

**Consolidating the Ideas of Boomi Tourist
Accommodation Providers into a Collective Conception**

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ABSTRACT

This paper uses the concept of collective ideas to make sense of the emerging Iranian boomi tourist accommodation industry. This industry is made up of numerous independent providers, each with their own ideas for how the industry might develop. Consolidated, these ideas provide a collective conception. This research draws on the pragmatic philosophy of ideas to consolidate the providers' ideas into a collective conception. Using network analysis, these ideas were clustered into five conceptions. The names given to these were; wanting to become sufficiently legitimate, work in a selected market, offer an inclusive boomi experience, become appropriately financially structured and be collaboratively empowered. This set of five concepts provides a useful collective cognition of how the industry might develop.

Keywords: entrepreneurial cognition, entrepreneurial strategy, new ventures, interview analysis

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This paper uses the concept of collective ideas to make sense of the emerging Iranian boomi tourist accommodation industry. This industry is made up of numerous independent providers, each with their own ideas for how the industry might develop. Consolidated, these ideas provide a collective conception. This research draws on the pragmatic philosophy of ideas to consolidate the providers' ideas into a collective conception. Using network analysis, these ideas were clustered into five conceptions. The names given to these were; wanting to become sufficiently legitimate, work in a selected market, offer an inclusive boomi experience, become appropriately financially structured and be collaboratively empowered. This set of five concepts provides a useful collective cognition of how the industry might develop.

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INTRODUCTION

The Iranian 'boomi'¹ tourist accommodation industry is a loose collection of informal, locally owned, culturally authentic accommodation homes for tourists (Khoshesar 2012). The demand for boomi accommodation has been growing significantly in recent years. The providers felt it was time to consolidate themselves as a distinct industry and coordinate any future plans for how the industry might develop. This would need to be done in a participatory manner to be effective. Research was required to both collect the providers' ideas and also to investigate how these might be usefully consolidated into a collective conceptual strategy (cognition, frame, mindset, mental model or schema). A collective conception would provide general guidance for how providers might act in the future without diminishing healthy competition (Kaplan 2011). Collecting ideas has to be done in a manner where there is allowance for volatility and instability in the future. As Kaplan (2011) and Walsh (1995) point out, that collective ideas or conceptions exist, and inform how a group interpret their future is well recognized. But how these collective ideas might be made explicit and managed is less clear. Researchers have used cluster analysis, causal mapping, content analysis and Axelrod's decision mapping to demonstrate the consequences of groups having different collective ideas or conceptions, but many of these methods are either time

¹ Boom being a Persian word for "area", "region" and boomi is anything of that area or region, native to that location (e.g. boomi culture).

consuming to use or fail to provide rich insight. Moreover, some have failed to give much consideration of the philosophy underlying what ideas are or a collective conception. Some have also failed to align their assumed philosophy with the research methods used and the purpose of the resultant collective conceptions. The dominant Western philosophy of ideas uses a combination of idealism, objectivism and mind body dualism where ideas are objects with attributes that can be compared to an ideal form by our independent calculative minds. This philosophy of conceptual ideas draws on a mix of Plato's idealism, Galileo's objectivism and Descarte's mind-body dualism. The term idea comes from ideals, as in the notion of an ideal lake, democracy or women. Good things correspond to the ideal form. Objectivism turns everything into an object with attributes. Lakes, democracy and people are obvious examples; they become things with attributes to be compared to an ideal. Mind-body dualism suggests that good ideas come spiritually from the mind of the independent, calculative, slightly mystical, creative people. They come from a mind that is like the soul of a brain; a place not accessible by empirics or surgery (Rorty 1982). This ideal, objective, independent-mind, conception of ideas makes it seem reasonable to say that ideas need to be rationally and independently evaluated as good or bad (Dreyfus 2007a; Rorty 1982). This philosophy of independent ideas, however, makes it hard to think about how to design a collective conception, and yet we know they exist. There is an alternative philosophy of ideas attributed to neo-pragmatism but which draws heavily on continental philosophy (Rorty 1982). It does not assume ideal forms exist. Function replaces objects with attributes, and there is no mind, only numerous remembered past experiences, mainly from social interactions, that can be named and used to reflect on ideas. However, it was not obvious how this pragmatic explanation of ideas could be used to consolidate the ideas of the boomi accommodation providers. Alexander (1964) provided a clue by suggesting ideas can be networked much like words in a visual thesaurus. Modern networking software makes this feasible and their clustering algorithms seem to offer a means of consolidating providers' ideas into manageable clusters. This idea networking method is in need of further exploration, but it does offer a philosophically grounded means of designing a collective cognition. It also provides an explanation of what a collection of individual ideas is and it can be used to coordinate the development of an industry. The following section

