

# Stakeholders and Start-up Enterprise

Stakeholder theory of an entrepreneurial context

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Project Management

Submission date: June 2014

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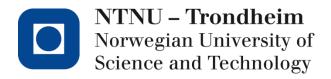
# Stakeholders and start-up enterprise Stakeholder theory of an entrepreneurial context

## Master's thesis in Project Management

Trondheim, June 2014

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## **MASTERKONTRAKT**

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Oppstartsdato 13. jan 2014	Innleveringsfrist 09. jun 2014	
Oppgavens (foreløpige) tittel Stakeholders and Start-up Enterprise Stakeholder theory in an entrepreneurial context		
Oppgavetekst/Problembeskrivelse Exploratory research conceives stakeholder theory in an entrepreneurial context. The topology of stakeholders is addressed in relation to value creation. Two lines of inquiry establish a foundational framework for inexperienced entrepreneurs to cogitate the underlying interests and interactions of early-phase stakeholders of start-up enterprise.  1. How does start-up enterprise integrate stakeholders into value creation? 2. How does start-up enterprise manage stakeholders integrated in the process of value creation?		
Discussion considers three case start-ups and the practical implications of anchoring a conception of stakeholders in entrepreneurship.		
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Merknader  1 uke ekstra p.g.a påske.		

**Note:** The deadline listed above is extended to 11 June 2014.

#### 4. Underskrift

Student: Jeg erklærer herved at jeg har satt meg inn i gjeldende bestemmelser for mastergradsstudiet og at jeg oppfyller kravene for adgang til å påbegynne oppgaven, herunder eventuelle praksiskrav.

Partene er gjort kjent med avtalens vilkår, samt kapitlene i studiehåndboken om generelle regler og aktuell studieplan for masterstudiet.

TROUDHETA 24-04-2014
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#### **Abstract**

This paper sources focused interviews from multiple case study companies in conjunction with synthesised theoretical considerations to explore the integration of entrepreneurial stakeholders in start-up enterprise.

A resource based-framework for early-phase entrepreneurial stakeholders is grounded with existing stakeholder theory. It is applicable to an entrepreneurial context that is grounded with entrepreneurship literature. Both the early-phase entrepreneurial stakeholder framework and the entrepreneurial context are rooted in value creation.

Findings suggest that there is limited applicability of a resource-based stakeholder framework for entrepreneurship. From the perspective of start-up enterprise requirements, the resource based-framework is coherent largely because such value creation efforts are constrained by limited resources. External to the value creation networks of start-up enterprise, the resource-based framework is valid where exchanges are dominated by relative bargaining relationships of stakeholders with respect to economic substitution or switching costs and in the absence of personal relationships. However, inside the entrepreneurial context and where value creation is reducible to personal interactions, theoretical tensions are manifest when considering intangible personal relationships in terms of a resource exchange. The implication is that trust, loyalty, or the evolving dynamics of a contextual stakeholder network might be reliably modelled through quantification. The practical implications for entrepreneurs are to pay attention to personal characteristics of stakeholders.

Further research may be lent to testing the propositions of an entrepreneurial context or of exploring how entrepreneurial behaviours, relationships, and activities might account for stakeholder interactions with relation to stakeholder theory.

This work is completed in partial requirement for graduation from the Norwegian University of Science and Technology in a master programme of project management.

## **Acknowledgements**

Thanks to the kindly folk who make international studies possible. Thanks to the teachers in all walks of life who are sources of feedback, insight, and patience. Thanks to the friends who support and inspire.

This work would not be possible without the gracious input from the case companies. Hopefully the content is succinct and coherent to be of value for posterity in further research and entrepreneurial efforts.

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## **Abbreviations**

UoA – Unit of analysis

VVG – Venture vector growth

EES – Early-phase entrepreneurial stakeholders

NOR – Norwegian case study company

CAN – Canadian case study company

AUT – Austrian case study company

CEO – Chief executive officer

KPI – Key performance indicator

#### 1 Problem formulation

The forces of economic constructs shape societies. In guiding the efficient allocation of human and non-human resources, free-market enterprise is the agency of capitalism. Within the global reach of capitalism, entrepreneurship underpins new and dynamic enterprise driven by opportunity of innovation or change. (Bygrave 2009; McGrath and Desai 2010) Incrementally and sometimes disruptively, entrepreneurship will open market frontiers, render existing markets more efficient, create employment, and, as a result, generally augment quality of life. (Acs 2010) Entrepreneurship is widely recognised as a preeminent source for economic and social development. (Acs and Audretsch 2010)

In literature, research on entrepreneurship is diverse and attributed to thinking about organisational context, performance criteria, and the behaviours that define entrepreneurial activity. (Audretsch 2012) The current focus of research exists at the confluence of examining several core topics. These relate to the entrepreneurial process, the nature of entrepreneurial opportunity and its exploitation, the emergence of new ventures, and the interaction between entrepreneurship and organisations. (Acs and Audretsch 2010)

By virtue of its diversity as a field, entrepreneurship is hard to define. This creates difficulty in establishing theoretical foundations. (Shane and Venkataraman 2000; Koppl and Minniti 2010) Empirically, entrepreneurship is described according of certain characteristics, or specific outcomes thereof. (Gartner 1990) Entrepreneurship is also taken to manifest at the nexus of entrepreneurial opportunity and enterprising individuals exist. (Venkataraman 1997) All the while, progress of the field is piecewise and apparent. (Koppl and Minniti 2010)

Even with a sound definition, it is debatable whether extant theory is able to practically inform entrepreneurs: Will it teach a prospective entrepreneur to recognise, discover, or create opportunity? Perhaps it will mandate a process of opportunity exploitation or venture formation? Onerously, would it suggest molding individual behaviours to be more conducive to entrepreneurship? These seem implausible because entrepreneurship is dynamically inherent to the entrepreneur and their specific context of opportunity, exisiting in perception or in reality depending on epistemological disposition. (Alvarez, Barney et al. 2010)

This calls to mind that entrepreneurship is fundamentally an activity of human labour, and that it is important to recognise an immersive context of entrepreneurship in which the entrepreneur partakes. (Shane and Venkataraman 2000; Parmar, Freeman et al. 2010) In this regard, the state of core current theory does not yet seem practical beyond abstracted foundations for descriptive featuring of diverse understandings of entrepreneurship itself.

In this paper, we construe an entrepreneurial context as the origin from which to relate the features of entrepreneurship. In contrast to existing theoretical foundations, this approach permits exploring how enterprising individuals orient towards entrepreneurial opportunity in the circumstance of this entrepreneurial context. Practically, regarding the engagement of people, entrepreneurs may reflect on their orientations within this context, and among a team of early-phase entrepreneurial stakeholders.

By rooting the entrepreneurial context in value creation, we account for both the characteristics of entrepreneurship (attributed to the context), and the outcomes of entrepreneurship (as a result of value creation). This permits two things: 1) a synthesis harmonising a formulation of entrepreneurship without impinging on existing theory and 2) the development of a foundational framework to explore the manner in which early-phase entrepreneurial stakeholders partake in start-up enterprise.

Against this theoretical backdrop of stakeholders and entrepreneurship, we explore how early-phase entrepreneurial stakeholders integrate into the entrepreneurial context of value creation, and what mechanisms manage this integration. Empirical support comes from three separate case studies probing a single unit of analysis with semi and unstructured interviews.

The intention of research is not to examine the complete bodies of knowledge in entrepreneurship or stakeholder theory. The purpose is to stimulate a consolidated stream of thinking for further research and to derive practical reflections from entrepreneurship literature regarding the nature of early-phase entrepreneurial stakeholders.

Governments, businesses, entrepreneurs, and researchers all stand to benefit from a better understanding of entrepreneurship, whether designing policy to foster economic growth or pursuing new economic ventures or research. Beyond consolidating understanding, this research will hopefully source practical insight for inexperienced entrepreneurs.

## 2 Methodological consideration

It serves to discuss the methodology before considering the theoretical model used to ground this research. In justifying the methodological approach, we indirectly introduce the structure of the paper and the conceptual links that are to follow.

The purpose of exploring stakeholder theory in an entrepreneurial context is to provide a source for practical reflection so that inexperienced entrepreneurs may hone their efforts with relevant research. The outcome is a prompt regarding the manner that stakeholder interaction occurs in an entrepreneurial context.

Briefly reprising the purpose, we frame the cause of research. For the duration of year prior, your correspondent contributed to found an IT company. A successful outcome is not realised and all active efforts are terminated during research. Participant bias is not present because a conscious effort is made to address objectivity. This is aligned with a tangential motivation to objectively know what different approaches are more appropriate in this prior and possibly future circumstance.

To establish direction for the research effort, a context must be established. Recognising that entrepreneurship is poorly defined, exploratory research is naturally aligned for probing. It also follows that objective and representative metrics are difficult to define and to measure without a rigorously established context. Consequently, the research adopts a qualitative disposition. (Yin 2009) Initial effort thus lends itself to define the entrepreneurial context and subsequently formulate hypotheses so that inquiry is directed towards stakeholders of the context.

To consider whether the presumed context of research is contrived is misleading. Contemporary entrepreneurship literature focuses on the existence of opportunity and the process of its exploitation. This occurs within our economic reality. (Acs, Braunerhjelm et al. 2009) Any phenomenon based in reality is attributable to a context from which it emerges.

Focus now shifts to define research questions in relation to the intended context of research, and to determine the feasibility of research procedures. Concerning a study within the context of entrepreneurship, we consider the type of research questions, the extent of

control that is borne on behavioural events, and the degree to which investigation immerses in contemporary versus historical events. (Yin 2009)

There is an obvious question relating to the definition of the context underpinning the research effort. A more robust investigation would begin with empirical support to define an entrepreneurial context. Research is constrained by time. The case is made that the body of knowledge is sufficiently mature in its examination of entrepreneurship that an entrepreneurial context is credibly drawn. Where the entrepreneurial context is established in following section, "theoretical synthesis," this may be scrutinised. Within the constrained timeframe, this ensures the scope of research is aligned to its practical purpose: in order to inform entrepreneurs, exploration seeks the how and why success is wrought from stakeholder interactions within the context of entrepreneurship.

Behavioural events of the entrepreneurial context are not affected nor can they largely be controlled by investigation. The purpose of this exploratory research is not to exert control to necessarily test hypotheses, but to develop a more stable bearing in the undefined context. Direct and participant observation would make poor use of the time allotted for research and would additionally require the improbable proximity of a willing entrepreneurial case study.

Finally, focus is fundamentally directed towards a contemporary context. The how and why within a context of entrepreneurship is not reliably drawn from historical account. For example, hindsight or non-observed bias in the data may alter examined representation and not necessarily treat contextual change over time. In the same vein, scrutinising potentially incomplete documentation of start-up enterprise will obscure relevant data of the research effort. There is also difficulty considering confidentiality issues in examining what documentation is available. Data is most suitably obtained with case study interviews.

The objective of research is distilled to capture the circumstances and conditions conducive to success within an entrepreneurial context as best demonstrated from case study interviews. This calls for a holistic design – i.e. there are no apparent subunits to the phenomenon of entrepreneurship where it is rooted in value creation. (Yin 2009) Specifically, understanding is drawn from entrepreneurship as a contemporary phenomenon in its real-world setting where the boundaries between the phenomenon and the context are not evident in literature. We therefore rely on multiple sources of convergent evidence, anticipating that more

variables of interest will arise from the entrepreneurial context than possible data points. (Yin 2009) This further supports the qualitative disposition of research, and of using multiple case studies.

With relation the research questions developed below, the application of a case study research method is to explore stakeholder integration in an entrepreneurial context. Due to its nature, exploratory and qualitative research is hereafter designed as a holistic and multiple-case case study that seeks from each respective case study: 1) analytic generalisation to the entrepreneurial context, and 2) replicated evidence to support conclusions with respect to the research questions.

The starting point of exploratory case study work relies on existing theoretical propositions regarding entrepreneurship to support the conception of an entrepreneurial context. Relevant empirical data then emerges by exploring the decisions, actions and interactions of early-phase entrepreneurial stakeholders with interviews. It is with such exploratory data that entrepreneurs may best inform and orient themselves within their respective contexts. A focus is narrowed to the research purpose with two exploratory research questions:

- (1) How does start-up enterprise integrate stakeholders into value creation, and
- (2) How does start-up enterprise manage stakeholders integrated into the process of value creation?

An implication from the structure of both questions is that entrepreneurship is inexorably linked with value creation: this recalls that entrepreneurship is largely attributed to economic growth. (Carree and Thurik 2010) Both questions seek to augment an existing descriptive understanding of entrepreneurship with practical implications of entrepreneurial stakeholders.

The first question is one of association. How is the association of entrepreneurial stakeholders and start-up enterprise engendered? Comparatively or prospectively, an entrepreneur might reason different modalities of interaction according to a present circumstance. We seek to base this reasoning on a foundational framework that is replicated from each considered case.

The second question probes the association further. How do start-up enterprise and these stakeholders maintain mutual interaction? We seek to extend the foundational framework to encompass consideration of entrepreneurial stakeholders over a duration constituting the entrepreneurial context. The flow and structure of study are depicted below and in Figure 1 respectively. The research questions are addressed in stage four and define the nature of conclusions.

- (1) The nature of an entrepreneurial context is synthesised from literature.
- (2) The underlying propositions of the entrepreneurial context are cross-referenced with relevant entrepreneurship research.
- (3) A foundational framework to subsequently consider entrepreneurial stakeholders is established. It builds from the conception of an entrepreneurial context.
- (4) We ground consideration of the entrepreneurial stakeholder framework with relevant stakeholder research.
- (5) Empirical support from multiple case studies additionally validates the proposed entrepreneurial context.
- (6) Empirical support from multiple case studies additionally explores the research questions related to the entrepreneurial stakeholders.

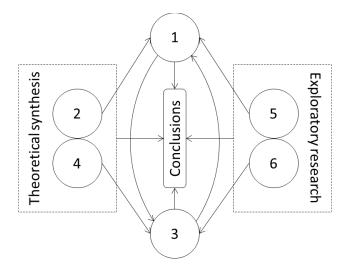


Figure 1 The structure of research is dynamic: the entrepreneurial context and the foundational entrepreneurial stakeholder framework redefine each other of the course of study

In sum, the entrepreneurial context serves to contextualise the foundational framework subsequently considered of entrepreneurial stakeholders in relation to the questions of study. The research culminates in discussion about the conception of stakeholders and start-up enterprise. The preliminary pieces are now in place to consider the design of the methodological approach in greater depth.

The unit of analysis (UoA) is fundamentally related to the way we define the initial research questions. (Yin 2009) Underpinning the definition of the research questions is thematic exploration of how and why success is wrought of entrepreneurship and attributed to the integration of entrepreneurial stakeholders. Implied are two notions regarding the structure of the UoA and separately discussed below.

#### (1) There exists a successful outcome from entrepreneurship.

Existing within a capitalist economic construct, we have so far broadly treated entrepreneurship as a phenomenon whereby stakeholders cooperate as part of start-up enterprise in the pursuit of creating shared, uncertain, and unrealised opportunity that relates to the capture of economic value. Refer to the theoretical synthesis for an expanded conception of stakeholders, and of start-up enterprise (alternatively venture enterprise or venture for short). Consequently the nature of successful outcome from entrepreneurship is construed to engender ability for the economic perpetuation of grown venture. The UoA therefore deals with venture entities in a process of becoming economically sustainable.

