EXPLORING THE COGNITIVE BEHAVIOUR OF AFFILIATED NEW VENTURE INVESTORS IN AUSTRALIA: A QUALITATIVE STUDY

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ABSTRACT
This paper reports on the first stage of an ongoing research project. It develops a conceptual framework that is further developed using a grounded theory approach. The research project investigates the process by which individuals invest in new ventures that are started by people they know. The research is couched in terms of entrepreneurship and takes a cognitive approach.

INTRODUCTION
This paper reports on the development of a conceptual framework and initial coding scheme using a grounded approach. It is the first stage of ongoing research into the process by which individuals obtain finance from friends and family to start a new venture. The overarching research question is “Why do individuals invest in new ventures in which they have a prior affiliation with the lead entrepreneur?” By affiliation, we include friends, family, or other relationships.

Research into new venture formation is of fundamental importance because entrepreneurship is a key component of economic growth (Kirzner 1973; OECD 2003). The process by which individuals perceive business opportunities and garner the resources to turn an idea into a business that creates value is of fundamental importance to the study of entrepreneurship (Shane 2003).

After the allocation of personal capital and bootstrapping, additional capital resources are often required to start a new enterprise, that is, capital that the entrepreneur does not own or control (Greene, Brush et al. 1999). This capital may take the form of equity, debt, and grants from government or other organisations.

Entrepreneurial enterprises have been shown to require different types of finance at different stages of their lifecycle (Timmons and Spinelli 2007). Once the entrepreneur’s own sources of capital are exhausted and bootstrapping is not an option, informal investors may be enticed to invest their capital. The people who provide this capital are referred to as business angels and are “private investors who provide risk capital directly to new and growing businesses in which they have had no prior connection (i.e. it excludes investments in their own firm or in a family business).” (Mason and Harrison 1995).

This is an important source of capital because many early stage enterprises could not survive without it (Abernethy and Heidtman 1999).

The mechanisms by which new firms are started and, in particular, financed is an important area for study because this knowledge informs entrepreneurs, their advisers, and policy makers. Informal equity finance has been identified as an important enabler in the formation of entrepreneurial new businesses (Bygrave, Hay et al. 2003). Research into equity finance of entrepreneurial firms has predominantly addressed venture capitalists and business angels, see for example,
(Mason and Harrison 1997; Gompers and Lerner 2004). This is important because “informal capital markets are the leading source of external risk capital fueling entrepreneurial start-up and small business growth” (Gaston 1989, p.223). Yet, the largest supply of informal finance is from people who are known to the entrepreneur (Bygrave, Hay et al. 2003). The proportion of equity financed new ventures in Australia that accept finance from friends or relatives is consistently above 83% (O’Connor and Hindle 2006; Hancock, Lindsay et al. 2007).

The financial impact of this behaviour is significant. The average number of people who invest informally, globally, is 3.4% of the adult population. This accounts for (US) $196 billion annually (Bygrave et al. 2003). In Australia, 3.3% of the adult population, accounting for 1.26% of GDP, engages in informal investment behaviour (Hancock, Lindsay et al. 2007). Venture capital investment, by comparison, is insignificant in terms of activity. Yet, the basis upon which these individuals make their investment decisions has been virtually ignored in the academic literature to date, see for example Bygrave et al. (2003) and Maula et al. (2005). Recent calls have been made for further research into informal finance that has been provided by individuals who are previously known to the entrepreneur (Bygrave, Hay et al. 2003; Maula, Autio et al. 2005). This research answers that call and aims to address this gap in the literature.

There have been numerous attempts to classify business angels (Sorheim and Landstom 2001) but the conclusion reached by a review of 20 years of business angel finance research found that even though work had been done on understanding business angel finance, we still do not know how the angel investing process really works (Freear, Sohl et al. 2002). There is a lack of theory-driven research on the attitudes and behaviour of individuals who invest in businesses owned by others (Wright, Westhead et al. 1999) and the theoretical underpinnings of business angel behaviour, in particular, has only recently been addressed. For example, (Maula, Autio et al. 2005) addressed this issue and used the Theory of Planned Behaviour (Ajzen 1991) as the theoretical basis of the investigation. Another recent attempt to use a cognitive approach resulted in business angels who are unaffiliated with the entrepreneur in which they had invested being identified as exhibiting an Entrepreneurial Orientation (EO) (Lindsay 2004). EO measures pro-activeness, innovativeness, and risk taking propensity.