will first elaborate on the problem of ideas. Then the pragmatic interpretation of ideas will be explained which includes the suggestion that they can be networked (Alexander 1964). Next, how the boomi accommodation providers' ideas were networked is explained. The resultant collective conception is then discussed.

IDEAS

The term idea, rather than thought, suggests innovation, insight, agreement, usefulness, and being sparkling or imaginative (Weick 2006). For those who believe in rational process, sparkling ideas need to be able to be created from an organizable and repeatable process. There has been a tendency in the past to suggest that creative acts are not able to be produced through explicit organization. Rather, ideas were portrayed as being the outcome of a mystical gift, only available to a few clever individuals (Bailin 2003). The exact mental processes of the intuitive leap that often precedes an idea are beyond our present cognitive or neuro-scientific understanding. However, organizing a rational process for structuring useful, creative, collaborative ideas seems to be a required and a necessary step in creative community problem-solving. Like any word with a significant history, the word idea has changed its meaning and has a range of differing meanings depending on its use and user (Peirce 1878; Vandenbosch, Saatcioglu & Fay 2006; Warfield & Perino 1999; Watson 2006). It is often caught up in issues of free will, reality and whether or not we are born with conceptual ideas like individuality or survival already implanted in our heads. The old philosophical debate over what are ideas revolved around the issue of mental images. An idea, according to David Hume (1748, 1999), is something you can imagine, recollect or recall in your mind's eye. The idea of a tree or lake can be formed as an image of a tree or lake in the mind. This draws on the Platonic view mentioned earlier where this mental image is an ideal form of a tree or lake of which real trees or lakes are imperfect examples; ideas are ideals and actual examples are to be compared with these ideals. The controversy over the definition of ideas in the past has been whether you can conceive the idea of something you cannot imagine like "a democracy". You cannot bring up an image of a democracy in your head, only examples. The historic ideals definition of ideas also seems at odds with the modern or

innovation meaning of ideas (Anderson 2003). Innovators' ideas are typically new designs of objects, systems or processes: "He had an idea about how to redesign the light switch". There is, however, some connection between this understanding of ideas as possible actions (what needs to be done) and the old definition of ideas as being something imagined. An inventor, drawing on past memories, can produce a drawing or report of what the new light switch will look like – action ideas. But they can also come up with ideas that cannot be imagined, conceptual ideas such as justice or democracy. Pragmatism offers a means of reconciling action ideas and conceptual ideas using a non-idealistic, objective or dualist epistemology.

PRAGMATISM

Pragmatism, at least the stream being referred to in this paper (James 1911/1996, 1907/1910; Rescher 2005; Rorty 1982) is thought to be an ethical epistemological basis for participatory action because it is pluralistic, focused on actions, concerned about consequences and yet still scientific (Shields 2005). It seeks useful alternative actions as solutions to social problems – to improve the world yet adopt the basic tenets of science. It wants knowledge or ideas to be reasonable, rational and open to empirical study, in the provision of explanations and justifications to a skeptical audience. Knowing is an act of interpretation justified with evidence and reasoning (Dewey 1938; Metcalfe & Powell 1995; Rorty 1982). Experience and experiment, as learning through social interaction, are given more emphasis by pragmatism, than under positive science. People learn from experiences by reflecting on the consequences of past actions. The absence of any use or consequence from a knowledge claim or idea makes it useless. Knowledge needs to provide suggestions of what actions to take in the future, how usefully to act to resolve a social concern. Pragmatism provides an explanation of how we 'sensemake' (Weick 1995) events as they occur to us, how we think, as we move through the world. We use conceptual ideas or concepts to interpret events as they occur to us. Put another way, conceptual ideas provide the stance, perspective, *a priori*, or intent (Dennett 1989; Toulmin 1972) used to make sense of or structure our concerns. For example, if we are required to attend a meeting across town, the conceptual idea or concept of punctuality suggests