This frames a line of inquiry related to the life-cycle of entrepreneurship that is beyond the scope of this research. For our purposes, the UoA is appropriately delimited where the uncertainty of a venture's economic viability reduces to a critical threshold. This threshold is more concretely depicted when the operations of venture are projected to surpass a sustained financial breakeven point with a high degree of certainty. At this point, venture ceases to be characterised by uncertainty in its pursuit for economic value and is no longer considered entrepreneurship. In this respect, the UoA extends for the duration that venture is characterised by prevalent uncertainty of unrealised successful outcome. This is a good delimitation because nascent companies that grow from entrepreneurship invariably fail or mature. We thus disregard consideration to entrepreneurially established firms in their transition to institutionalise the sustainability of what value has already been created.

(2) Informed cognition of the context has the potential to better direct entrepreneurial effort towards successful outcome.

This second notion relates to a human factor. Framed with uncertainty, there is potential to misallocate resources and possibly squander successful outcome. For example, mentorship calls to mind that experience, an informed heuristic, serves to mitigate likely wasteful allocations of resources or venture effort. It follows that an understanding of decisions, knowledge, or actions taken by stakeholders in the venture context is possible and applicable to the growth of venture in the direction of successful outcome. This interpretation couples the economic reality of entrepreneurship and a human component. In relation to the UoA, it suggests that entrepreneurship will possess a growth curve towards successful outcome as uncertainty decreases. This also implies a time constraint attributed to the availability and exhaustion of resources and effort.

Summarily, the UoA spans venture growth during which a degree of certainty to achieve successful outcome is lacking. The UoA in Figure 1 disregards transition to the institutionalisation of successful outcome beyond a threshold degree of certainty.

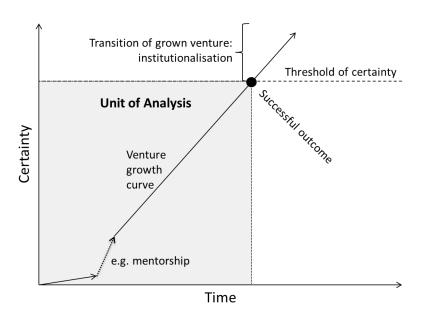


Figure 2 Unit of analysis

The research is concerned with the integration of early-phase entrepreneurial stakeholders of entrepreneurship. The UoA justifiably treats this purpose by delimiting venture such that it is directed to manifest some unrealised product or service at a stage where commercially

sustainable is wholly uncertain. For example, venture engaged in the commercialisation of novel research falls within the UoA. On the other hand, new enterprise engaged in arbitrage is not part of the UoA because such value creation potential is not innovative or novel. Arbitrage however does correspond with an appropriate regime of uncertainty. We further disregard maturation processes of venture beyond the UoA like exit strategies of the entrepreneurial stakeholders, for example.

This UoA narrows theoretical consideration and empirical investigation by removing emphasis from unique contexts, attributed to firm size or self-employment for example, and by embracing all business that is new and dynamic in the pursuit of uncertain value. (Acs and Audretsch 2010) While the UoA potentially accommodates non-profit business, consideration is first lent to profit seeking venture to minimise the necessary body of literature.

Initially, entrepreneurship literature is scrounged from a preliminary investigation during the prior academic work. What becomes apparent is that the field accommodates a diversity of thinking because entrepreneurship has been seized upon for study from many established fields such as economics, sociology, and strategy. (Alvarez, Barney et al. 2010) To reconcile the breadth of literature with the purpose of research, focus turns to current and comprehensive reviews of the field. Importantly, this manages the limited time of study. Where it is relevant to establishing the entrepreneurial context, additional work from current and leading researchers of the field is included. While not comprehensive in its treatment of the field, this is a reasonable approach: it ordains reliance on an inclusive and multi-disciplinary overview of the most up-to-date and prominent lines of thought. (Acs and Audretsch 2010)

Stakeholder literature is also addressed from prior investigation, both from earlier academic work and also from the syllabus of the study programme in project management. Stakeholder theory is a better established because the field is more mature. In this sense it is readily applied to a new context under consideration. Traces of this are already observed as stakeholder literature is seeded with consideration along the periphery of entrepreneurship. Again, the intention is not for a comprehensive summary of the field but for tractable linkage and application to the entrepreneurial context of early-phase entrepreneurial stakeholders being considered.

The weakness of the non-comprehensive approach is that relevant literature, whether supportive or contradictory, might slip under the radar. Despite accepting this weakness in dealing with a time constraint for research, a robust exploratory search of literature has spanned a year to in order to select the most relevant information as part of the consolidated synthesis hereafter. Coherence of the synthesis with recent and preeminent research lends confidence to the quality of the selected literature. Further, in either case considering entrepreneurship or stakeholder theory, solid foundations exist from which to base a narrower investigation of stakeholder involvement in an entrepreneurial context. Ultimately rigor is achieved from peer review.

With regard to empirical research, two categories of data are relevant. This first is data that explores the uncertain value creation of entrepreneurship. This is the origin from which to conceive an entrepreneurial context. The second category is data that explores the research questions lending focus to entrepreneurial stakeholder integration into the venture context of value creation. The second data class dynamically relates to the grounding of the first in order to satisfy the research purpose – i.e. it draws practical insight for a foundational framework relating stakeholders to an entrepreneurial context. Generally, we seek data from within the UoA that tests a conception of the entrepreneurial context and of entrepreneurial stakeholder integration. Such data will relate to the nature of value creation in entrepreneurship, and to the way that people and/or nascent enterprise organise efforts to manifest value. It is also important to consider that unanticipated data might present itself in exploratory research.

The penultimate weakness of this methodological approach and a congruent data category of interest is that which invalidates the established entrepreneurial context. We argue with sufficient rigor, left to the scrutiny of the reader, that the entrepreneurial context accommodates existing theory well, links to the UoA, and uses case studies as independent and convergent sources of data for its reliable conception.

Another weakness of this methodological approach is that the case studies are not sampling units. (Yin 2009) This suggests that any representative coherence derived in exploration is not necessarily complete. This has a bearing on the reliability of research - i.e. will subsequent case studies arrive at the same conclusions? This is primarily overcome by using three diverse case study companies to independently probe the UoA and consider the entrepreneurial context and stakeholder integration. This embodies an aspect of replication in the case study

design in order to predict similar results. While contributing to an external validity, the important step in this replication procedure is to rely on a robust theoretical framework that states the conditions that phenomena under consideration are both likely to be found and not to be found. (Yin 2009) In this respect, it is of critical importance to credibly establish the entrepreneurial context. Precision of the UoA also helps to prescribe reliability where careful investigation will minimise the chances of misrepresentation and maximise exposure to the observed case study evidence. (Yin 2009) Subsequent case studies of a greater quantity or different nature will definitively account for any weakness in reliability.

Yet another weakness possibly emerges from the holistic design. Identified is only one logical UoA. It is common in holistic case studies for the entire nature of the study to shift orientation as a new picture emerges during data collection. (Yin 2009) This relates to possible unanticipated data inadvertently steering the progressive query of the UoA. Over the course of study, this is managed by linking similarities between the UoA and the established entrepreneurial context against which the case study evidence is gathered and examined. This has a bearing on construct validity to ensure the data is explored with alignment to the questions attributed to the entrepreneurial context and derived from the purpose of research.

Theory begins with consideration of the entrepreneurial context. As discussed, this amounts to a synthesis from selected literature concerning entrepreneurship and stakeholders. The synthesis is rooted in a framework for value creation. This applies the entrepreneurial context to an economic reality and indirectly to the UoA as well. It is with this entrepreneurial context that the research questions are considered.

The empirical research makes use of an interview based case study format to gather evidence for the theory. Interviews are sourced from individuals of venture within the UoA. The line of inquiry directly and indirectly explores how entrepreneurial stakeholders integrate with venture. This implies the necessity to recognise the disposition of the interviewee as a stakeholder themselves.

From the theoretical synthesis, four themes are embedded to an interview protocol. These are: 1) the value pursuit of venture, 2) the work processes of venture, 3) the background and venture affiliation of the interviewee, and 4) the early-phase stakeholders of venture. Theme one openly informs about the entrepreneurial context of the case as it pertains to value

creation. Theme two intertwines conceiving entrepreneurial stakeholders and venture with respect to the second theme. Themes three and four directly align conversation of the interview towards the nature of entrepreneurial stakeholders. Each of the four themes derives from the UoA and elicits relevant data to both qualitative categories of interest – i.e. the data of stakeholders and the data of entrepreneurial context as shown in Figure 3.

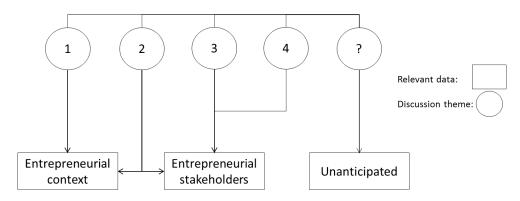


Figure 3 Interview protocol structure with respect to anticipated data extraction

The initial interview format is semi-structured. This means that the themes and associated open-ended questions of discussion are specified in advance in order to guide conversation. However, the sequential flow of discussion arises over the course of the interview. (Hancock and Algozzine 2006) This is chosen to increase the completeness of relevant data and to systematise an approach from which to objectively replicate the relevant data in each case.

While selected for relative ease of procedural data collection, the interview format is a justifiably sound choice: emergent data from embedded perspectives is rich. This enhances the exploratory nature of inquiry by accommodating potentially unanticipated data. In this sense, it would be foolish to consider reducing the interview flexibility with, for example, a format of predetermined questions or response options.

Early design of the semi-structured interview protocol also permits prior consideration of possible gaps or disconnected understandings of discussion. (Hancock and Algozzine 2006) Specifically, we are concerned with the gaps that may emerge between discussion and relevant data.

Specific to the format of a semi-structured interview format is that critical topics may be inadvertently missed. This is addressed by accommodating unstructured interview discussion.

This occurs when the natural discussion directly treats the relevant data and touches on the themes. Without sacrificing comprehensiveness of the data, but at the cost of any structural organisation in the data, several interview discussions shift to a largely unstructured format. Where the data is perceived to be richer, inquiry becomes open to a heightened value from responses. Prompting questions are fewer to preserve the flow of accumulating data. Any questions are matched to the progressive evolution of the interview without the guided structure to an otherwise semi-structured interview format. (Patton 2005; Hancock and Algozzine 2006)

We address the limitations to a general application of the interview format by recognising that bias will arise from poorly worded questions, that there will be a response bias from each interviewee, that there will be inaccuracies due to poor recall, and that a reflexivity of the interviewee is associated with the flow of the interview. (Yin 2009)

The initial preparation and subsequent interviewer training, with the external perspective of a friend, is based on the interview protocol. Though it is entirely contextual, this mitigates bias from poorly worded questions. Questions are defined in a friendly and non-threatening manner leaning towards "how" instead of "why" to avoid defensiveness. (Yin 2009) Opinions based on discussed realities makes the role of the interviewee more of an informant rather than a respondent. With this in mind, the subtleties of interpersonal influence are better managed over time with procedural replication of the interview protocol across cases as evidence is gathered. (Yin 2009) In this respect, the quality of the later interviews is arguably improved, from a procedural perspective.

Response bias from flexible wording and the sequence of questions or discussion may reduce comparability and make replication of the data difficult or render it null. (Patton 2005; Hancock and Algozzine 2006) This is managed by asking only what questions are necessary in an objective and open manner while serving the line of inquiry and corroborating data across the cases. (Yin 2009)

Data recall is not an issue for any of the case interviews. Each interviewee agreed to private digital recordings of discussion. Independently and as soon as possible after the interview, notes are taken to additionally supplement the recordings.

Finally, reflexivity – i.e. where the interviewee gives what interviewer what is desired – is best accounted for with flexibility in data collection across multiple sources. (Yin 2009) The relative flexibility of inquiry is engendered by the relying on the interview protocol only where necessary and enabling free flowing conversation.

Defined by a limited duration of the interview, the designation of the format employed exists as a focused interview. (Merton 2008; Yin 2009) The open-ended inquiry along four themes is avoids data capture tailored to suit original theoretical propositions. Instead it assists linking relevant data to inquiry.

Notably, the methodological application of case study ameliorates with time in the non-routinised setting of interviews. For example, follow-up seeking clarification that facts appear as they do becomes more frequent, better listening occurs in the immediate context, and stewarding discussion to the UoA becomes more fluid while maintaining a firm grasp of theory to query as appropriate. Case study is concurrent with the formulation of relevant literature. However, a more committed approach for pilot study will benefit posterity. A greater span of interview timing, while not a feature of research that is well controlled, will permit parallel interpretation of the hypotheses with a formative development of the relevant lines of inquiry. (Yin 2009)

By virtue of its design, the case study makes use of a single data source: interviews. We rely on convergent evidence from a) multiple cases and b) existing theoretical perspectives to achieve triangulation. Flexibility in the interview format augments independent triangulation of evidence, but it remains weak because evidence is determined by a sole evaluator. While this weakness has no bearing on the construct validity of research, it might be addressed by using additional data sources in the future. Figure 4 considers the triangulation employed to establish a dynamic explication of the entrepreneurial context and a framework for entrepreneurial stakeholders.

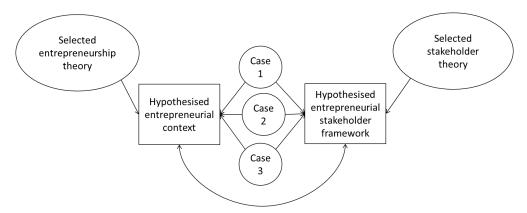


Figure 4 Methodological triangulation

To facilitate examination of convergent evidence, a case database containing the interview recordings and related investigator notes is created. (Yin 2009) To simplify the preservation of trust from case companies and interviewees, this case database exists only for later inspection by the investigator, and the identities of the interviewees remains anonymous. The contained information emerges in discussion and comparison of the case reports as empirical evidence. The chain of evidence is therefore limited as a cascade from the research questions to the interview protocol with relation to evidence in the case report. Without external scrutiny of the case database, the information is thematically presented according to the individual interviews from separate cases. As part of the empirical evidence, this presentation makes the case report data more accessible. This also enables an integration of relevant interview specific consideration, such as the setting of the interview for example.

However well a research bias might be mitigated, this presentation of qualitative data might influence the manner in which an independent reviewer perceives the information. This is accepted as part of the nature of this qualitative research. Also, as the research has a greater bearing on streamlining entrepreneurship to the entrepreneurial context and establishing a foundational framework to consider stakeholder involvement, there is greater onus for conception and communication than to comprehensively address the issues that maintain a robust chain of evidence for triangulation. Nonetheless, construct validity allows alternative and augmented triangulation from future research with preliminary exploratory insight. As mentioned, this is primarily achieved with a coupling between the UoA and the synthesised entrepreneurial context – i.e. it is then sound to observe evidence from the UoA and directly relate it to the entrepreneurial context. Further, the research protocol and case selection procedure are considered replicable.

Analytic generalisation of the exploratory empirical observation explores possible representation with the hypothesised framework. This occurs through pattern matching of coincident thematic relation of the evidence from each case study with the hypothesised framework for integration of entrepreneurial stakeholders. In other words, the four themes of research serve as criteria for interpreting the findings. The data is also analysed by relying on consideration of theoretical propositions that have shaped the data collection. This is independent for each case and serves to strengthen internal validity. (Yin 2009). Patterns are also compared between the cases to additionally justify replication and external validity.

We address rival hypotheses with the design of research to further internal validity of the research. (Yin 2009) Craft rivals like the null hypothesis and investigator bias are mitigated by designing the research with reliability. Direct, comingled, and implementation rivals – i.e. potential intervention of another source, potential coupling of causation, and probing of the context respectively – are managed with a narrow UoA within entrepreneurship and precise research questions probing the specific phenomenon of stakeholder involvement in an entrepreneurial context.