Entrepreneurship can be viewed through different lenses. This research accepts that entrepreneurship is a process and that any research activity should clearly identify where in this process it is focused (Baron 2007). One way of illustrating the process is to use a life-cycle approach. The well established concept of the lifecycle theory of the firm proposes that firms evolve through stages with different identifiable characteristics. The stages have been referred widely to as start-up, early rapid development, maturity, and decline. There are many variations on this theme but the important aspect for this research is that there are differing characteristics and needs of the firm at different life-cycle stages.

There are many aspects that may impact on an individual’s motivation to invest in a venture. There are any number of financial theories regarding financial investment (Kaplan and Stromberg 2004), but this research used a cognitive psychological approach because informal investment amongst friends and family may be driven by factors other than rational financial factors (Maula, Autio et al. 2005). There has been a recent increase in the attention given to a cognitive approach to entrepreneurship. For example, both Entrepreneurship Theory and Practice (2002 Vol. 27(2)) and the Journal of Business Venturing (2004 Vol. 10(2)) published special issues focusing on the cognitive approach to entrepreneurship.

METHODOLOGY

There is growing evidence of the multidimensional nature of Entrepreneurship (Mitchell, Busenitz et al. 2002; Neergaard and Ulhoi 2007) and new venture investment decision-making can only add to the complexity because a focus on economic analysis alone provides an incomplete explanation of investment behaviour (Basu and Parker 2001; Cassar 2004). This is reinforced by the introduction of the complex dynamics of family and friends (Neubauer et al., 1998) when considering investment that involves family and friends.

The purpose of this research was to develop an understanding of the processes and motivations that underpin the behaviour of investors who invest in friends and family starting new ventures. As has
been noted, this is a research area that is underdeveloped and requires theoretical development. The quest is, therefore, a rich understanding to develop propositions for future research.

The process of affiliated investment is embedded in a social construct. The very definition of the relationship between the investor and entrepreneur means that the investment behaviour is part of a larger social environment.

This research is investigating a social rather than a natural phenomenon and together with the exploratory nature of the research, lends itself to a qualitative methodology (Neuman 2000). This research is ideally placed to answer the call from a number of researchers in this field for a greater focus on qualitative methodologies within the entrepreneurship discipline (Hindle 2004).

This research follows the approach of Glaser (1992). The main departure from the original Glaser and Strauss (1967) approach is that this research design was informed by current theory in order to avoid a ‘data overload’ (Miles and Huberman 1994). The existing theoretical bases provided a conceptual framework that was used for a pre-structured case approach to the early stage of data analysis (Miles and Huberman 1994).

**DATA COLLECTION**

Having established the reasons for using a qualitative methodology, the semi-structured interview was chosen as the most appropriate data collection method. This was deemed appropriate because it gave respondents the opportunity to introduce insights that may otherwise have been missed by a more structured questionnaire (Neuman 2000). The interviews were guided by the theories that informed the research design, thereby providing a context and framework without restricting the respondents’ ability to provide a comprehensive response to the interviewer.

A purposeful sampling strategy was employed in this research. The interviewees were selected for their level of in depth knowledge of the phenomenon being investigated, i.e. ‘experts’. This method was chosen because the purpose of this stage was to develop a research model and identify the key dimensions that will inform later stages of the investigation (Miles and Huberman 1994). Interviews were held with people who had different perspectives of the behaviour. This was done to minimize bias from any particular perspective. Interviews were conducted with an investor in start up ventures, an adviser who has had experience in dealing with early stage investment, and an academic identified as being an expert in the field. The sample was drawn from the personal network of the research team, a list of people provided by The Venture Capital Board of South Australia, and academics identified through their research activities and publication record.

The interviews were recorded, transcribed and analysed using content analysis. All interviews were conducted face to face and were between 30 and 90 minutes in duration.