different travel arrangements from the conceptual idea of energy conservation. Pragmatic conceptual ideas or concepts are names for patterns of activity or language generals, not a representation of something in an abstract mind. Punctuality is the name given to the abstracted pattern of activities of arriving on time, being reliable and perhaps being inflexible over timings. If we felt being late was unacceptable and using large car acceptable, then the concept of punctuality is being used over energy conservation. The pragmatist, William James (1890) argues that conceptual ideas need to be created and justified by their uses, consequences or the activities they suggest. He used the much debated example of the concept of God. One of the uses, consequences or patterns of activities this concept suggests is the alleviation of peoples' concerns over dying. This makes the concept useful because it suggests alternative ideas for how to act when facing a life-threatening situation. James also explains that new concepts can be derived, implicitly or explicitly, from the three steps "compare", "reflect", and "abstract". His example is the formation of the concept of leaves. He suggests a process of comparing a wide range of different foliage, reflecting on the leaves' functional similarity, and abstracting the concept of a leaf as a generic term. The concept of leaves names a pattern of photosynthesis activity undertaken by plants. Pragmatism therefore suggests that ideas consist of two recursive aspects: one is of ideas as actions, the other is conceptual ideas. The two aspects have an inter-dependent relationship (Figure 1). For example, the idea to develop a collective identity would be a conceptual idea. The idea to join into a professional group of similar businesses would be an action idea. Conceptual ideas seem to drive, make intentional, or rationalize action ideas. However, action, like experiences, may generate new conceptual ideas. Continuing the example, it may have been the business owners' experiences in having to deal with the challenges and problems of running the business alone which generated the new conceptual idea of gaining a collective identity.

Insert Figure 1 about here

IDEA NETWORKING

The pragmatic philosophy therefore provides an explanation of why participants' apparently independent ideas should be collected and clustered. The individual ideas actually represent one specific from a collective cognition. They are socially constructed from interactions within the community. The research task is to reconstruct explicitly the entire collective cognition from numerous individually expressed excerpts. If Miller's corrected magic number is right then this collective cognition will be reconstructed in five parts (1956). Many community meetings collect ideas, but without a philosophical explanation it is unclear how these collections of ideas can be used. Pragmatism tells us the outcome needs to be some language based, inductively formed, artifact that the participants can use to structure their future thinking. A convenient way of clustering the statements is draft them into a network diagram; an ideas network. This enables all ideas to be displayed relative to each other and a clustering algorithm can be used to cluster similar ideas. The nodes would be the idea statements and the links represent which ideas are thought to be similar. For more on the mechanics of producing an idea network see Metcalfe (2007).

Alexander (1964) sees the process of linking participants' ideas as an intuitive creative act best performed without formal explanation by those experienced in the problem domain. However different epistemologies suggest different ways this judgment be made. Interpretivists and ethnographers, will want an experienced person to use their experience to do this creatively and intuitively. Positivists will want impartial judges, and communitarians will want the participants to do it in a consultative ethical manner (Trochim 1989). However done, a random numbered list of idea statements is required to become the nodes of the network diagram. To provide the links it is necessary to work down this list, underlining keywords and then deeming idea statements are similar if they have similar keywords. By similar it is meant the keywords are identical, an example from a collective, synonyms, draw on a similar root metaphors or there is similar intent (Alexander 1964; Buckle 2003; Morgan 1986). Because of how the resultant network diagram appears, about 100 ideas statements each with between one and five links has been found to produce a workable network (Metcalfe 2007). The numbered idea statements and their links

can be drafted as a matrix. The rows and columns are the numbers of the statements. In the body of the matrix a link can be shown as a “1”. This matrix then provides input for producing the ideas network diagram using network analysis software, e.g. UCINET6 (Borgatti, Everett & Freeman 2002) or NODEXL. UCINET6 is a popular, affordable software with spring embedded algorithm which will cluster adjacently linked nodes. Typically, the clusters can be quickly visually identified from the resultant network diagram although sometimes this requires the use of density and path metric analysis.