The more pressing real-life rival hypotheses relate to rival theory, super rival and societal rival hypotheses. (Yin 2000) Existing theories of entrepreneurship are credibly harmonised with the established entrepreneurial context. In this regard, the inference of propositions does not impinge upon existing rival propositions or explanations. Empirical results are potent because they explore a framework in which rival entrepreneurship models are accommodated. (Yin 2009)

Super rival and societal rival hypotheses are largely discounted because they are concerned with external intervention as causation for observe facts. Super rival hypotheses – i.e. where factors external to the considered context will account for observed phenomena – are in part addressed with diversity in cultural context and industry niche in the selection of case candidates and further mitigated by focusing on the UoA. Societal rival hypotheses – i.e. that societal trends will map the observed consequences – are not relevant to the research because we explore a contemporary phenomenon: such broad consideration is beyond the scope of research

Finally, discussion consolidates the research and proposes features of subsequent study. The goal is to present sufficient evidence so that the reader will arrive at independent and similar exploratory conclusions. The primary audience is for academic overlords who will determine the merit of the following research effort. The research is also shared with the case companies. It is hopefully simple and coherent that another would-be entrepreneur might extract insight.

#### 3 Theoretical synthesis

Research is concerned with two primary domains of relevant literatures as applied to an entrepreneurial context: entrepreneurship and stakeholder theory. The intention of this theoretical overview is not to systematically review either but to argue a unification conceiving early-phase stakeholder stakeholders in an entrepreneurial context. This conception makes use of selected literature to support a foundational framework to understand how people band together in venture. By rooting entrepreneurship in a context of value creation and drawing from relevant stakeholder theory, the foundations of a framework for entrepreneurial stakeholder integration are established. Relevant definitions are treated with their related theoretical domain.

#### 3.1 Value model and the entrepreneurial context

Capitalism is the prevailing theory of the market function where a monetary incentive guides constituents and mechanisms to allocate scarce resources in circumstance of uncertainty. (Abzug and Webb 1999) Ultimately, the output of market activity has value to individuals, groups, and societies. Entrepreneurship is recognised as driver for economic growth. (Bygrave 2009) In this regard, it is a driver for creating value. This is an appropriate framing to consider entrepreneurship with respect to a model of value creation.

As an aside, consider that enterprise is an interconnected whole of one or more individuals or organisations whose activities are related, whose operations are aligned, and who share a common business purpose in relation to realising economic value. This is an expanded definition of from Wikipedia. For the purposes of this research, it is linked to an economic environment. This definition of enterprise is extended for consideration of entrepreneurship with respect to the UoA. Start-up enterprise or venture is enterprise that pursues the creation of new and unrealised value. Venture exists in a regime of uncertainty with regard to successful outcome and its activities and ongoing operations are existentially bound by the exhaustion of resources in finite time.

Value creation is the question of how venture creates worth, utility, benefit, or reward in exchange for a commitment of resources and effort. (Murman 2002) The nature of value is broad. For example, value creation can be argued to occur at individual, organisational, and

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<sup>&</sup>lt;sup>1</sup> http://en.wikipedia.org/wiki/Enterprise#Economics and business

societal levels. (Lepak, Smith et al. 2007) For the purpose of this research, a model to account for entrepreneurship is selected to consider value creation at a venture level: an ideal model is reducible to the individual. To begin exploration, a simple value framework contextualised from the aerospace industry is shown in Figure 5. While its perspective is rooted in an enterprise context, its phases are related to entrepreneurship in Table 1.

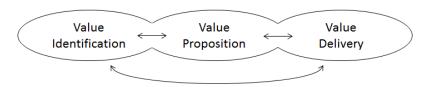


Figure 5 Three phase value creation framework (Murman 2002)

Each phase is distinct with regard to respective underlying activity. Though value identification and proposition are requisite precursors to value delivery, there is recognition that the framework is dynamic. For example, the nature of value creation will be re-evaluated and altered where internal and external constraints change. For example, customer requirements may evolve. (Murman 2002)

Table 1 Value creation and entrepreneurship adapted (Venkataraman 1997; Murman 2002)

Phase	Purpose	Relation to Entrepreneurship
Value Identification	To find the common enterprise value relevant to stakeholders	The presence of entrepreneurial opportunity
Value Proposition	To agree and an develop an approach for the creation of value	Coupling of entrepreneurial opportunity and entrepreneurial individuals
Value Delivery	To deliver the proposed value	Action to exploit entrepreneurial opportunity

Despite high level congruence with entrepreneurship, this fails to explicitly link the regime of uncertainty and the constraint of time that define venture. This particular framework is overly general to conceive successful outcome from entrepreneurship. However, it begins to reveal linkages for relating entrepreneurship to value creation.

Bowman and Ambrosini (2000) propose a theory of value generation that sources value to a combination and deployment of labour with other resources. They argue that value is two-fold: there is a creation of value engendered by internal stakeholders and a capture of value

wrought from interfacing with external economic actors. Their distinction separates the conception of value in two components summarised in Table 2.

Table 2 Components of value adapted (Bowman and Ambrosini 2000)

Perceived use value (or use value)  Value that is subjective to the perception of product or service as defined by customers. It is represented by a monetary amount buyer is prepared to pay for the product or service.	
Exchange value	Value that is realised when a product or service is sold. It is represented by the monetary amount that the buyer actually pays for the anticipated use value.

This duality in the definition of value enables coherent consideration of its creation at a reducible level. Inanimate resource inputs first need to be activated before contributing to the creation of new use values. (Bowman and Ambrosini 2000) This decries a human intervention to transform new use values from input. For example, a baker combines the ingredients of bread, or an advertiser will associate a brand with a product. Exchange values from the transformation of inputted use value is only determined when the newly created use value is sold. In this way the profits of venture are attributed to the capacity of internal labour to create new values which are the source of realised exchange value. (Bowman and Ambrosini 2000) The implication is that profit differentials of competing venture occur from within the transformation processes of use value. As a source of profit differential, inert resource inputs are discounted because they are incapable of preforming variably. The sole resource identified to perform heterogeneously in transformation of use values is human labour. (Bowman and Ambrosini 2000) Three categories of labour are summarised in Table 3.

Table 3 Labour according to competitive performance adapted (Bowman and Ambrosini 2000)

Generic labour	Homogenous labour across competing firms: This is generic labour that is easily routinised, imitable, and substitutable. It is essential labour but does not create superior profits in relation to competitors.
Differential labour	Heterogeneous labour across competing firms: This is non-generic labour that is unique, inimitable, and specialised. It is rooted in the synergy of talent or behaviour of its unique deployment in combination with generic labour and use value inputs to realise superior profits relative to competitors.
Unproductive labour	Value-destroying labour: This is labour that is wasteful in producing new use values or destructive to created use values. In relation to competing firms, it is not required and burdensome.

A subset of differential labour is distinguished as entrepreneurial labour. Its essence is directing the novel and artful deployment of resource inputs. (Bowman and Ambrosini 2000) In other words, entrepreneurial labour is a knowledge-based and systemic resource. (Black and Boal 1994; Miller and Shamsie 1996) In the coordinating use value inputs and their transformations, entrepreneurial labour is either explicit or tacit. The explicit application of entrepreneurial labour derives from a clear understanding of opportunity and its exploitation whereas the tacit application is an embedded cultural or intuitive know-how. (Bowman and Ambrosini 2000) In entrepreneurship it is therefore the application of differential labour that creates innovative or novel use values. This is a direct result from the actions of internal venture stakeholders. The unit process of value creation for venture is considered in Figure 6.

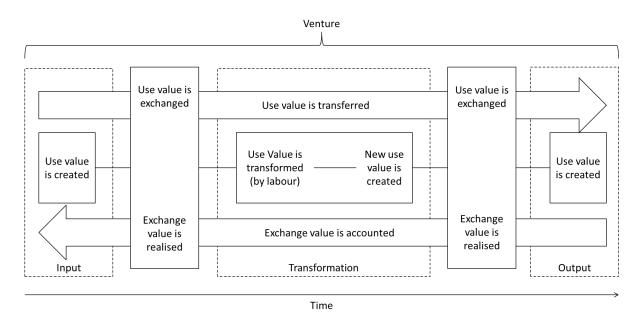


Figure 6 Unit value creation process of venture adapted (Bowman and Ambrosini 2000)

In contrast to other conceptions where value capture is a function of competitive differentiation within enterprise, this model explicates that value capture occurs when use value is exchanged. It is therefore attributed to external exchanges of input and output. First, resource suppliers of necessary use value input will consider the opportunity costs of dealing with alternative buyers. Secondly, customers of the new use value output will make comparisons between competing offerings. In this sense, the economic viability of enterprise is stressed as an external function spanning the difference of exchange value captured by sale margins and between input and transformation costs. (Bowman and Ambrosini 2000) With respect to value capture, the model considers the bargaining power relationships between buyers and sellers. For venture, this is ultimately a question of substitution and switching cost

– for input resources, for labour commitment, in terms of capitalisation, and with regard to customers. (Porter 2008)

With the conception of both use value and exchange value, it evident is that use value is always transferred forward to realise potential exchange value. Exchange value is transferred backward and used to account for the costs of the value inputs and transformation processes.

Succinctly, this value model is rich where others are not. As applied to entrepreneurship, the coherence to this model for value creation and capture derives from the fact that economic decisions occur as a result of either contextual perceptions or objective economic realities. For example, the feasibility of use value creation is determined based on hypothesis about the usefulness of procured resources. Also, the feasibility of offering greater consumer surplus from the novel use value transformations is based on hypothesised capture of innovative use value output in market. (Bowman and Ambrosini 2000) Where these hypotheses may result from the subjective perception or real market needs of addressing inefficiency, this suggests that the activity to bridge input and output from venture is dynamic due to changing nature of markets. (Bowman and Ambrosini 2000) This is specific to the immersive context in which the entrepreneur is situated. In addition, there is an inherent framing of uncertainty regarding the pursuit of unrealised and novel or innovative use value transformations. Further, this model of value creation applies to entrepreneurship where it accommodates the fact that the application of differential and entrepreneurial labour will exhaust itself over time if exchange value is not captured to sustain the venture: labour and input have a cost.

Though external bargaining relationships determine the viability of value capture and resulting economic throughput from value creation, this value model instrumentally associates differential and entrepreneurial labour as the source of value creation. Further alignment of the model results from this labour association with internal stakeholders of venture.

For the purpose of establishing an entrepreneurial context, an adaptation of the value model builds from the unit value creation process and is shown in Figure 7.

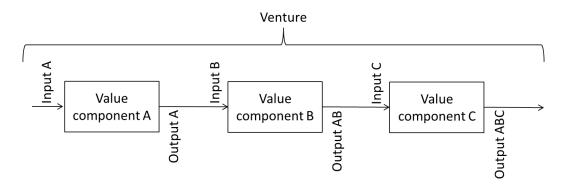


Figure 7 Scaling the unit value creation process within venture

The unit value creation process is depicted as indivisible value components because of the necessity for specific labour transformations and unique use value inputs and outputs. It is evident that these value components potentially form a cascade of use value transformations within venture. In this case, the venture intention is to monetise from output ABC.

The arrangement of this value component cascade is flexible as in Figure 8 – i.e. the input and output of value components potentially have multiple parallel and serial dependencies, internal or external to venture.

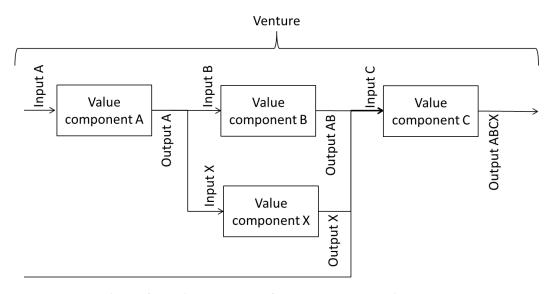


Figure 8 Flexible cascade of value components in venture

The holistic value creation of value components is defined hereafter as a value stream of venture. Consider that a value stream of unit depth is a value component. The application of differential labour in the value stream might be applied to the system as a whole or to subsystems. Reconsidering the prior distinction of differential and entrepreneurial labour we begin to frame the nature of entrepreneurial opportunity. For example, the technological

innovation of a new product is limited in scope with respect to a whole value stream; it is better conceived as a value component, or a sub-system of the whole value stream. The opportunity in this case is attributed to the application of differential labour to realise the system that creates this product. Alternatively consider that this product can be further transformed for relevance to larger markets. There is a natural mechanism to construct and grow a larger system of the value stream to address these markets. This systemic curation is attributed to the application of entrepreneurial labour. Indirectly this also introduces the emergence of venture via the commitment of labour which is discussed later and in greater detail.

From this context of value creation, it becomes obvious that venture will seek to operationalise the hypothesised value stream opportunity in order to realise it. This connotes the two characteristics of the proposed context for entrepreneurship. The entrepreneurial context is 1) an expression of opportunity and 2) the vectored growth of a value stream as transformed use values materialise. Succinctly, expression is the operationalisation of entrepreneurial opportunity and the venture vector growth is a commitment of resources and differential labour to test and render output from the hypothesised expression.

## 3.1.1 Expression of opportunity

The expression of value reflects the functional potential for a value stream with regard to entrepreneurial opportunity – i.e. it is distilled hypothesis to anticipate what use value input, labour transformation, and new use value output of value components are necessary to engender economic throughput of the proposed value stream. Opportunity therefore underlies the functionality of the value component and expression is a conjecture with regard to possible activation of the opportunity. Expression is not necessarily analytical and procedural, Consider that entrepreneurial labour may be explicit or tacit. Respectively, expression might be experimental or intuitive. Regardless, expression it makes testable the plausibility of each value component and the ultimately the fit of the value stream in market. Succinctly, expression is a presence and operationalisation of entrepreneurial opportunity. In this respect, the expression of opportunity or the expression of a value stream are synonymous.

At this point, it serves to recapitulate the conception of successful outcome for entrepreneurship. Successful outcome is depicted where the expression of a value stream will robustly anticipate a credible achievement of economic viability. It is irrelevant whether some

value components are materialised and operational. What is important is that the holistic expression of the immaterialised value stream possesses credible potential to capture this sustainable fit in market.

Consider the simple expression of a value stream presented in Figure 9. It is subsequently used to conceive how entrepreneurial opportunity is integrated into the entrepreneurial context. Note that the value components are not activated in their expression; this is indicated with the "prime" operator.

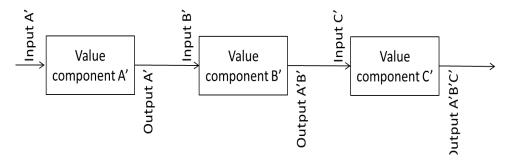


Figure 9 Simple representation of an expressed venture value stream

The considered value stream will express successful outcome by virtue of credibly sustainable exchange value anticipated from output A'B'C'. The cascade of use value transformations from sequential value components is expressed under a regime of contextual uncertainty from a baseline threshold. This is represented in in Figure 10.

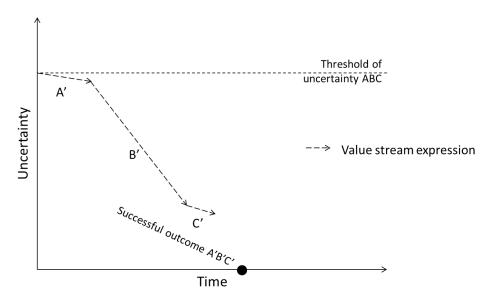


Figure 10 Venture value stream expression

The expressed accrual of output use values from each value component in the value stream will bring venture closer to the point where uncertainty is sufficiently reduced. Note that the circumstance of successful outcome is also delimited in time prior to the anticipated exhaustion of the resources required to materialise the value stream. In addition to the uncertainty inherent in opportunity expression, this uncertainty establishes a contextual uncertainty. In this example, the particular value stream is unable to express the achievement of successful outcome.