Data obtained from content analysis of the initial interviews were used to develop an initial coding scheme. The ongoing research program will use sequential analysis of subsequent interviews to further develop the coding scheme and construct a rich understanding of the phenomenon under investigation.

**PRE-STRUCTURED CASE OUTLINE**

The pre-structured case outline was adapted from the Theory of Planned Behaviour (TPB) (Ajzen 1991) (see Fig 1) because it provides the constructs that are relevant to the intentions and behaviours of investors (Davidsson 2005).
The research will be conducted using an entrepreneurial context because the investor is investing in an entrepreneur, and research has shown that investors display an entrepreneurial orientation (Lindsay 2004). Previous entrepreneurship research that focused on personality traits such as Locus of Control, Need for Achievement, and Need for Autonomy have been unsuccessful in explaining entrepreneurial behaviour (Gartner 1988; Deakins and Freel 2006). The TPB is chosen in this instance because of its suitability for investigating specific behaviour rather than using general dispositions to explain behaviour. Furthermore, recent research indicates that the TPB is applicable to the study of informal finance (Wong, Ho et al. 2004; Maula, Autio et al. 2005). This research is interested in the specific behaviour of investment and is, therefore, suited to the Theory of Planned Behaviour (Wong, Ho et al. 2004; Davidsson 2005). In accordance with the need for specificity in the TPB, each construct is adapted to the entrepreneurial context. This approach is consistent with other research that utilizes the TPB; see for example, (Sheeran, Trafimow et al. 2003; Hansen, Jensen et al. 2004; Rhodes, Blanchard et al. 2006).

**Investment Behaviour**
Investment behaviour is the act of an individual investing in a start-up enterprise. The behaviour is defined by the commitment of funds to the enterprise. Therefore the TPB construct of behaviour is the investment in the proposed research model.

**Attitude**
Attitude theory (Fishbein and Ajzen 1972) has been used to assist researchers understand entrepreneurs and avoid the generally discarded personality trait theories of entrepreneurship that were popular with early attempts to define entrepreneurs (Gartner 1988). Attitude is the “predisposition to respond in a generally favorable or unfavorable manner with respect to the object of the attitude” (Ajzen 1991) and used as the basis of entrepreneurial attitude (Robinson, Stimpson et al. 1991).

**Social norm**
Investments are made within the social construct. Many investments are made by people who are socially connected to the entrepreneur through family or acquaintance (Jack 2005). Social capital is accessed through social networks and enables or disables entrepreneurial activity (Westland and Bolton 2003). Social networks and their impact on entrepreneurship have been investigated and found to be both supportive and non-supportive to the entrepreneurial process and the level of influence of the social norms depends on their relationship with the entrepreneur (Klyver 2004).

The TPB subjective norm construct refers to the social pressure and expectations of the individuals within the subject’s social network (Ajzen 1991). This pressure influences the individual’s intention to
perform the behaviour. The TPB proposes that there is less intention to behave where negative social norms are associated with the behaviour whereas a stronger intention to behave is associated with positive social norms regarding the behaviour.

The TPB construct of subjective norm will use Klyver’s (2004) concept for investigating the influence of the subjective social support of the investor and how this affects their opportunity recognition. This concept was developed from Aldrich and Zimmer’s (1986) construct that identified different role-sets in an entrepreneurial network. Klyver’s (2004) concept provides the mechanism by which the set of people who are active in their influence on the entrepreneur can be identified. The TPB proposes that if the investor’s social network is supportive, there is a greater likelihood of the investor recognizing an investment opportunity. The specificity of Klyver’s model provides accuracy in understanding the set of people who have the most influence at the entrepreneurial opportunity recognition stage of the investment.

**Perceived Behavioural Control**

Ajzen (2002) concluded that there are two components that make up perceived behavioural control: self-efficacy and controllability. Bandura’s (1993) concept of self-efficacy has been shown to be particularly important when examining specific behaviour (Kraft, Rise et al. 2005). It refers to the confidence an individual shows in relation to performing a specific behaviour. Controllability refers to the perception of the individual’s ability to undertake the behaviour. This perception may come from an assessment of their physical ability as well as environmental factors. The two factors have been shown to be able to be assessed individually and used as separate constructs in a theoretical model. The factors of both components may be aggregated to measure the perceived behavioural construct as a unitary factor. In line with recommendations from Ajzen (2002) this research will deal with these two components separately. The hierarchical model of perceived behavioural control that results form this decision is illustrated in Fig 2 and derived from Ajzen (2002).