METHOD

Our research investigated the planning ideas of boomi tourist accommodation providers in rural Iran. Nineteen operators involved in this largely informal industry were interviewed in their native language to ask what problems the industry faced. Interviews lasted on average two to two and half hours with the longest going over three hours. In qualitative research, no fixed minimum number of participants is required; however, adequate depth of information has to be obtained (Fossey et al. 2002). Following each interview, the co-author recorded details of the setting and her observation of the interview including how welcoming the hosts were, their relationship and interaction with their guests, etc. This helped in establishing a context for interpreting and making sense of the interviews at the analysis stage. In addition, to check the consistency of the information gained, often observation notes and interview transcripts were compared. The Iranian co-author then transcribed and translated fifty hours of interview into English. Using an ethnographic epistemology, she used her experience to identify 117 significant statement sentences from the translations. These were numbered and then analyzed by first drafting a table or matrix of statements deemed similar (linked). This involved some interpretation and judgment from knowing the language and conducting the interviews. An automatic analysis of the statements would have missed synonyms, pronouns and metaphors. Furthermore, it would not have easily allowed statements to be linked for differing or contextual reasons. For example, statement number 25 was linked to statement number 31 because both referred to lack of financial support from government officials and also “gradual development” as a specific feature of these businesses.

To reduce the costs, I did most of the things myself...Whenever I had a bulk of money from the guests who stayed, I'd spend it on the house...Every time a group of guests left, I used the money earned to purchase new facilities needed. Having access to big loans would make things easier but there is no need for a loan to be able to do this job (Statement 25).

...Getting some financial help would have helped me achieve my goals quicker but working slowly and persistently is also possible. You can spend little by little instead of having to pay the installments of a loan. Even when you're offered a loan, the amount you spend- time, energy, money- outweighs the benefits gained (Statement 31).

We used UCINET6 to produce a network map from the statement table which is shown in Figure 2. Using close visual inspection, the 3D rotation option and/or the Girvan Newman subgroup identification analysis available within the UCINET6, five clusters of nodes were identified from the network diagram. These are highlighted by the use of separation lines and different node shapes in Figure 2.

RESULTS

Insert Figure 2 about here

Separating out too few clusters limits the opportunity for creativity and too many becomes hard to remember. Miller's magic number (1956) suggests around five to seven clusters be identified. The clusters give pattern to the 117 statements, where each cluster represents a grouping of like statements. The statements within each cluster were then examined for internal patterns and what they had in common. From James (1911/1996), a process for giving recognition to any pattern found within each cluster is to name them, to represent the cluster as a concept. To do this, the Iranian co-author first listed all the statements within one cluster in a table and then carefully reflected upon them to determine a conceptual idea that encompassed the list. Identifying a representative conceptual idea or concept for each cluster is an important interpretative creative act, one that is informed by the statements within each cluster and by the whole research context. Therefore, the names selected should be justifiable to the accommodation providers. For example, looking at the "square" shaped nodes in Figure 2, they included statements like:

Some guests come here to see [me] and I think this is putting too much emphasis on individuals... [it] should move away from individualism. Maybe some sort of educational/training program could be implemented among locals so they'd know how to interact with tourists and offer them services (Statement 70).

Training the locals and involving them by creating jobs for them has another advantage and that is increasing their interaction with the guests which would benefit the guests by providing them a more authentic experience (Statement 74).

Reflecting on these and the other statements in this cluster, the Iranian co-author started to think about the role and support of these businesses for the local community. The cluster also included statements which implied less emphasis on the host being the main attraction (“host-oriented”) towards more emphasis on the overall ‘boomi’ experience for the guests. This suggested for the accommodations to be sustainable, the operators needed to use locals more in offering services to guests. So Cluster 3 was named: Inclusive ‘boomi’ experience. The same sort of synthetic thinking was used in identifying the conceptual idea encompassing the remaining clusters. These were named:

Cluster 1 Sufficient legitimation: a balance needs to be maintained between interaction of operators and government bureaucracy.