Framed with contextual uncertainty, the accumulation of information coupled with an ability to functionalise useful information will have a bearing on entrepreneurial opportunities. (Burt 1992; Von Hippel 1994; Venkataraman 1997; Shane 2000; Sarasvathy, Dew et al. 2010) Thus the threshold uncertainty for venture will modulate in relation to the contextual re-expression of an opportunity with such information. This modulation is depicted in Figure 11 and further occurs by virtue of the depth of a value stream and the scope of a value stream.

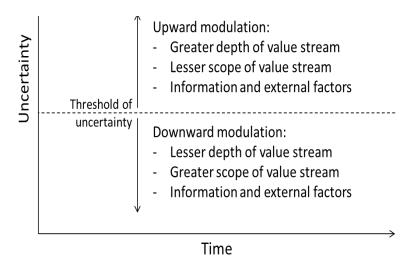


Figure 11 Modulation of uncertainty in the entrepreneurial context

Consider that business modelling is a tool for the expression of venture value streams. It is a complementary tool serving to gather data that models the viability of venture. Research suggests that a dynamic approach to venture modelling is beneficial to achieve successful outcome. (Brinckmann, Grichnik et al. 2010) It facilitates immersive consideration and awareness with regard to the context of venture. For example, discovering and growing with a viable customer will imbue greater certainty to the contextual expression of a value stream. The consolidation of such contextual knowledge will modulate the threshold of uncertainty

downwards and make successful outcome more certain. It may also be that acquired data will invalidate the certainty of an expressed value component. For example, the passage of inhibitive regulation with regard to stem cell research will greatly modulate the threshold of uncertainty upwards for such venture, if not invalidate the expression of the value stream completely.

The value stream depth is a feature of internal complexity. A greater number and greater interconnection of input and output use value dependencies will affect greater uncertainty to the expressed potential of the value stream. With relation to the value creation model, a greater depth of the value stream will also necessitate a greater commitment of labour and possibly resources. This inherently adds uncertainty to the venture and modulates the threshold of uncertainty upwards: things may go wrong in a complex system or resources may not be provisioned. Conversely, a simpler depth means lesser labour commitment and the threshold of uncertainty will modulate downwards. Figure 12 depicts a simple depth of value stream expression.

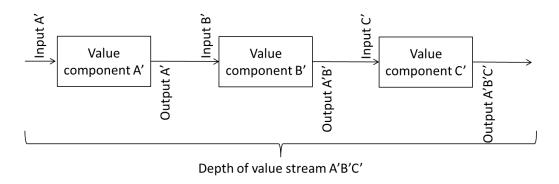


Figure 12 Conceiving value stream depth

The scope of a value stream is an indirect measure of anticipated exchange value. Internally, a single value component has a large scope if it has a high relative measure of new use value output. The idea is that the bulk of exchange value may be attributed to a value component of high scope. For example, assembly of a computer is high in scope because the majority of use value for customers is derived from a functional whole and not individual part. In Figure 13, B' is expressed to transform the majority of use value embedded in the value stream.

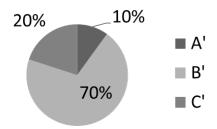


Figure 13 Conceiving the scope of internal value components

Regarding the value model, the scope is then a direct consequence of considering which value component maximises the internal transformation of new use values to realise exchange values. If a value component of high scope is expressed to capture exchange value without the completion of the value stream, then the threshold of uncertainty is modulated downwards. For example, a steel producer will express a greater scope of their value stream with the ability to sell raw product as opposed to custom metallurgical products in a highly competitive niche industry. This is because the raw product has a greater perceived use value in a more vast market than does the niche product.

So far the conception of a threshold for successful outcome in entrepreneurship broadly treats uncertainty as a whole. The subtlety is that the expressed value components will possess a contextual and an operational uncertainty. It is the contextual uncertainty – i.e. a fit within market – that modulates the threshold uncertainty of the entrepreneurial context. Operational uncertainty is innate to the expression of a single value component – i.e. an uncertainty that expressed use value is actually realisable or functional in practice. Operational uncertainties are present regardless of context. This relates to the distinction Hayek (1945) makes with regard to scientific knowledge and contextual knowledge. For example, operational uncertainty derives from possessing the appropriate scientific knowledge to produce novel solar cells; this is attributed to a single value component. Contextual knowledge relates to the uncertainty of circumstance and whether it is possible to compete in a market flooded cheap solar cells.

In summary, expression is the operationalised conjecture of achieving exchange value; it depicts opportunity of potential market fit for use value output with respect to a threshold of uncertainty. This lends a hypothesis based framework to activate the value components in the entrepreneurial context. In expression, successful outcome is anticipated where the intended

commitment of labour and resources will credibly project sufficient sustaining exchange values prior to their anticipated depletion.

# 3.1.2 Venture vector growth (VVG)

The VVG of the entrepreneurial context describes the venture growth curve. This is an accumulation of operational value components. Concretely, it is the commitment of resources and differential labour to materialise expressed exchange value. In other words, the vector of a value stream is the tangible result after value components having been activated. As components of the value stream are materialised, the vector is established. Consider again a simple value stream in Figure 14 to frame an understanding of VVG.

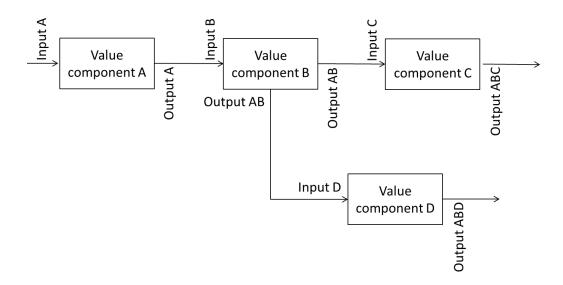


Figure 14 A simple and operational venture value stream

A vector is comprised of a force and direction. The VVG force is derived from the proportional ratio of venture resource and labour commitment with regard to the scope of a value component. This is a trade-off between exhaustion of resources and realising new use values. A strong force is a low commitment of necessary resources to achieve a new use value of credibly lucrative exchange value. The converse applies for a weak force where significant resource commitment engenders new use value with only marginal exchange value. For example, a viable opportunity to co-brand with a major commercial label requires significantly less labour than establishing a new brand. Such brand association has the potential to greatly enhance perceived use values for customers. A larger force from the application of resources to value components serves to bring venture closer to successful outcome.

The VVG direction is derived from the proportional ratio of resource and labour commitment with regard to the depth of the value stream. Fundamentally, this is a restriction of the venture vector space. Labour committed to operational value components limits the future direction of venture growth – i.e. venture is restricted to what new use values can be outputted a) with the prior established use value inputs or b) with the remaining resources. Figure 15 depicts the force and direction of VVG under consideration.

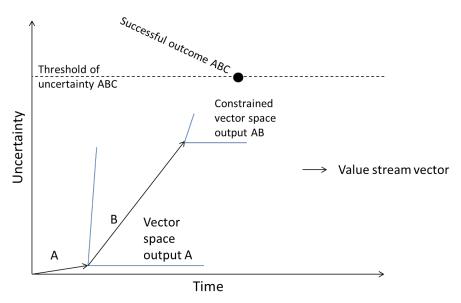


Figure 15 Force and direction of VVG

In terms of VVG force, this shows that venture has materialised value components A and B. The force of value component B is high: resource commitment to the component is proportionally less in relation to the whole in order to achieve the use value output AB of greater scope. However, the future use values derived from output AB are constrained by possible new transformations – i.e. less labour might be committed to other independent value components, or the cascade of venture use values is constrained by what subsequent new use value is wrought from output AB. This imputes a vector space that limits the direction to the VVG. For example, if value component C is unable to manifest successful outcome with the remaining availability of labour resources, the venture fails as in Figure 16.

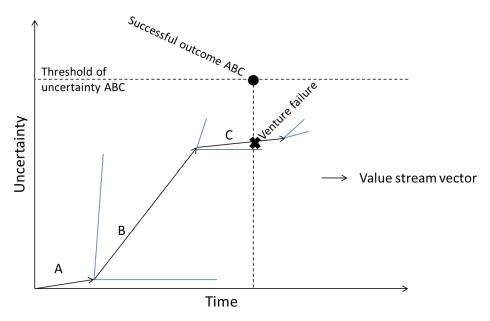


Figure 16 VVG fails to materialise successful outcome

In this case, the venture fails because the committed labour and inputs cannot be sustained without a sufficient capture of exchange value. Where expression in the entrepreneurial context is about projecting operationalised use value hypotheses, VVG is about capturing exchange values from operations to sustain the commitment of resources in ongoing venture efforts.

The original intention of the value stream under consideration is to monetise from value component C. Consider that value component D is now in play as in Figure 17. The opportunity underlying value component D has a large force. It may also be that the nature of the market fit for output ABD is more certain. This couples a downward modulation to the threshold of venture uncertainty. In entrepreneurial jargon, materialising the vector of value component D is a pivot. In this new case, venture is able to utilise the limited availability of resources to achieve successful outcome by capturing exchange value from the use value output ABD.

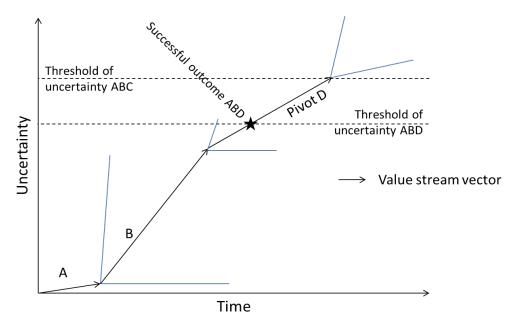


Figure 17 VVG and pivot to value component D

So far unmentioned is the nature of increasing uncertainty of the VVG. The coupled application of labour and inputs serves to establish the direction and force of the VVG. Value components made operational validates their expression. This reduces the uncertainty of stream expression. However, the uncertainty to sustain functional value components increases as resources are drained and the VVG materialises. In other words, established infrastructure, labour, and use value input of materialised value components cost money. With each additional operational value component, the VVG assumes a more tightly bound existential deadline by which it must sustain itself with captured exchange value. The question becomes, can this committed application of resources be sustained until a threshold of uncertainty is surpassed? Injection of venture resources will extend this deadline. Value stream expression and VVG are inverse with respect to a regime of uncertainty and time constraint. This defines the entrepreneurial context which is depicted in Figure 18.

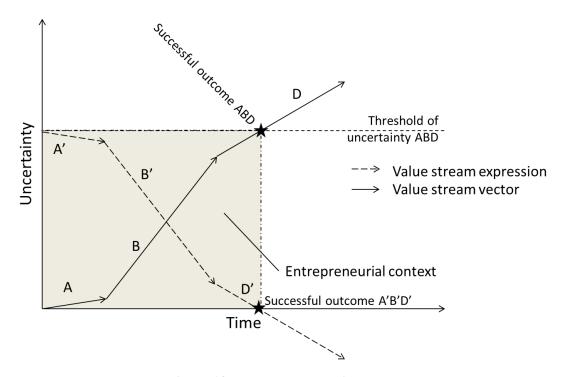


Figure 18 The entrepreneurial context

Expression and VVG are not bound sequentially. Consider that a downstream value component might only use external input to later couple with the value stream. In such a case, this value component is not constrained by requisite vector space before its expressed value potential is possibly wrought.

In summary, VVG is attributed to rendering output from the expression of a value stream, in whole or in part. As the VVG materialises, uncertainty attributed to operations increases because capturing sustaining exchange value is put to question. Affecting the nature of successful outcome, the VVG associates a force and a direction to the emergence of venture, whether the rendered vector was originally expressed or not. Moreover, where expression of a value stream is concerned with the nature of value creation attributed to the forward transfer of use value output, VVG is concerned with the nature of value capture attributed to the reverse accounting of exchange values. In short, venture is coherent with mutual alignment of expression of opportunity and VVG. Expression may occur without VVG, but VVG will only occur is opportunity is expressed. However, it is possible that expression and re-expression is instantaneous once a new opportunity is seized. For example, an unpredicted customer might place an order.

# 3.1.3 Entrepreneurship and the entrepreneurial context

Entrepreneurship is treated as a phenomenon of the entrepreneurial context: entrepreneurship occurs where opportunities are expressed and coupled with VVG whereby new outputted use values are potentially transformed further or exchanged. When the expression of new opportunity ceases, venture fails if it has not achieved successful outcome, or it transitions to a mature development outside the scope of entrepreneurship as it is defined.

Four core topics related to the nature of entrepreneurship research are 1) defining entrepreneurial opportunity, 2) the entrepreneurial process and opportunity exploitation, 3) the emergence of venture, and 4) interactions with organisations. (Acs and Audretsch 2010) It is now argued, according to each, that the entrepreneurial context accommodates these topics.

### **Entrepreneurial opportunity**

Entrepreneurship literature treats opportunity with a question: Where does entrepreneurial opportunity come from? (Acs and Audretsch 2010) Epistemological tensions of constructionists, realists, and evolutionary realists frame the debate. (Alvarez and Barney 2010; Alvarez, Barney et al. 2010)

Constructionists argue that reality is a social product and that it does not have an existence beyond the perceptions of individuals. (Berger 1969; Acs and Audretsch 2010) Ultimately, an entrepreneur will decide what opportunity to create based on available resources. (Sarasvathy 2001; Baker and Nelson 2005) It does not predict how opportunities are selected or whether they are valid beyond perception. This perspective means that opportunity and the entrepreneur are inseparable. (Alvarez, Barney et al. 2010)

The difference between realists and constructionists is that realists treat observed and non-observed phenomena as if they are observed and constructionists explain non-observed phenomena through a lens of interpretation. (Azevedo 2002) In this sense, realists argue that phenomena exist in reality objectively and regardless whether they are perceived. (Alvarez, Barney et al. 2010) Asymmetrically dispersed knowledge determines the nature of confluence where opportunity and entrepreneur meet. (Hayek 1945; Venkataraman 1997; Shane 2000; Sarasvathy, Dew et al. 2010) This means that opportunities exist for the taking only by those who are alert to observe and exploit them. (Eckhardt and Shane 2003; Kirzner 2009)

Evolutionary realists account for opportunities from the realist perspective such that they exogenously address market inefficiency, and for path-dependent emergence of opportunities that are related to the constructionist perspective. (Alvarez and Barney 2010) The evolutionary realist perspective draws on both the constructionist and the realist perspective such that there is a reality independent of the entrepreneur that constrains possible action: the perceptions of opportunities may be constructed, but are selected for based on context to achieve market fit. (Campbell 1974; Aldrich and Kenworthy 1999)

With respect to the entrepreneurial context, a value component suggests that opportunity exists where there is independent and combinatorial absence of use value input, labour transformation, or use value output. The entrepreneurial context is abstracted away from theoretical lenses in recognising that opportunity of such absence is on its own useless. (Sarasvathy, Dew et al. 2010) It stipulates the activation of opportunity via the expression of a value component so that it might be rendered. In a return to the dual nature of value creation, the constructionist perspective regards that transformations or use values (input or output) are perceived, the realist perspective regards that exchange values are liable for capture from a potentially materialised value component, and the evolutionary realist perspective regards that the nature of value component expression is dynamically prone for change to achieve fit in a greater value stream. In this regard, the entrepreneurial context offers flexibility to relieve epistemological tensions in a practical setting.