**Self-Efficacy**

The TPB predicts that if the investor has positive self-efficacy in enterprise investment, they are more likely to recognise an investment opportunity. Entrepreneurial self-efficacy has been shown to have a positive effect on the likelihood of being an entrepreneur (Chen, Greene et al. 1998). Further work showed that the entrepreneurial self-efficacy instrument developed by Chen et. Al. (1998) is personal and situational specific (Drnovsek and Glas 2002). This is an indication that perceived behavioural control of an investor in the entrepreneurial context will indicate the individual’s ease or difficulty perceptions of performing the behavior based upon experience and expected impediment.
The TPB proposes that the higher the perceived behavioural control the greater the intention to perform the behaviour, so greater entrepreneurial self-efficacy may result in a higher propensity to recognise entrepreneurial investment opportunities. From an entrepreneurial perspective, the higher the self-confidence about being successful in an entrepreneurial setting that has been developed from past experience (entrepreneurial self-efficacy), the more likely the investor will have a positive entrepreneurial opportunity recognition and consequently exhibit a greater intention to invest in an entrepreneurial start-up. Thus;

**Controllability**

Controllability can be seen as the investor’s perception of their ability to have control over their investment. In other words, how the investor perceives whether the investment satisfies their assessment of ability to accept the risk of investment. This will vary between individuals due to their variations in wealth, propensity for risk, and various other factors such as financial commitments. The TPB proposes that there is a positive relationship between an individual’s acceptance that they are capable of the behaviour in question and their attitude towards the behaviour. Therefore, a perception that an individual has discretionary investing power will have a positive influence on their recognition of an investment opportunity.

The TPB also proposes that there is a direct correlation between perceived behavioural control and behaviour. From an entrepreneurial point of view, there is a demonstrated link between entrepreneurial self-efficacy and past experience. There should be a relationship between past investment behaviour and entrepreneurial self-efficacy.

**PRE-STRUCTURED CASE**

The resultant pre-structured case developed in this paper is as follows:

1. **Attitude**
   a. Investor attitude to investing
   b. Investor attitude to entrepreneurship
2. **Social norms**
   a. Closeness of investor and entrepreneur
   b. Family connection
   c. Culture
   d. Perceived obligation
3. **Perceived behavioural control**
   a. Self efficacy
      i. Experience of the investor in business/entrepreneurship
      ii. Knowledge, training, education
      iii. Understanding of investment/business risk
   b. Controllability
      i. Affordability
      ii. Investor’s ability/willingness to take an active role in the business
4. **Motivation**
   a. Opportunity/necessity based
   b. Financial or non-financial
   c. Building human capital

**DISCUSSION**

The following discussion describes how the pre-structured outline was modified and extended by the results of content analysis of the first three interviews. The interviews were guided by a pre-structured outline that was developed by existing cognitive theoretical approaches. The outline was used to guide interviews, but the respondents were free to introduce aspects that they considered important.

The first stage of the content analysis was to look for evidence in the transcripts to support the pre-structure established prior to the interviews. This was done by a search on key terms and coding text within the body of the transcript (Miles and Huberman 1994). The following discussion reports the most prominent themes that were identified by the respondents and how those themes are supported by evidence from the literature.
All three respondents reported that the resources provided by an affiliated investor included more than just money. For example, one stated

“I guess the other one is lifestyle, you know they’re wanting to have more control over the direction and wanna be involved in something they’re passionate about and I probably think that’s one of the more common reasons and I guess that passion, you know that drive for whatever they’re doing whether its producing skin care products or doing, oh it could be anything, but they might just have a passionate about the service

The investor will inevitably provide more than just finance to the deal. Business angels provide management experience and assistance with their investment providing capabilities and resources that provide competitive advantage (Wernerfelt 1984). Capabilities reside in superior managerial and entrepreneurial skills and knowledge that make it possible to engage in advantageous business process activities (Barney 1991). Thus, entrepreneur and investor experience that manifest themselves in attitude, social capital, and knowledge can be viewed as resources that potentially enhance the success of investments (Shepherd and Detienne 2005). Such knowledge may manifest itself in an ability to better assess the risks involved in new venture creation.