Cluster 2 Selected market: consciously selecting those tourists/guests who cause less harm and damage to these operators and to the local community.

Cluster 3 Inclusive ‘boomi’ experience: needing to involve locals in offering primarily a home-oriented cultural experience.

Cluster 4 Appropriately financially structured: looking to sources of funding which will not distract from the intent of the industry.

Cluster 5 Collaboratively empowered: developing a collective decision-making identity for the boomi accommodation network which empowers its members.

DISCUSSION

The system of five concepts suggests that the participants’ think that the future of the boomi accommodations business could be structured around these five conceptual ideas or concepts. Without their resolution their informal industry may struggle to survive. Put another way, the five concepts make sense of, or structure, the diverse list of unrelated comments collected from the interviews. These can be

used to give structure to future actions, to allocate resources, to draft plans and as a system of criteria for evaluating future decisions. As a Strategic Statement of Intent (Hamel & Prahalad 2005), the concepts say the operators' priorities are to develop sufficient legitimisation, a selected market, offer an inclusive boomi experience, be appropriately financially structured and seek collaborative empowerment. The system of concepts can also be used creatively by calling for future actions that fulfil two or more of the concepts. For example, some operators suggested applying for permits from the government. Doing this can be evaluated against the concepts of legitimisation, and collaborative empowerment. Having a permit system would help these businesses to be formally and legally recognized and thus minimize unwanted pressures from formal and informal organizations. However, to avoid too much interference from the government, they need to seek an optimum level of legitimisation. Their collaboration encourages them to have an active role in determining the required standards and principals for a permit. Also these discussions could include how best to use relevant regulations and legislations related to their businesses through some form of lobbying. Clusters 2 and 3 can be used to evaluate the operators' suggestions that they should be attracting more professional tourists considerate of the local people's culture and beliefs who tend to cause less tension. However, some means of increasing awareness among non-professional groups by educating and informing them of the relevant issues could offer alternative opportunities. The education and training programs for locals who in turn might educate visitors could itself offer supply chain employment opportunities and result in an even more authentic and genuine culture appreciation experience. However, a balance would need to be maintained as too much reliance on the local services, rather than interaction with a personable host may reduce the "sense of home" for guests, one of the distinguishing features of these businesses. The boomi accommodations collaboration has empowered operators and led to numerous benefits. They now see that this has placed new obligations on them about how to collectively develop their industry. Concepts 4 and 5 enable evaluation of the suggestions that this might include collectively developing some form of financial or market cooperative. Forming a boomi accommodation cooperative may obligate the government to provide the accommodation operators with financial support/incentives such as low interest loans and tax exemptions.

CONCLUSION

We have argued that a pragmatic epistemology can be used as a basis for making sense of ideas presented by the providers in the Iranian boomi tourist accommodations industry. Their ideas were consolidated into a collective conception of how the industry might be developed. The individual ideas were identifiable in the clustered collective conception which provides something like root an inverted root cause analysis and the evaluation criteria for future tactical or strategic decisions. Individual ideas can still be enacted but can now be explained in term of intending to fulfil the collective conception. But the collective may suggest individual ideas in its own right. For example, the providers' idea to form a cooperative can now be evaluated and modified using the collective conception of wanting an organisational structure that empowers other through collaboration. Also industry norms and processes could be developed to more directly improve the concept of being collaboratively empowered regardless of the cooperative idea. As a collective conception, summarising all the ideas collected from the boomi accommodation providers, it has some legitimation to claim it represents the participatory strategy for the industry.

