particular industry usefully be seen as such a self-organizing system, and if so (2) can a system be more foresightful than its components?

### Results and Implications

Findings were reviewed in terms of the five criteria for viable self-organization: purpose, capacity, holarchy, communities of practice, and sustainability through feedback mechanisms.

1. Purpose. Motivations of the participants in becoming B&B proprietors ranged from the almost incidental to the highly planned; however, they generally shared a commitment to the industry, with almost none intending to leave, and some having moved to South Australia specifically for this purpose.

2. Capacity to act. This industry, made up almost entirely of independent agents, with few legal or other restrictions on the businesses, was relatively unrestricted in its capacity to act, except by financial considerations, such as for major expansion.
  3. Holarchy. In a holarchy, a unit is simultaneously a separate system and part of a larger system. By definition "Bed and Breakfast" does not include lunch and dinner, nor does it include other guided activities - in contrast with a luxury resort, which guests need never leave. Further evidence is that these businesses, locally owned, were integrated (more so than large hotel chains) into the regional economies.
  4. Social networking. We found that many of the businesses in the study had established informal groupings, exemplified by co-operation when potential guests wanted to stay in an establishment that had no rooms available at the desired time. At this point, networks of recommendation swung into action; establishments were usually able to suggest several nearby alternatives.
  5. Sustainability through feedback mechanisms. Though no accurate statistics exist on trends in the number of B&Bs, we found that the membership of the industry association had remained stable for the last five years: an indicator of sustainability. B&B proprietors were also self-sufficient in their booking systems: for example, the great majority had their own websites, which attracted many international guests.
- In summary, the five criteria for self-organizing systems were found (in most cases) to exist clearly among this sample. The exception was the group of self-contained accommodation proprietors in Adelaide: larger in scale, and financially struggling at the time of the study. There was some evidence of foresight inherent in networks, raising the question of how this might be fostered for further development.

**Contact**

Dennis List. University of Adelaide, Centre for Development of Entrepreneurs, School of Management, GPO Box 2471, 5001 Adelaide, SA, Australia.  
 (T) (08) 8302 0634, (F) (08) 8302 0512, Email: dennis.list@adelaide.edu.au