With the traces of the discussed epistemological framings, the origins of opportunity are considered by treating the market as an allocative process, as a discovery process, and as a creative process. (Sarasvathy, Dew et al. 2010) Each process is applied to different regimes of uncertainty. Knight (1921) distinguishes three types of uncertain futures that characterise the possible regimes:

- (1) The first future possesses uncertainty of a known distribution. In this case, deductive processes establish the market fit of the value stream. Opportunity is systemic and recognised for resources to be allocated according to analysis. This treats value creation as an allocative process. (Sarasvathy, Dew et al. 2010)
- (2) The second future possesses uncertainty of an existing but unknown distribution.

  Inductive processes dynamically estimate the distribution to discover opportunities to fit

the value stream in market. Opportunities for value creation are manifest from a discovery process. (Sarasvathy, Dew et al. 2010)

(3) The third future possesses uncertainty of an unknown but unknowable and non-existent distribution. Abductive processes guide decisions to establish a sustainable market fit of the value stream; value creation opportunities have to be created. (Sarasvathy, Dew et al. 2010)

The typology of opportunity for each regime of uncertainty is summarised in Table 4.

Table 4 Typology of entrepreneurial opportunity adapted (Sarasvathy, Dew et al. 2010)

Opportunity recognition	The fit of a value stream links existing supply and demand. (Allocative process)		
Opportunity discovery	ne fit of a value stream links existing supply with a discovered demand d vice versa. (Discovery process)		
Opportunity creation			

The entrepreneurial context accounts for these regimes of uncertainty with respect to value stream expression and VVG being bound contextually bound by uncertainty. Where contextual uncertainty is established in an allocative process, the threshold of uncertainty can be reliably modelled with respect to known inputs and outputs of the value stream. Successful outcome is dependent on adherence to the appropriate VVG of the expressed value stream, correctly recognised.

Where the contextual uncertainty is established in a discovery process, the threshold of uncertainty can only be estimated. Successful outcome is more dependent on the correct expression or re-expression of the value stream for VVG to arrive at contextual relevance.

Where the contextual uncertainty is attributed to a creative process, there is no threshold of uncertainty. This is because the contextual uncertainty is unknowable. The uncertainty of venture treating the market as a creative process is attributed to the operational aspect of the value stream. In this sense, the values stream expression and VVG are coincident and not inverse. VVG will not have a constrained vector space because the contextual information that would suggest potential for further cascade of use values is absent – i.e. the nature of

successful outcome existing downstream within an unknowable contextual uncertainty is itself unknown. The only uncertainty attributed to successful outcome is therefore an operational time constraint with respect to realising sustainable exchange values before exhausting resources.

A summary of Sarasvathy, Dew et al. (2010) 's ontological definition for entrepreneurial opportunity according to three elements is below:

- (1) Innovation in idea or invention space that uncertainly may lead to economic ends
- (2) Belief that presumes a favourable context to achieve those uncertain economic ends
- (3) Actions that generate and implement those ends

Echoing point one in the entrepreneurial context, a value stream might have novel use value output, or the use value output may be transformed in an innovative way, or both. This is a feature of the application of differential labour. Point two reflects the expression of a value stream to achieve successful outcome under a regime of uncertainty. The final point relates directly to the effort of materialising VVG.

Central to this implicit pairing of entrepreneurial opportunity with differential labour are two relevant categories of knowledge. The first is scientific knowledge which is stable and possessed by experts. This relates to the manner that use values might be transformed in an innovative way – i.e. the expression of a value stream. The second category is contextual knowledge of temporal and circumstantial factors that lend plausibility to the implementation of opportunities. (Hayek 1945) This relates to the manner that entrepreneurial labour is applied to express the correct fit of opportunity in relation to potential VVG growth.

The implied dispersion of these two knowledge categories is at the root of uncertainty with respect to entrepreneurial opportunity. (Sarasvathy, Dew et al. 2010) It accounts for the disconnected nature of opportunities and their exploitation only made possible with a necessary confluence of entrepreneurial opportunities and enterprising individuals. (Venkataraman 1997; Shane 2000; Eckhardt and Shane 2010) The entrepreneurial context presupposes this confluence. It puts a greater emphasis on the context of value creation process that defines entrepreneurship.

As Sarasvathy, Dew et al. (2010) suggest, the three views of entrepreneurial opportunity are treated independently but with contextual specificity for integration with the conception of an entrepreneurial context. Achieving market fit for a known or unknown value stream is dynamically inherent to the context of venture. (Aldrich and Kenworthy 1999) As such, each view represents an equally valid modality to seek market fit for value streams and will each hold specific contextual relevance.

For example, an entrepreneur has a novel algorithm that reduces bandwidth by fundamentally changing how data is transmitted in fiber optic cables. In this case, only novel value transformation is perceived. The market supply of new data transmission and demand for this type of reduced bandwidth needs to be created. Once supply or demand is expressed through a creation process and a prospective market exists, the entrepreneurial context will have a changed nature for venture to continue with a discovery process to achieve its successful outcome. The entrepreneurial context first possesses an operational time constraint that solely defines uncertainty in a market creation process. The time constraint is represented by the entrepreneurial behaviour like persistence and subsistence for example. The nature of the entrepreneurial context shifts when opportunity is bound with contextual uncertainty of a discovery process

This also calls to mind a better distinction of entrepreneurial labour. This subset of differential labour is activated to express opportunity and ground value creation. The operational uncertainty of entrepreneurial labour, fundamentally a time constraint, is the operational uncertainty of the venture expression. If there is no momentum of VVG the operational uncertainty of entrepreneurial labour regarding persistence and subsistence is the penultimate determinant in the entrepreneurial context.

This integration accepts that neither the exogenously directed VVG nor the endogenous piecewise expression VVG is more correct in order to create value. In this, there is tacit recognition that the nature of entrepreneurial opportunity in an entrepreneurial context will evolve as opportunity is expressed in allocative, discovery, or creation processes to better suit the economic ends of value creation.

### **Entrepreneurial process**

Realist and constructionist dispositions underpin different conceptions of the entrepreneurial process. Eckhardt and Shane (2010) suggest that entrepreneurship is a sequential process as in Figure 19. In this sense, they posit that opportunities are not exploitable before their objective nature might be accounted for in discovery. This is a realist perspective. They also recognise that the process is prone for dynamic feedback and is not necessarily linear.

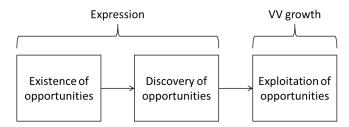


Figure 19 A sequential entrepreneurial process adapted (Eckhardt and Shane 2010)

This process depends on opportunities being treated with 1) objective information supporting conjecture of the opportunity, 2) time to complete organising activities to activate the opportunity, and 3) appropriate selection criteria to establish market fit. (Eckhardt and Shane 2010)

The entrepreneurial context would treat this sequential entrepreneurial process by depicting that value streams are expressed and subsequently materialised. This is a causal logic of the entrepreneurial process that depends heavily on what makes entrepreneur, namely creative alertness to opportunity. (Kirzner 1999; Kirzner 2009)

Another view of these exploitation processes are attributed to piecewise emergence of VVG using effectual logic as in effectuation and bricolage. (Baker and Nelson 2005; Sarasvathy 2008; Read, Dew et al. 2009)

In effectual logic of the entrepreneurial process, depicted in Figure 20, the entrepreneur interacts with stakeholders to derive the resource-based means required to achieve goals. As resources accumulate, stakeholder commitments of the prior interactions constrain the future nature of venture. The process is therefore directed by commitments rather than by any grand overlying strategy. If the accumulation of stakeholders does not fail, then a new venture or

market will emerge. The process depicts an emergent and incremental process of value creation. (Sarasvathy 2001; Sarasvathy 2008)

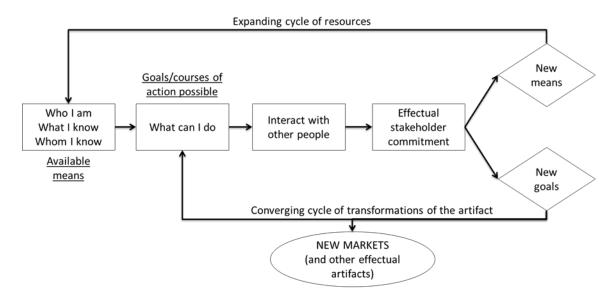


Figure 20 Dynamic model of effectuation (Sarasvathy 2008)

Entrepreneurial bricolage connotes effectual logic where value creation is manifest by "making do with what is at hand" and refusing to constrain the vector space of VVG by the limitations of prevailing resource environments. (Baker and Nelson 2005) This view holds a bias that use value inputs and novel transformations of value streams are liable to be tested against conventional limitations. Implied is that there is a general awareness of existing norms and willingness to overturn these. (Baker and Nelson 2005) Effectuation and bricolage veer towards the constructionist perspective of opportunity. The emphasis of this conception of entrepreneurial process informs not what makes an entrepreneur but rather the nature of an entrepreneur. (Alvarez, Barney et al. 2010)

The entrepreneurial process includes the functions, activities, and actions associated with perceiving opportunities. (Bygrave 2009) The causal and effectual logics relate to prediction and control in decision processes governed by uncertainty to arrive at strategic opportunities. (Wiltbank, Dew et al. 2006) Considering that the entrepreneurial context does not mandate that full value streams be expressed, but that VVG might be piecewise and liable to pivot in downstream expression or in re-expression, either causal or effectual logic of the entrepreneurial process are accommodated. Depending on the confluence of opportunity conjecture, timing, and a market fit of a value stream, whichever process is employed serves to define the dynamic contextual uncertainty regime of the entrepreneurial context. This gives

flexibility to consider the nature of an entrepreneur or what makes dispositions conducive to entrepreneurship.

### **Emergence of venture**

Gartner, Carter et al. (2010) view entrepreneurship as an organising process. They adopt a perspective such that entrepreneurship is embedded in social processes. They consider the scope and boundaries of entrepreneurial behaviour to conceive the outcomes of entrepreneurial behaviour.

They first posit that venture formation is an individual phenomenon. Therefore, venture will emerge from a context, but venture is not created by a context. (Gartner, Carter et al. 2010) This is coincident to the entrepreneurial context: the value stream expression and VVG is attributed to its context. However the venture is wrought from the commitment of differential labour transforming use values. It is therefore the behaviours of those labouring individuals committed to value creation processes that manifest venture.

Secondly, they state that entrepreneurial behaviour is a process that occurs over time. (Gartner, Carter et al. 2010) This is inherently linked to this application of differential labour. In this sense, the context determines the temporal relevance of differential labour for value creation; this prioritises the behaviour of the entrepreneur. Gartner, Carter et al. (2010) also note that the process of entrepreneurial behaviour is a multi-level phenomenon that occurs as part of the venture and as part of the individual. For example, once a new use value is created it is exchanged to capture value. This capture of exchange value – i.e. making a sale – might be construed as part of the value stream and thus venture or as an individual behaviour.

Ultimately, the creation of venture is the principal outcome of entrepreneurial behaviour. This has no bearing on the quality of the venture – i.e. the successful outcome. (Gartner, Carter et al. 2010) With the value model of the entrepreneurial context, the emergence of venture is a feature of VVG where labour is commitment to activate a value stream. In this there is alignment with existing theory and the entrepreneurial context with regard to venture emergence.

At the locus of discovery and exploitation, (Eckhardt and Shane 2010) depict a foundational nature of venture shown in Figure 21.

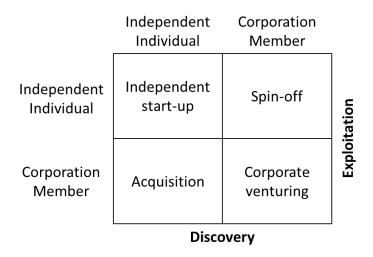


Figure 21 Entrepreneurial efforts as a function of opportunity discovery and exploitation (Eckhardt and Shane 2010)

What this further suggests is that the context of individuals and of their behaviours has a direct influence on the emergence of venture. What the entrepreneurial context indicates is that the expression of entrepreneurial opportunity and the VVG are contextually specific. In other words, the unique circumstance of entrepreneurship, be it a corporate setting or an independent setting, is unimportant. What is important is that value streams are expressed and materialised: this is the outcome to create venture from entrepreneurial behaviours. Entrepreneurial behaviour is a set of entrepreneurial actions by which individuals make decisions under uncertainty. (McMullen and Shepherd 2006) With respect to the entrepreneurial context, this suggests is that entrepreneurial behaviour is fundamentally a propensity to commit differential labour to affect value creation under conditions of uncertainty.

Table 5 summarises four suggested properties to depict the emergence of venture that it should reveal itself

Table 5 Four properties of venture emergence adapted (Katz and Gartner 1988)

Table 3 Four properties of venture emergence unupieu (ixatz and Garther 1900)			
Intention	Characteristics depicting purpose and goals		
Resources	Inert input; propensity for differential labour; and financial capital		
Boundary	Barrier conditions such as incorporation, a tax identification number, or legal counsel		
Exchange	External financial transactions; service or product delivery		

Arguably, the entrepreneurial context accounts for all four. Consider that intention, or the pursuit of economic ends, and anticipated or available resources, those necessary to achieve those ends, are features of value stream expression. For example, a value stream is operationalised with respect to inputs and labour transformations and directed in the pursuit of perceived use values. The boundary and exchange conditions depict the materialisation of a value stream. This is the materialisation of a value stream where operational value components delimit the nature of economic throughput in venture to realise exchange value. Further entrenching the value stream and defining the boundary of venture is a notion of value stream momentum with respect to the quality of boundaries and quantity and nature of economic throughput.

### Interactions with organisations

Aldrich and Martinez (2010) depict two problems facing entrepreneurship that are related to the formation and growth of organisations. The first is the development of routines and competencies to effectively render use value output, and the second is the establishment of a legitimate market niche (referred to as legitimacy) in order to render exchange value capture. These interactions may occur within collective, between collective, and across collective organisations. (Aldrich and Martinez 2010)

Interorganisational relationships can route knowledge and routines within organisations to enhance venture competence. For example, franchises will share knowledge to increase value creation. Interorganisational relationships depend heavily on trust. For example, corporate venturing will have knowledge and resources to draw from, enabled by embedded trust with the sponsor firm. (Aldrich and Martinez 2010) In this regard, the knowledge spillover theory of entrepreneurship attributes a greater stock of knowledge from industry with endogenous growth of venture: knowledge spills over to entrepreneurial agents. (Acs, Braunerhjelm et al. 2009; Acs and Audretsch 2010)

Collective interest associations are collaborative networks that potentially develop into strategic alliances. Trade associations facilitate the dissemination of knowledge for effective routines and competences within a collective. (Aldrich and Martinez 2010) Between collectives, political lobbies are a form of association to establish the legitimacy of a use value outputs. For example, tobacco firms join forces to stress the right of an individual to

choose a lifestyle. Cross collective associations like standardisation efforts for Bluetooth also help to establish the social legitimacy of use value outputs. (Aldrich and Martinez 2010)

Early interactions may have a large impact on the future viability of successful outcome with an effective and legitimate fit of value stream expression. What is clear is that such interactions require resources that venture may not possess. However, these interactions are prone to start small and will depend on the formative nature, thus the context of venture.

Three modalities for interactions with external organisations exist when considering the unit value stream of the entrepreneurial context. Interfacing with external organisations will occur at an input level, an output level, and with respect to the application of differential labour. These are depicted in Figure 22.