The affiliated investor may want to have an active role in the business, as do many business angels. However, the respondents identified that they thought that such desires may be modified by their relationship with the entrepreneur. One of the respondents noted that

“The issue with friends and family providing money and, you know, help as well could be really complex and create all sorts of personal issues. Like, how close you are will determine how much candid advice you give, but, you know, its still your money”

Further to this, all respondents questioned the extent to which such investments were properly investigated.

“Would they do an analysis like a business angel or a VC company would do and I suspect not.”

Investors are known to want to exert an influence on the business in which they invest. The Business Angel will often take an active role in the business, whereas the formal Venture Capitalist will often take ‘a hands off’ approach to the daily management of the venture. Ajzen’s (1991) findings that that an individual’s intention to perform a specific behaviour is influenced by their perception of their ability to have some control over that behaviour provides a basis to examine this particular aspect of the process.

If it follows that if the investors do want to hold some control over their investment, then they are also likely to show some evidence of having Entrepreneurial Self Efficacy, (Bandura 1993). This was highlighted in one of the interviewees who said

“The self efficacy which is essentially the knowledge, the experience, the background of the investor, have they done this before and all those sorts of things, risk is probably straight forward.”

This corresponds to research that showed that the entrepreneurial self-efficacy is personal and situational specific (Chen, Greene et al. 1998). Therefore, an investor will likely have some knowledge or experience in entrepreneurship, but this may be modified by the relationship as noted by a responded when referring to the involvement in a business

“Does the emotional effect influence the entrepreneur’s behaviour in any way or not?”

This experience may be in knowledge about business such as how to assess teams, resources, and opportunity (Timmons and Spinelli 2007), risk analysis (Deakins and Freel 2006), opportunity recognition (Shane 2003) or any other number of business skills. The attitudes of affiliated investors are expected to be favorable towards entrepreneurship. Entrepreneurial Attitude was developed from Fishbein’s (1972) attitude theory that has been used to assist researchers understand entrepreneurs while avoiding the vagaries of personality trait theories of entrepreneurship (Robinson, Stimpson et al.
Investors who provide resources to new start-up ventures are likely to have a positive attitude to entrepreneurship. However, interestingly, none of the interviewees mentioned entrepreneurial attitude.

The investor’s social network is expected to be supportive in terms of entrepreneurial behaviour; there is a greater likelihood of the investor investing in an entrepreneurial opportunity if they are familiar with the entrepreneurial environment and have experience in entrepreneurship (Markman 2007). Following Klyver (2004), building on Aldrich and Zimmer’s (1986) research, we can expect different role-sets in an entrepreneurial network. One of these will be the closeness of the relationship between the entrepreneur and the individual who invests in them. This was highlighted by one of the respondents who started the discussion with

“there’s a relationship; so its either very close or very distant and I’m sort of playing with the idea is family different to friends or does it really matter, I mean maybe its just the closeness and not the actual relationship”.

This area of investigation is more complex than that, though, because there are at least two perspectives from which one can examine a relationship. A respondent raised the following point,

“we’re dealing with people that are probably not flushed with cash so it is one of the options to get cash and commonly for them it is the bank but if they haven’t got equity or they’re not willing to put the house up its other choices so it’s the friends, the family”.

It appears important that the research investigates the behaviour from both the viewpoint of the investor and the entrepreneur. As discussions regarding relationships progressed, all the respondents raised culture as an important factor. One of then said

“Well certainly where you’ve got a culture or ethnic groups I think, I would have thought that, well there is an ethnic dimension to, you’d expect really to see the differences and worth pursuing.”

There is also likely to be cultural effects on the process. This is expected to manifest itself in terms of expected family commitment or obligation felt to assist family or friends.