Discussion about collective cognitions has rather been pushed aside by the guru theory of innovation literature (Kuepp, Palmié & Gassmann 2011). However, alternative theories of innovation include the wisdom of crowds (Surowiecki 2005), the need for more democracy in the collection of ideas (von Hippel 1988), and bottom up idea creation in workplace routines (Martin, Metcalfe & Harris 2009). These may benefit from first establishing a collective conception. Moreover the extensive literature on innovation (Tropman 1998) tends to assume good ideas are precious, hard to find things. There is rather a problem of an excess of ideas, the problem is rather how to collate them in a collaborative yet useful manner. The use of networking was suggested as an alternative to the automated text string matching of content analysis, cluster analysis and multidimensional scaling software. All require the social construct of naming, drawing on interpretation and context to name collated ideas. Networking uses the clustering and visualization functionality of network analysis and mapping. It explicitly does not, like cognitive maps, concept maps, frames and mental models, even hint that its visualizations represent knowledge structures

in the mind of stakeholders (Dreyfus 2007a, 2007b). Rather, what is being produced is a shared, linguistic mobile (Latour 1986) for abducting conceptual ideas from the clusters (patterns) of participants' individual ideas. Preferably these ideas are statements of what might be done. Based on Alexander's (1964) *Synthesis of form*, idea networking is attractive as an ideas management analysis method because it displays these participants' comments as a network akin to social network analysis where the comments are nodes and the links represent similar comments. Visualizing the concepts using a network map provides a classification system that visualizes the number, density and relative position of each class (concept, cluster). The overall shape of the network demonstrates the interrelatedness of the classes. It also provides a dynamic, three-dimensional classification scheme which does not prejudge the names of the classes, the number of them, or their relative positions, allowing statements to be a member of any number of classes. This provides a very egalitarian, visual, ideas management system, the output of which can be used to structure decision trees, provide variables in causal models, as events in Boolean analysis or as the starting point for cognitive mapping (Huff & Jenkins 2002). Although linking of statements and naming of clusters is subjective and thus regarded as a limitation of the method, they could also be done by an objective panel with written criteria. The use of pragmatic epistemology to think about ideas enabled the assumptions of idealism to be questioned. Pragmatism fits the role of organising well in a changing, globalised, pluralistic world. It provides a linguistic, social interaction, action based, problem solving interpretation of how we think. Ideas are not objects with attributes to be discovered. Rather they are names for actions, names that can be part of a collective. Some of which will be more generic than others, the consequences of enacting them greater.

Future research may look more closely at how action ideas are linked (paired), the clustering algorithm and how the resulting clusters are named, including by whom. However, the method used here would appear to have potential for other tourism enterprises to consolidate the ideas of its participants into a collective conception of what the enterprise is and how it might interpret its future.

REFERENCES

- Alexander C (1964) *Notes on the synthesis of form*, Harvard University Press, Boston.
- Anderson C (2003) Finding ideas, *Harvard Business Review* 81(11): 18– 19.
- Bailin S (2003) Is argument for conservatives? Or where do sparkling new ideas come from? *Informal Logic* 23: 3-17.
- Borgatti SP, Everett M & Freeman LC (2002) *Ucinet for Windows: Software for social network analysis*, MA Analytic Technologies, Harvard.
- Buckle P (2003) Uncovering system teleology: A case for reading unconscious patterns of purposive intent in organizations, *Systems Research and Behavioral Science* 20: 435– 43.
- Dennett DC (1989) *The intentional stance*, MIT Press, Cambridge MA.
- Dewey J (1938) *Logic: The theory of inquiry*, Holt Rinhart and Winston, New York.
- Dreyfus H (2007a) The return of the myth of the mental, *Inquiry* 50: 352–65.
- Dreyfus H (2007b) Why Heideggerian AI failed and how fixing it would require making it more Heideggerian, *Philosophical Psychology* 20: 247– 68.
- Fossey E, Harvey C, McDermott F & Davidson L (2002) Understanding and evaluating qualitative research, *Australian and New Zealand Journal of Psychiatry* 36(6): 717-732.
- Hamel G & Prahalad CK (2005) Strategic intent, *Harvard Business Review* 83(7–8): 148– 61.
- Huff AS & Jenkins M (2002) *Mapping Strategic Knowledge*, Sage, London.
- Hume D (1748/1999) *An enquiry concerning human understanding*, Oxford University Press, Oxford.
- James W (1890) *Principles of psychology (Vol 1)*, Henry Holt, New York.
- James W (1907/1910) *Pragmatism*, World Publishing (Meridian), Cleveland.
- James W (1911/1996) *Some problems of philosophy*, University of Nebraska Press, Lincoln.
- Kaplan S (2011) Cognition and Strategy, *Journal of Management Studies* 48(3): 665- 95.