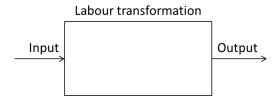


Figure 22 Modalities for interaction regarding the unit value stream

Consider that the modalities of interaction may lie fallow when internal to venture, or be present when external to venture. If resources are possessed by venture, they are internal and no organisational interaction is necessitated. At an input level, resources and capital are required.

It is misleading to consider labour as an input because this provides a heterogeneous differentiation among firms. (Bowman and Ambrosini 2000) Capital input serves to activate labour transformation. This conception of heterogeneity is supported by the knowledge spillover theory where a supplier might learn of opportunity to create a new product to better address a perceived use value of their customer. (Acs and Audretsch 2010) Labour might also be internal or external to venture. For example, software development may be outsourced. In this case, the labour is arguably not differential and the venture value stream would be entrepreneurially innovative in creating novel use value outputs with existing technology or in new linkage of existing supply and demand. Affiliation with educational institutions is an additional source of knowledge relevant to labour transformation, where interaction may precipitate the commercialisation of recent research. (Aldrich and Martinez 2010)

There is also an indirect interaction between venture labour and external organisations. Consider that an entrepreneur might be involved in more than one project. Alternatively, the application of labour is possibly bound by regulation and intervention. For example, extracting hydrocarbons with a new fracking technique might be legally restricted.

The output of a value stream might also be internal or external. Internally, the output might be required as a further input to render the intended and downstream output for market. The external output of a value stream has a dual nature. First is a perceived use value – i.e. the product that is intended for customers. The second is an externality output – i.e. some output of the labour transformation that potentially impinges on external value streams. Consider again the example of fracking to extract shale gas. An externality output is possible seepage of released hydrocarbons into the water table. This creates a circumstance where external value streams using the local water source are adversely affected. This engenders the probability for external interactions that jeopardise the greater legitimacy of the value stream in society according to public or political perception.

Aldrich and Martinez (2010) define the organisational community as a set of coevolving organisations joined in commensalism and symbiosis through orientation to a common context. Symbiosis denotes dependence between dissimilar value streams whereas commensalism means the value streams make similar demands of the environment. (Aldrich and Martinez 2010) Consideration of organisational community is pertinent to entrepreneurial context because it frames the dynamic legitimacy of potential value creation relative to a changing set of possible stakeholders in terms of proximate neutrality, competition, or cooperation. The idea is that in conceiving organisational community, the entrepreneurial context is framed within a broader market context.

In relation to the value model of the entrepreneurial context, sustaining exchange values depicts successful outcome of venture. In other words, the expressed value potential of venture will have legitimacy to bridge a value stream connecting existing or new supply or demand. Framed in a broader market context, this suggests the entrepreneurial context is able to link entrepreneurship and microeconomic growth of venture to economic growth by virtue of interaction with external organisations. This is conceived in Figure 23.

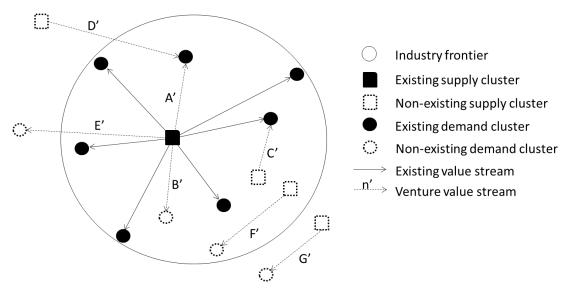


Figure 23 Entrepreneurship as a mechanism for economic growth: A' is a market allocation process; B', C', D' and E' are market discovery processes; F' and G' are market creation processes

The branching of value stream expression according to venture opportunity of recognition, discovery or creation serves to direct augmenting and expanding value throughput of the entire industry as VVG occurs. This is aligned in conceiving economic growth with the changes entrepreneurship engenders in industry organisation (Carree and Thurik 2010) and with respect to venture clustering. (Hsieh, Lee et al. 2012) Though this hints at external validity by virtue of scaling the entrepreneurial context to a more general context when the regime of uncertainty is relaxed, further development of this idea is beyond the scope of research.

External interactions of venture are defined by exchanges. Where inputs are provisioned, where outputs are sold or where externalities are addressed, and where labour is embedded, the interactions with organisations occur according to the bargaining power relationships between parties. (Bowman and Ambrosini 2000; Porter 2008) This determines the nature of the venture stakeholder interaction and is discussed later.

## 3.1.4 Summary of the entrepreneurial context

The entrepreneurial context is rooted in a reducible value model. It stipulates that entrepreneurship is a contextual phenomenon resulting from a dynamic expression of value stream potential and VVG that is not necessarily tied to the initial expression.

The expression of a value stream puts forward the operationalisation of opportunity whether it is recognised, discovered, or created. The expressed opportunity underpins the uncertain conjecture that a use value might be created for prospective customers. The growth of a value stream is tied to the functionalisation of a value stream. Venture emerges along a vector as value components become operational. This vector is bound in a regime of contextual and/or operational uncertainty and is constrained by time as inputs exhaust themselves. Failure within the entrepreneurial context is attributed to this exhaustion of resources prior to successful outcome. Together, these concepts depict that value is created and appropriated by stakeholders of venture, and how the appropriation of value is planned for in advance. (Coff 2010)

Three streams of literature depict entrepreneurship as an organisational context, in terms of performance criteria, or by virtue of entrepreneurial behaviour. (Audretsch 2012) As a process of value creation within a regime of uncertainty, conceiving entrepreneurship as a phenomenon of the entrepreneurial context reconciles these three streams.

In the organisational context, it does not matter what behaviours are exhibited or whether there is performance. The criteria to consider entrepreneurship in an organisational context are the size of a firm, age of the firm, or the nature of the firm – e.g. self-employment. (Audretsch 2012) The entrepreneurial context accounts for these metrics in relation to the emergence of venture and occurs with respect to the commitment of differential labour and implicit interaction with venture stakeholders.

Performance criteria examine entrepreneurship in terms of innovation and in terms of growth. Innovation is largely treated with respect to research and development activity, patents, and new products. Growth is also a proxy measurement of innovation and generally treated as the manifestation of innovative activity. (Audretsch 2012) This potentially has a bias by oversampling success. Failed entrepreneurship does not exhibit such performance criteria. Venture Capital financing is another performance criterion noted, and more recently consideration is lent to the social contribution of the social entrepreneur. (Audretsch 2012)

The entrepreneurial context accounts for such performance criteria with the legitimacy of a value stream. While growth is intuitively aligned with the notion of VVG, innovation is more appropriately conceived as a correct expression of opportunity. The scope of a value stream in

terms of perceived use value output is a better metric in this regard. As such, innovation is a continual reformulation of expression to arrive at more potent use value legitimacy. It comes down to the economic hypotheses suggesting that a new use value output will hold customer appeal, and that venture will grow in an attempt to capture associated exchange values. The criterion of financing from Venture Capital is context limiting – e.g. it does not account for corporate venturing. In a social dimension, the expression of use value remains valid – it is ultimately perceived by the end user. Social cause may also have a further bearing on stretching fundamental resources of entrepreneurial labour, like motivation for example.

Where entrepreneurship is treated as behavioural, the brunt of research focuses on 1) the ability to recognise, discover, or create an opportunity and 2) the exploitation of an opportunity. (Audretsch 2012) Entrepreneurial behaviours like a locus of control, independence, and risk taking are all conducive to arrive at the confluence of opportunity and its exploitation. (Hisrich 1998; Eckhardt and Shane 2010) This behavioural treatment of entrepreneurship is integral to the entrepreneurial context. Arguably both are very similar. The subtle difference is clear where the entrepreneurial context is rooted in value creation with a high degree of context specificity – i.e. it is less concerned with the nature of opportunity that arises from behaviours than with the projected operationalisation of opportunity and materialisation attributed to either causal or effectual logic processes. In this way, behaviour may be conducive and highly correlated to entrepreneurship but not explicitly necessary. This gives flexibility to consider other types of entrepreneurship like corporate entrepreneurship where risk taking and independence might be dampened, for example.

In the entrepreneurial context, entrepreneurship is a propensity for the agency of differential labour to express and exchange new use values in a regime of uncertainty. In contrast to existing theory, this puts a greater emphasis on the specific and dynamic context framing opportunity and innovative value creation efforts. The fundamental implication is that a better treatment of uncertainty is possible when considering a context for a process of opportunity expression and value stream manifestation rather than in a) examining an organisational context b) associating performance criteria to venture activity or b) determining the nexus at which opportunity and individual meet.

More suited to the purpose of research, the entrepreneurial context provides a framework to consider early-phase entrepreneurial stakeholders. Through three interaction modalities

related to the value component, people are directly involved in expression of opportunity and in VVG. This lends contextual flexibility to consider early-phase stakeholders participating in venture. Thus, the underlying value model unites stakeholders of value creation process with the contextual uncertainty of the entrepreneurial context.

# 3.2 Stakeholder attribution to the entrepreneurial context

Stakeholder theory has evolved to provide an understanding of modern capitalism. The basics of revolve around the integration thesis and the responsibility principle. (Freeman, Harrison et al. 2010) Broadly from these two mechanics, stakeholder theory creates a narrative to understand three interconnected business problems of value creation, ethics in capitalism, and the managerial practice to manage stakeholders. (Parmar, Freeman et al. 2010) Within this narrative, stakeholder theory is thematically related to five categories: the definition of stakeholders and salience, stakeholder actions and responses, firm performance, and theory debates. (Laplume, Sonpar et al. 2008)

With a focus on entrepreneurship, this research explores stakeholders in value creation efforts of venture so that future research might consider the landscape for better engaging stakeholders in entrepreneurship. Discussion therefore largely discounts ethics and primarily draws from the understanding of the value creation problem. Additionally considering research of stakeholder management practice as applied in entrepreneurship enables a grounding to further explore early-phase stakeholders in the entrepreneurial context. Thus exploratory work focuses on the first three themes of salience and interaction as applicable to stakeholders of venture. In other words, the application of stakeholder theory amounts to exploring who is a stakeholder of venture, and how are they stakeholders in conjunction with venture.

The problem of value creation and trade is addressed with stakeholder theory by examining economic activity at a scale reducible to the individual as creating value for stakeholders. (Parmar, Freeman et al. 2010) The common definition of a stakeholder is borne from a set of relationships among individuals, groups or societies who can affect or are affected in achievement of firm objectives. (Freeman 2010; Parmar, Freeman et al. 2010) This is a broad definition of a stakeholder which is narrowed to have functional significance in the UoA.

With respect to the value creation model, the set of stakeholder relationships is attributable to modalities for interaction according to input, labour transformation, and output. These are either internal or external to the value stream. Venture will then characteristically comprise stakeholders who share a purpose or interest common to the achievement of economic ends. In this sense, the conception of a stakeholder is reduced to the internal or external individual or entity that will affect or is affected in the pursuit of venture value creation.

To further narrow the definition, an entrepreneurial stakeholder is an individual or entity whose resource contribution is required in the early-phases of value creation – i.e. the entrepreneurial stakeholder is an agent of venture formation in a regime of uncertainty. This means that any stakeholders who are affected by externality outputs and may affect venture accordingly are beyond the scope of consideration. This is justified where such interactions are a more latent function of time. In other words, outputs that are not directly tied to the immediate output of perceived use values will only precipitate stakeholder interactions as these externality outputs accrue and the relevant individuals or entities mobilise. These externality stakeholders will therefore only emerge in a later-phase of value creation to contend or defend the materialised value stream. It follows however that where an externality output is necessary to functionalise use value exchanges from onset, treating such externality output is a prerequisite for value creation and such stakeholder would be relevant.

As an example of a latent externality output, consider that carbon capture is a value component of power generation that will only be addressed when a) exchange values capably sustain such activity and b) there is a critical mass of public pressure to treat the issue with respect to the enterprise value stream.

Early-phase entrepreneurial stakeholders (EES) are therefore of the value creation process. They are attributed to interactions necessary to conceive and sustain the value stream of venture regarding the systemic construction of opportunity expression, the exchanges of input and output use values, and the application of labour to transform use values. Accordingly, their attributes with respect to value creation and venture affiliation as summarised in Table 6.

Table 6 Modalities of early-phase entrepreneurial stakeholders

Entrepreneurial stakeholder modality	Internal to venture	External to venture
Input use value	Capital; resource supply	Capital; resource supply
Value transformation	Entrepreneurial labour; differential labour	Differential labour
Output use value	-	Customers

With respect to the entrepreneurial context, EESs share an uncertain interest or purpose in the expression of opportunity and the successful outcome from VVG. In this way, EESs are attributed to the entrepreneurial context. Further discussion now considers their orientations in relation to structure and salience.

#### 3.2.1 Stakeholder structure

A feature of stakeholder theory is the examination of the particular relationships occurring between individuals and groups and with venture. (Murman 2002) Firms do not respond to each other, but to the interactions within the stakeholder network. (Rowley 1997) In this regard, it is important to consider what determines stakeholder structure.

Freeman, Harrison et al. (2007) depict how the hierarchical and hub models for stakeholders preserve an internal and external focus of management effort respectively. This is shown in Figure 24.

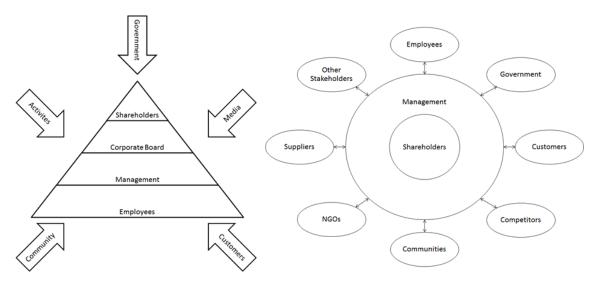


Figure 24 Hierarchical and hub stakeholder structures (Freeman, Harrison et al. 2007)

The hierarchical model implies an inflexible chain of command. Consider that entrepreneurial labour is a scarce resource; the correct expression of opportunity is more probable if greater resources are committed to this task rather than to delegation or reporting. However, this does not invalidate the hierarchical model in an entrepreneurial context. Consider that in the VVG it is possible that differential labour might be delegated as entrepreneurial labour is focused elsewhere. What is evident is that its structure is rigid which is not suited for dynamic change of the underlying value stream of venture and thus of associated stakeholder interaction.

The hub model implies that control is asserted outwards from firm operations. This model is inflexible to consider the emergence of nuanced stakeholder categories, of multiple classes for example, and how underlying interests may change with time. This would imply that multiple one-way channels are necessary to address the fully conceived stakeholder needs of each category. (Vandekerckhove and Dentchev 2005) This does not account well for the intangible and dynamic nature of opportunity expression – i.e. there would be embedded organisational resistance to dynamic changes of the entrepreneurial context. (Rowley 1997) Inherently, these structural models focus more towards concrete stakeholder roles that does not port well to the uncertain nature of value creation.

To understand the structure of EESs in the entrepreneurial context, the formation of venture must also be considered. In this respect, a network structure imbues flexibility where hub or hierarchy and hub structures do not. For example, the stakeholder network would radiate from the expression of opportunity and venture would emerge along social and business relationships of EES network. Increasing network characteristics of density and centrality then account for the emerging nature of firm stakeholders. (Rowley 1997) The implication is that in value creation, the stakeholder network begins with low density and centrality. In these conditions, the focal venture will adopt a solitarian role and attempt to avoid stakeholder pressures. (Rowley 1997)

The network structure accommodates multiple and dynamic ties of EESs with respect to a process of value creation and with respect to each other. The characteristics of low density and centrality coherently suggest that venture will avoid unnecessary stakeholder pressure, like that which arises from latent externality output. This is appropriately coupled with the

notion that the expression of opportunity will follow a path of least resistance under a regime of uncertainty.