GEM Global has identified that there is a significant difference in the motivation to start a business. Some new business start-ups are predominantly motivated by necessity. That is individuals will begin a venture because they have no better option. Other start-ups are motivated by opportunity. That is the individual perceives that an opportunity to start a venture is the main motivator. This theme was referred to by all the respondents and they perceived that even within our developed economy that these motivations still play a part. How the different motivations would impact on the investment behaviour though was not so clear. The motivation for investing in a start up venture is usually couched in terms of return on investment through a variety of mechanisms. These are invariably based on rational economic decision making processes (Gompers and Lerner 2004). The investment that occurs between friends and family, on the other hand, are likely to be more complex and driven by a range of motivations. These may consist of economic or non-economic reasons. The respondents clearly related to this as one of the more important aspects of the study. One encapsulated the ambiguity of this part of the behaviour by saying

“They don’t actually go through the steps of actually saying who does what, who owns what, what’s the roles and responsibilities, what’s our exit strategy, things like that. So there’s propensity to not have that financial base and if you were going to take out $100,000 grand like where does that money sit and who does the risk sit with, you know what I mean.”

**CODING**

In line with sequential analysis techniques, the three interviews reported above were used to develop a coding scheme. The scheme will be used to inform subsequent interviews. The coding scheme that was developed from the pre-structured case and subsequent initial interviews is illustrated in Table 1. It reports the number of respondents (n=3) that raised the issue, and the number of times that issue was referred to in the interviews. It should be noted that the frequency of responses does not necessarily correspond to importance or any other qualitative measure.
### Table 1

<table>
<thead>
<tr>
<th>Name</th>
<th>Sub</th>
<th>Number of Respondents addressing this issue</th>
<th>Number of References evident in the transcripts</th>
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<tr>
<td>Risk</td>
<td>Understanding</td>
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<td>8</td>
</tr>
<tr>
<td>Motivation</td>
<td>Return on investment</td>
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<td>44</td>
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<td></td>
<td>Necessity vs Opportunity</td>
<td>2</td>
<td>21</td>
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<tr>
<td>Investor sophistication</td>
<td>Entrepreneurial experience</td>
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<td>8</td>
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<td></td>
<td>Business experience</td>
<td>3</td>
<td>5</td>
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<td></td>
<td>Investment experience</td>
<td>3</td>
<td>10</td>
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<td></td>
<td>Self efficacy</td>
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<td>4</td>
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<td>Relationship</td>
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<tr>
<td></td>
<td>Culture</td>
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<td>5</td>
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</tbody>
</table>

### CONCLUSION

The initial pre-structured case was very useful in eliciting a comprehensive response form the respondents. The richness of the three interviews has provided a new set of constructs that will be used to guide subsequent interviews. The methodology and methods employed in this research has resulted in new insights that are expected to be valuable in an ongoing sequential analysis program.

### Contribution of the research

This research contributes by building a theoretical base for future research. At a practical level, it provides an early understanding of the complexity and diversity that exists in early stage investment. This is important to entrepreneurs, advisors and financiers of new ventures. At a policy level, the findings could be used to better understand the complexity evident in designing and implementing policy in order to encourage and facilitate new venture creation. Existing government policy has, to date, largely concentrated on venture capitalists and business angels.

### LIMITATIONS OF THE RESEARCH

The interviews were all conducted by the one researcher. This introduces the possibility of bias. However, this is not considered as a fatal flaw at this early stage of the research process. A rich understanding of the issues that need to be examined in future interviews was considered more important at this stage than the risk of interviewer bias.

Coding of the interviews was also conducted by the one researcher. To alleviate potential coding bias, the transcripts were coded twice at different times (two weeks apart). Any coding that was not in substantial agreement was discarded for this report. Subsequent interview transcripts will be coded by different researchers and compared for consistency (Miles and Huberman 1994). Qualitative investigations such as this one should be supported by triangulation (Miles and Huberman 1994). This paper is reporting on an early investigative stage of the process. The three interviews reported in this research are from different perspectives. Therefore, serious bias that could affect the later stages of the research is unlikely.

### Bibliography and References