- Keupp MM, Palmié M & Gassmann O (2011) The strategic management of innovation: A systematic review and paths for future research, *International Journal of Management Reviews*.
- Khoshesar (2012) *About Khoshesar*, Viewed January 2012. <http://khoshesar.com/index.php/1388-12-13-07-20-06.html>.
- Latour B (1986) Visualization and cognition, *Knowledge and Society* 6: 1– 40.
- Martin C, Metcalfe M & Harris H (2009) Developing an implementation capacity: justifications from prior research, *Journal of the Operational Research Society* 60: 859- 68.
- Metcalfe M & Powell P (1995) Information: A perceiver-concerns perspective, *European Journal of Information Systems* 4: 121–29.
- Metcalfe M (2007) Conceptualizing problems using idea networks, *Systemic Practice and Action Research* 20: 141-150.
- Miller GA (1956) The magical number seven, plus or minus two: Some limits on our capacity for processing information, *The Psychological Review* 63: 81– 97.
- Morgan G (1986) *Images of organizations*, Sage Publications, Beverley Hills.
- Peirce CS (1878) How to make our ideas clear, *Popular Science Monthly* 12: 286– 302.
- Rescher N (2005) Pragmatism at the crossroads, *Transactions of the Charles S. Peirce Society* XLI(2): 355- 65.
- Rorty R (1982) *The consequences of pragmatism*, University of Minnesota Press, Minnesota.
- Shields P (2005) Classical pragmatism does not need an upgrade, *Administration & Society* 37: 504– 18.
- Surowiecki J (2005) *The Wisdom of Crowds*, Anchor, New York.
- Toulmin S (1972) *Human understanding: The collective use and evolution of concepts*, Princeton University Press, New Jersey.
- Trochim WMK (1989) Introduction to concept mapping for planning and evaluation, *Evaluation and Program Planning* 12: 1– 16.
- Tropman JE (1998) *The Management of Ideas in the Creating Organization*, Quorum Books, Westport CT.

Vandenbosch B, Saatcioglu A & Fay S (2006) Ideas management: A systems view, *Journal of Management Studies* 43: 259– 88.

von Hippel E (1988) *The sources of innovation*, Oxford University Press, Oxford.

Walsh JP (1995) Managerial and Organizational Cognition: Notes for a Trip Down Memory Lane, *Organization Science* 6(3) 280- 321.

Warfield JN & Perino Jr GH (1999) The Problematique: Evolution of the idea, *Systems Research and Behavioral Science* 16: 221– 26.

Watson P (2006) *Ideas: A history of thought and invention*, Harper Perennial, New York.

Weick KE (1995) *Sensemaking in organizations*, Sage Publications, New York.

Weick KE (2006) The role of imagination in the organizing of knowledge, *European Journal of Information Systems* 15: 446–52.

Figure 1: Relationship between Concepts and Actions

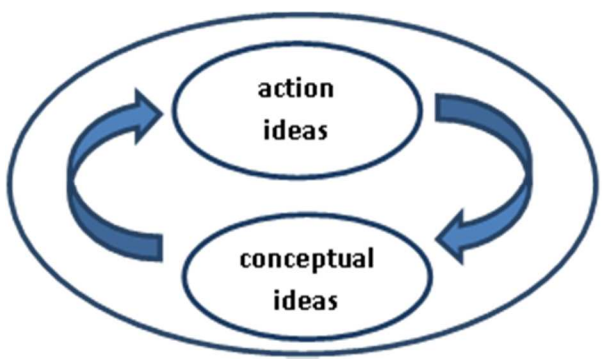


Figure 2: Boomi Tourist Accommodations Idea Network