It is the timing and nature of stakeholder engagement crucial to the underlying value creation effort at hand that determines EES integration. (Jawahar and McLaughlin 2001) The network structure avoids the inflexibility of both the hierarchical and hub models of interaction. For example, it suggests that EESs will integrate dynamically according to possibly nuanced roles as relevant for the creation of value and with minimal overhead of delegation and reporting. This liberates focus to consider the potentially non-predictive strategies and behaviours of the entrepreneurial process (Dew, Read et al. 2008) via information and value anomalies in stakeholders networks. (Shane and Venkataraman 2000) The network structure also accounts for venture formation in terms of the emerging stakeholder relationships with each other and with the value stream.

#### 3.2.2 Stakeholder salience

EESs share common interests or purpose in value creation. As VVG is constrained in time by the availability of resources, the salience of these early-phase stakeholders is best treated with an understanding of the resource relationships that will arise from integration. This is depicted in Figure 25.

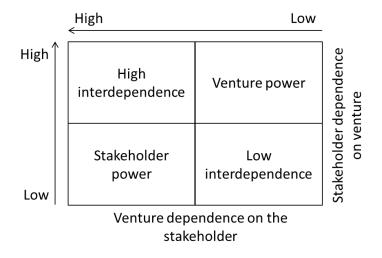


Figure 25 Typology of resource relationships *adapted* (Frooman 1999)

According to Frooman (1999), salience is therefore a feature of resource control. This is aligned with the value model where inputs, outputs, and labour are stakeholder resources.

In the context of entrepreneurship, the availability of resources like dispersed scientific and contextual knowledge is a determinant of opportunity expression and inherent to the entrepreneurial process. The nature of stakeholder interaction with venture is then a function of resource commitment depicted in Figure 26.

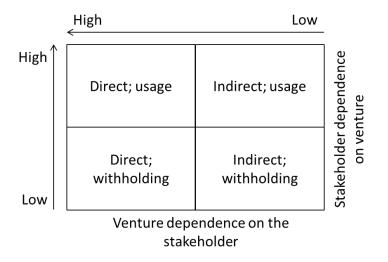


Figure 26 Typology of influence strategy adapted (Frooman 1999)

With a binary resource-based conception of power the interactions that exist are in/direct withholding and in/direct usage. These represent the ways by which a stakeholder will influence the success of venture with the commitment of added resources. (Frooman 1999) They are contextualised with the example of an EES possessing a labour resource of varying importance to venture value creation:

- (1) When the stakeholder and venture relationship is characterised with low dependence, the stakeholder will exert their influence with an indirect strategy to withhold resource commitment. (Frooman 1999) The EES gains nothing by committing their labour to the venture that does not require it.
- (2) Where the stakeholder is the dependent, the stakeholder will indirectly seek render resource to venture. (Frooman 1999) Where possible, the EES will commit their labour to gain from venture.
- (3) A relationship of venture dependence will engender the circumstance where the stakeholder directly withholds resource. (Frooman 1999) The EES does not gain from the venture and will directly withhold from committing resources.

(4) In the case of mutual dependence, the stakeholder will directly employ their resource alongside venture; (Frooman 1999) the EES will directly contribute labour for mutual benefit.

The interaction mechanism of stakeholders based on this binary treatment of resource availability is valid for the value model - i.e. a resource is either required or it is not and those possessing the resource are considered stakeholders of venture.

In a deeper conception of this resource availability determination of what constitutes a stakeholder, Mitchell, Agle et al. (1997) suggest that three attributes are crucial: power or the control of resources, resource legitimacy or the extent of risk assumed, and urgency or time-sensitivity of the stake. This is shown in Figure 27. In addition, Driscoll and Starik (2004) advance the primordial attribute of proximity to account for spatial and temporal potential for inclusion in venture.

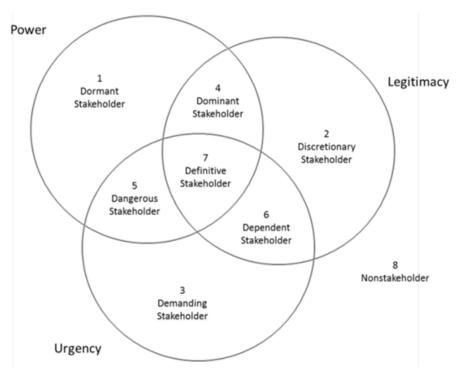


Figure 27 Stakeholder attributes (Mitchell, Agle et al. 1997)

A stakeholder will therefore exhibit at least one of these attributes, becoming more salient as more attributes are manifest. With a resource-based perspective, the salience of stakeholder influence is then a function of the quantity of resources put at risk, the level of risk exposure and sunk costs, and the resource control that might be exerted on venture. (Kochan and Rubinstein 2000)

Coming back to the shared common interests or purpose in value creation, this resource perspective adopted from literature all tend to classify a stakeholder in relation to what potential impact or demands are made of venture resources. Conversely, it is more suitable to examine EESs from the perspective of what potential impact or demands venture will make of stakeholder resources. This is justified where the resources of venture are scarce and derived from inputs, outputs, and labour which are all associated to EESs. This frames the perspective immediately with venture dependence; a stakeholder will accordingly attempt to withhold or apply their resources to value creation efforts. (Frooman 1999)

This venture perspective of a stakeholder preserves fidelity to integrate more readily with the value model – i.e. venture will have a proximate necessity for resources and the interactions with EESs will be direct and in the pursuit of value creation. In this regard and at an early-phase of venture, those stakeholders of a withholding strategy are discounted on the underlying assumption that stakeholder and venture share a common purpose. The dynamic nature of the entrepreneurial context further depicts, that at a later stage, affiliation may end if such were to be the case. Thus the stakeholder relationship under consideration is one of mutual dependence. (Frooman 1999)

As a feature of power, being proximate and committing resources to venture will subsequently lead to legitimacy and/or urgency. (Mitchell, Agle et al. 1997) In this respect, from a venture perspective, an EES will be either embedded or critical. In the absence of embeddedness or criticality, then no common venture interest or purpose is shared because such stakeholder resources do not contribute to value creation.

The attribute of embeddedness connotes stakeholder proximity in relation to the value potential expression or VVG. It decries commitment of resources that are put at risk, even if only as an opportunity cost. As a salience attribute, embeddedness is the degree to which a stakeholder is constrained by commitment of resources to a value stream. Thus, a fully embedded stakeholder is considered proximate, powerful, and legitimate. Note that embeddedness does not necessarily mean internal to venture such as with the case of entrepreneurial labour. For example, an external supplier is embedded where they contribute use values for transformation.

Criticality is an attribute of possibly embedded stakeholders depicted by urgent resource relevance to the value creation efforts. This suggests that their provisioned resources are prioritised in terms of value stream scope. For example, to achieve successful outcome, the first customer is a critical stakeholder because they validate the opportunity expression and realise value capture and the potential scope of the value stream.

Both these attributes focus on the positive affiliations of stakeholders with value creation. This is justifiable in considering that the solitarian role of a sparse and non-central stakeholder network of venture will seek to avoid non-critical stakeholder pressures. (Rowley 1997) These non-critical interactions consume finite and essential resources better applied in accumulating embedded stakeholder relationships.

In terms of stakeholder orientations, the relationships are qualified according to embeddedness and criticality in a network structure. These orientations are manifest from perceived bargaining power in relationships of internal and external buyers and sellers. First, buyers of venture resources will make comparison between the perceived use values on offer, and secondly, suppliers of venture resources will make comparisons of exchange value among alternative buyers. (Bowman and Ambrosini 2000) Once an integration occurs, substitution and switching costs will determine the nature and extent of embedding. (Porter 2008) These interaction orientations are well suited to the dynamic and uncertainty of the entrepreneurial context. For example, bargaining relationships are scalable within stakeholder networks of venture formation and readily shift as underlying interests and salience evolve.

The limitation of this resource perspective is that it presupposes a disposition to only consider the exchanges of resource. It is not robust in its treatment of underlying human factors where, for example, resources like entrepreneurial labour might be operationally bound by virtue of personal motivation. There is however flexibility in the value model to be applied independently from venture value creation to account for intangible factors that entice stakeholder embedding. For example, a social entrepreneur captures a personal use value in the commitment of activity to engender social well-being in the world. This perceived use value is inexorably linked with the expression and VVG to capture exchange values associated to the independent and personal use value of the social entrepreneurs. This is however hard to measure, especially where eliciting of utility functions do not consider longitudinal variations. Consideration is lent to what stakeholder management practice is suggested for entrepreneurship for clarification.

## 3.2.3 Stakeholder frameworks in entrepreneurship

Stakeholder management is typically manifest in organisations that possess the financial capacity to sustain such activity. Effective management of stakeholder relationships concerns the values, choices and potential outcomes from stakeholder interactions. (Phillips, Freeman et al. 2003) The underlying idea as related to the entrepreneurial context is that contextual uncertainty might be reduced with a better grasp of the underlying stakeholder relationships. Two frameworks are selected to explore EES relationships in entrepreneurship according to structure and salience

Vandekerckhove and Dentchev (2005) propose a heuristic approach of two mappings to adopt a network perspective of stakeholders in entrepreneurship. The first mapping focuses on existing resource-based interactions between venture and their stakeholders – i.e. stakeholder relationships. The second mapping draws attention to strategic issues – i.e. resource control – and the respective stakeholder relationships at hand. With these mappings, the suggestion is that entrepreneurial opportunities can be attributed to stakeholder relationships where discrepancies exist. This calls back to the idea that opportunity is attributed to dispersed knowledge. (Shane 2000) Table 7 depicts these mapped discrepancies from the perspective of venture.

Table 7 Entrepreneurial network opportunities adapted (Vandekerckhove and Dentchev 2005) Stakeholder relationship

		Direct	Indirect	None
Resource control	Full control	No opportunity: maintain good contact	Opportunity: establish contact to understand stakeholder behaviour and expectation	Opportunity: rethink stakeholder status (possible mistake in mapping)
	Limited	No opportunity: maintain good contact	Opportunity: establish contact to create a collaborative environment	Opportunity: establish contact to enrich knowledge perceptions
~	No control	Opportunity: inform stakeholder about issue involvement	Opportunity: inform stakeholder about issue involvement	-

The framework proposes three types of actions where opportunity is identified. An entrepreneur can 1) inform a stakeholder about venture, 2) rethink the status of stakeholders and whether there is merit for interaction, and 3) establish contacts to better affiliate with stakeholders. This framework serves to mitigate the cognitive limitations and behaviours that may constrain opportunity discovery. (Vandekerckhove and Dentchev 2005)

The basis of network opportunity is in knowing that an entity is a stakeholder, and why. The framework is justified whereby the two mappings simplify the analyses of opportunities by clarifying what stakeholder interactions are important, and reduce the nature of the issues determining criticality. (Vandekerckhove and Dentchev 2005)

The implication is that with a resource-based perspective, opportunity and its expression can be independently derived from relationships with network agents, internal and external to venture. Moreover, the application of a network structure lends recognition to the dynamic environment of the entrepreneurial context in which venture will only seek to engage with critical stakeholders. This connotes emergent VVG pursuing the optimal contextual density and centrality of the network in relation to available network resources and coordination faculty. (Rowley 1997; Holmen and Pedersen 2003; Vandekerckhove and Dentchev 2005) In this sense, the expression of opportunity and associated VVG is an ad hoc and self-organising network phenomenon of stakeholder relationships pursuing shared value creation.

McVea and Freeman (2005) reflect on three aspects of a "Names-and-Faces" to focus on individual and interpersonal relationships with stakeholders in entrepreneurial value creation. These aspects are: intense, individual and lasting relationships, modular design, and flexible delivery systems. With respect to the first aspect, the proposition is that a deep integration of with stakeholders increases strategic options and stakeholder support. The result is greater satisfaction from a relationship.

As per the value model, this satisfaction is an intangible perception of use value that is associated to the interaction. It suggests that there are human factors beyond only the exchanges of resources. In relation to stakeholder salience, the personal relationships coincide with an embedded nature of stakeholders.

Modular design of relationships refers to three approaches to stakeholder entities: 1) to understand the nature of the stakeholder entity, 2) to identify which preeminent aspects of the relationship should be considered, and 3) to determine what other aspects of the stakeholder relationship might be standardised. Each entity is treated as unique; it is the underlying principles of engagement that are routinised. (McVea and Freeman 2005) For example, a capital inflow to venture is a statement of economic viability and a return on investment that is the preeminent aspect of investment. Reportage of VVG progress as well as loan repayments are well suited for standardisation, however each individual investor will require a tailored initial pitch.

The framework adopts the perspective that a focus on specific and principled decisions renders the necessary resources more prone for exchange when relationships become flexible for embedding. Realistically, as the boundaries between stakeholders and venture are blurred, generic stakeholder categorisation presuppose a resource relation to venture. In nuanced and dynamic relationships, there is a greater potential to arrive at entrepreneurial opportunity without this presupposition. (McVea and Freeman 2005)

The notion of a flexible delivery system depicts strategy existing at the fringe a stakeholder network, pulling an emergent VVG as interactions with stakeholders occur. (McVea and Freeman 2005) In other words, this relates to the effectual logic of the entrepreneurial process. It adopts a constructionist perspective stipulating that opportunity is derived from stakeholder interaction and commitment the value creation process – i.e. value is delivered according to how it is construed. The implication is that criticality is more related to the characteristics of stakeholder emergence as opposed to directed VVG. Regardless, the entrepreneurial context accommodates either reality.

The "Names-and-Faces" approach to stakeholder management is limited in the same ways that other frameworks are limited by the time and resource constraints of venture. However, it provides flexibility to address key stakeholders on a human level and beyond resource-based transaction costs.

Both frameworks consider EESs as existing in a network structure and according to venture and stakeholder resources. The concepts are aligned with the foundations of the entrepreneurial context where flexible and dynamic interactions with stakeholders are

necessary under conditions of uncertainty. The "Names-and-Faces" framework suggests that EES salience is more than a function of the resource commitment under undercertainty.

## 3.2.4 Fitting stakeholders in the entrepreneurial context

Returning now to the conception of value creation in stakeholder theory, Garriga (2014) employs a capability approach to broaden the understanding of stakeholder welfare in the value creation process. The capability approach attributes propensity for labour to an individual's capability to function. This pertains to the willful participation in opportunities that define the individual. (Sen 2003) In an in-depth and inductive case study, Garriga (2014) finds that the stakeholder capabilities of an agricultural company are to: be employable, be autonomous, be innovative, be empathetic, be responsive, be entrepreneurial, be socially integrated, be healthy, and to be green. While it is not sound to generalise from a single indepth case study, there is still room to conceive a stark contrast with the traditional resource-based utility approach which considers stakeholder engagement as a resource trade-offs.

Garriga (2014)'s findings touch on the strategic and value-based integration of the stakeholders with the firm, as well as a human component that may explicitly enable entrepreneurial behaviour. While the development of an EES framework remains a resource-based endeavour grounded with a resource scarcity of venture, an unanticipated category of relevant data derived the case studies may stem from stakeholder capability.

EESs are individuals or groups who, especially prior to successful outcome, affect or are affected by expression or VVG in the entrepreneurial context. To these ends, they interact with venture in resource exchanges to enable value creation and economic throughput.

Venture is therefore a context and purpose driven engagement of stakeholders.

According to the modalities for non-latent interaction in new venture, EES relationships will emerge in exchanges of input, use value output, and labour transformation. On an internal and external basis stakeholders are distinguished according to the nature of expected interaction as capitalising, supplier, labour, or customer stakeholders. These designations do not impose a role on the stakeholder. Rather, the category depicts what contribution from the stakeholder is necessary for the process value creation. The categories are flexible in that a dynamic set of relationships will emerge from potential multi-categorical stakeholder networks.

The network stakeholder structure complements the integration of EESs in the entrepreneurial context of uncertainty. It suggests an inherent mechanism for opportunity expression by virtue of effectual logic. Causal logic of the entrepreneurial process is also accommodated suggesting the network direct an optimal expansion of density and centrality according to expressed value potential. A network model of EES integration also accounts for venture formation accrued by the commitments of EESs. In this way, the network structure defines a venture structure for self-contained and self-organising stakeholder relationships. From the network structure of EES salience emerge as a question of which interaction nodes are relevant for the process of value creation.

The foundations of this model conceive venture – i.e. shared economic interest or purpose – as the driver for stakeholder integration. The EES framework considers that the venture is entirely dependent on the resource contributions of these EESs. In a context of prevailing uncertainty, this conceives that salience is derived from venture requirements. This is justified where the EES are considered to be relatively resource rich where nascent venture is resource poor. Thus, the attribution of salience to the EESs depends on the characteristics of venture and not of stakeholders.

The two features of EES salience are whether a stakeholder is embedded or critical. This is shown in Figure 28. An embedded stakeholder is integrated in the process of value creation: they internally or externally contribute to the venture resource base and its expressed or materialised value stream. A critical stakeholder may or may not be integrated into the process of value creation. Their nature is depicted with urgency of venture to interact and acquire the required resource. Internally or externally embedded, consider that a scientist who owns a novel patent for design pharmaceuticals is critical to the value stream and its anticipated throughput. Solely critical, consider that once a value stream is operational, external customers will functionalise the value stream with exchange value transactions.

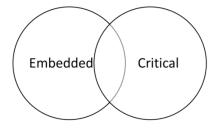


Figure 28 EES salience with respect to venture resource requirements

This two-fold depiction of EES salience preserves fidelity of venture growth in contextual uncertainty – i.e. Do we have or use this resource? Causal logic of process: Do we need this resource? Effectual logic of process: How can we embed this resource to create value?

With the notions of embedding and criticality, EES salience harmonises prioritising economic throughput of the value stream. An EES is either embedded, embedded and critical, or critical. This prioritisation is aligned with conceiving the life-cycle of entrepreneurship where criticality and embedding are dynamic saliencies in the uncertain entrepreneurial context. Jawahar and McLaughlin (2001) proposes that during venture inception, resources are allocated and decisions are framed in a context of losses. In growth, resource allocations and decisions are framed in a context of gains.

So in start-up, venture will be reactionary to latent stakeholders and proactive to embed EESs critical to venture survival. In growth, embedded stakeholders are treated proactively so that they do not become critical, or as a first priority if the embedded EES is also critical. The second priority is other critical stakeholders. Non-critical stakeholders may be accommodated. (Jawahar and McLaughlin 2001) As latent stakeholders in start-up, and other non-critical stakeholders in growth fall outside the scope of EES, these dual early-phase saliencies are valid.

EESs form a network of relationships with respect to venture. Their saliency is potentially twofold and assuming of three states according to their embeddedness and criticality. Identified by interaction modality, the EESs are categorised in the matrix shown with examples in Table 8. EES are classified as capitalisers, suppliers, labourers, customers, and others and may be internal or external to venture. The idea underpinning the exploratory purpose of this framework is to consider that any embedded or critical stakeholder will play a role in the expression and VVG of the entrepreneurial context. With this in mind, the category other is explicitly included to prompt focus for the purposes of exploration.

Table 8 EES exploratory classification matrix

	Internal	External	Interaction modality
Capitalising	Self-funded entrepreneur	Investors; angels; venture capital	←
Suppliers	Scientists	Raw materials provider; patent licensor; mentors	Inputs ←
Labourers	Entrepreneurs; engineers	Outsourced developers; contractors	← Heterogeneous labour transformations
Customers	-	Customers	← Outputs
Other	Owners	Owners	

Capitalising EESs provide the funding necessary to activate inert inputs. In this regard they are an input. However, for entrepreneurship they are treated independently due to their unique nature. While they enable expression and VVG, few personal risks are involved – i.e. they are abstracted from the process of value creation with the supply of a homogenous resource that is not capable of rendering new use values. (Bowman and Ambrosini 2000) However, the nuanced relations that evolved are observable if entrepreneurship is self-funded for example.

Suppliers input materials or knowledge into the value stream. They are either internal or external depending on the specific venture context. These are either heterogeneous or homogenous resources that are also unable to render new use values. The distinction is that these EESs have a personal stake in the state of venture. For example, venture is supplying exchange or use values to these external stakeholders: a material supplier is paid for their output and mentor may have a stake in the venture or perceive use value in the success of venture. Alternatively, these stakeholders might exist internally. For example, embedded scientists act as knowledge sources for opportunity expression.

Labourers provide differential labour. Internally, entrepreneurs apply systemic labour to express the value potential of venture. Differential labour transforms the input value into new use values. For example, engineers may be internal and embedded, or they may be external contractors. Embedding of labourers will restrict the vector space of VVG because the

differential labour relates to a unique set of skills that will align with the commitment to opportunity expression.

Finally, the role of customer integration is intuitively linked to the capture of exchange values. Owners are treated within the other category. They are implicitly present where value is being created, however they do not explicitly participate in the process of value creation. For example, where they parameterise the nature of venture, they apply entrepreneurial labour; where they assist in networking, they are input suppliers of knowledge; where they fund venture, they are capitalisers. However, the main purpose of the other category is to provide flexibility to capture unanticipated exogenous or endogenous relationships that might arise. For example, a contented customer may refer others to the output of a value stream. Any stakeholders of externality output are also discounted though they may be latently treated in the other category

Summarily, EESs hold a stake of venture. These integrations emerge by virtue of perceived bargaining relationships. These relationships will be nuanced according to the role of integration with respect to the unit value component and its internal or external state. Using stakeholder theory as a tool to explore the conception of EESs in the entrepreneurial context, theoretical foundations suggest that entrepreneurial opportunity and value creation is patterned throughout a network structure of the integrations. With a resource-based perspective, these stakeholders are salient with relation to value creation efforts according to their embeddedness and their criticality of contribution to dynamic venture resource requirements.

## 3.3 Summarising stakeholder theory of entrepreneurship

An entrepreneurial context is founded from a coherent value creation model and grounded with selected entrepreneurship literature to synthesise a foundation upon which to relate the integration of EESs. Taken together, the entrepreneurial context is a process-oriented practice of entrepreneurship and the stakeholder framework for EES engagement is human-oriented practice within the entrepreneurial context; both are complementary and suited for the purpose of research. In preparation to explore empirical data, we briefly recapitulate the theoretical steps and propositions of theoretical foundations prior to briefly ruminating on the research questions.

#### Value model

The strength of the value model derives from its reducible nature that links people to the process of value creation. Further, it is able to account for epistemological tensions related to the nature of value with a dual nature that is both perceived and exchange. The model is applicable to entrepreneurship such that it remains coherent in regimes of uncertainty and has an element of modular scalability.

The value model assumes transactions are resource-based. However it has the flexibility to consider non-resource based exchanges by coupling independent perceptions of use value with the resource exchanges. While such perceptions are difficult to operationalise, it suggests that the model maintains applicability in lieu of a more suitable option. Alternative models are too simplistic and exist at non-reducible levels.

### **Entrepreneurial context**

There are five tenets to the entrepreneurial context that are considered in relation to its foundation in value creation and its grounding in entrepreneurship literature:

(1) Successful outcome is delimited in time under a regime of uncertainty.

The time constraint is a function of resource depletion prior to the achievement of successful outcome. The regime of uncertainty relates to contextual and operational uncertainty attributed to the expression and VVG of venture. The uncertainty of expression decreases with time and is inversely related to the uncertainty of VVG, where it can be modelled or estimated. Treating markets as a creative process, the uncertainty is regime of the entrepreneurial context is unknowable and collapses onto the expressed or operational VVG value stream. Venture is constrained only by time.

(2) Value stream expression is the operationalisation of opportunity.

It reflects underlying conjecture borne of reality to achieve perceived use value output and legitimacy of the value stream. It is the foundation of value creation. The hypotheses of expression may be analytical or intuitive.

(3) Entrepreneurial labour is committed in value stream expression.

Entrepreneurial labour is a systemic resource and implicitly internal to venture. Venture should nucleate around its manifestation.

## (4) VVG is the materialisation of expressed opportunity.

It is the functionalisation of value components to render output for the capture of exchange value. VVG is the foundation of value capture. VVG may occur as a result of exogenous or endogenous opportunity.

## (5) Differential labour (of which entrepreneurial labour is a subset) is committed in VVG

Heterogeneous transformations of labour account for the innovative and dynamic nature of venture value creation. The commitment of differential labour accounts for venture formation in effectual and causal logics of opportunity exploitation.

In the derivation of these five propositions, the entrepreneurial context accounts for the core topics of literature and rival theories of entrepreneurship. Further, it relieves epistemological tensions by committing the process of entrepreneurship into a practical setting. In the entrepreneurial context, entrepreneurship is a feedback process for a propensity of the agency of differential labour to dynamically express opportunity and form venture in a regime of uncertainty.

The entrepreneurial context enables context specificity to uncertainty and it reconciles the divergent streams considering entrepreneurship by features of organisational context, performance criteria, and entrepreneurial behaviour. The entrepreneurial context emphasises flexible and dynamic process to express opportunity and grow venture with respect to circumstantial uncertainty.

The primary weakness of the entrepreneurial context is attributed to its derivation from a value model that assumes resource-based transactions. Robust validation of this weakness in conjunction with the entrepreneurial context requires a treatment of the founding value model.

The entrepreneurial context and the UoA are linked by the nature of the research. In depicting the UoA, the features of successful outcome and of venture growth under a regime of uncertainty are further expounded and clarified in synthesis of the entrepreneurial context.

These linkages are validated by grounding the entrepreneurial context with prevailing entrepreneurship theory. Thus, construct validity is preserved when treating empirical investigation with consideration of the framing conditions of the entrepreneurial context.

Paired with the value model, the entrepreneurial context also hints at external validity by virtue of its fit in a broader market context when the uncertainty conditions of venture are relaxed as enterprise matures. This possible mechanism for scalability of the entrepreneurial context is further echoed reflecting on the definition of value stream and the application of value stream mapping in lean management:

"A value stream is the set of all specific end-to-end and linked actions, processes and functions necessary in transforming raw materials into finished product delivered to the customer."

"Value stream mapping is a tool used in lean management. It serves to curate the internal the value stream of enterprise where all value adding activities are traced in sequence through a given operation to identify and eliminate wasteful activities."

(Murman 2002)

The idea is that when exchange values are sustained and entrepreneurship is no more, the core value stream remains and is treated in other domains of academia and practice. This implies that the exploring a value stream through its nascent stages possesses an inherent coherence with the more general nature of an economic organisation.

#### **EES** model

EESs are attributed to value expression and VVG in the entrepreneurial context. There are three tenets to the EES model derived from theoretical foundations:

- (1) EESs are manifest from an ad-hoc and self-organising network structure in the pursuit of common interest and shared purpose in venture value creation.
- (2) EESs integrate internal or externally according to venture resource requirements. In exploratory analysis, EES will be *capitalising*, *suppliers*, *labourers*, *customers*, and *other*. However, role is flexible and dynamic.
- (3) EESs manifest salience attributes of embeddedness and criticality that vary with time.

The resource-based transactions of the EES model derive from attributing stakeholder interaction to the modalities for resource exchange with relation to the unit value stream. This assumption is valid where resources are scarce in the early-phase of venture.

The EES model emphasises venture resource requirement as a mechanism for stakeholder integration. The presumption is that critical stakeholders will be resource rich where venture is resource poor.

However, resource exchange may not fully capture integration mechanisms of EES due to disregard of intangible human considerations. This is treated as an unanticipated but relevant source of data in exploration.

EES also discounts stakeholders whose salience is a more latent function of time. This is beneficial with regard to the UoA because it simplifies the nature of the model and is justified in the early-phases where a venture network structure of low density and centrality exists.

Alternative models are not developed in relation to a process-oriented practice of value creation. In this regard, the EES model preserves fidelity to the causal and effectual logics of the entrepreneurial process.

# 4 Empirical evidence

In relation to case study candidacy, we assume inability to examine the financial records to determine if the venture is beyond the unit of analysis in relation to successful outcome. Even if it were possible, the financial records do not reliably express the origin of certainty at which that successful outcome is attainable. Nor can we rely on responses from entrepreneurial stakeholders to confine a venture within our unit of analysis. Theory suggests entrepreneurs are disposed for certain behavioural characteristics; their responses would additionally carry contextual bias that is difficult to account for.

In the event that successful outcome is not an appropriate delimitation to new and dynamic venture, and to be certain that a case study candidate falls within the unit of analysis, we target venture that is newly established and dynamic – i.e. clearly without sustainable cash flows and seeking to operationalise new cash flows – in its pursuit of unrealised economic value.

Where such candidacy fails to materialise, the next best option is to target entrepreneurially established firms and probe historical recollection from the prior entrepreneurial stakeholders. Despite the discussion being framed within the unit of analysis, data will obviously have hindsight and contextual bias. This is not invalidating because critical events from the prior context are liable to be more prominent. With a multiple case study design and where the research questions are concerned, comparison of the involvement of entrepreneurial stakeholders might have a bearing on the nature of successful outcome.

Among possible case candidates, it is those with nascent and uncertain efforts in a dynamic or versatile pursuit of value creation efforts that are solicited. The four operational criteria for screening under the uncertainty and time constraint are summarised below.

### (1) New and dynamic start-up enterprise:

This first criterion directs relation of venture to the UoA, namely that there is a relatively new pursuit of uncertain value. Dynamism is accounted for by choosing relatively small venture in which the entrepreneurial stakeholders are most evident. Considering that only a limited number of interviews will be possible for any case, it is best to select a small organisation where the interviewee will have a disproportionately larger interaction with other

entrepreneurial stakeholders attributed to the entrepreneurial context. This is the primary criterion to consider because it ensures a the best possible basis for the purpose of research.

## (2) Diversity of niche in industry:

The holistic design of the case study format entails that replication of observed stakeholder interactions will occur independently of the nature of value creation. Venture is selected across different industry.

## (3) <u>Diversity of cultural context:</u>

Similarly, diversity in the cultural context is a feature attributed of the holistic design and a factor to account for in replication. Both the diversity in niche and cultural context ensures that replicated data adheres to the growth curve of venture as part of the UoA, and not some other factor unrelated to entrepreneurship.

## (4) Anticipated yield from data:

This final criterion is taken into account to ensure that sufficient understanding and depth from communication is achieved despite a diversity of niche and cultural context. Of the four, it is the least prioritised because it is rather inherent to an appropriate selection.

Four case companies pass screening on the basis of anticipated congruence with the UoA. No bias, other than one of availability, permeates the selection of case companies. The availability of individuals for research interviews – i.e. those who are disposed to cooperate is not well controlled with a time constraint of research.

Of four solicited, three case candidates agree for participation. The first company is a Norwegian holding company directly engaged in a variety of venture developing and commercialising technology related to energy and material. Three interviews, one from the founder and two from early-phase stakeholders are performed. The second case company is a new and yet unprofitable Canadian pharmaceutical company. A single interview from a founder and chief executive officer (CEO) is secured. The final case study is an Austrian information technology venture previously engaged in data collection and shifted to a privacy-preserving web search service. Similarly to the Canadian case, a single interview from a founder and the CEO occurs.

For ease of distinction and to mask any possible sensitive information inadvertently creeping into the data, we distinguish the case companies according to a national designation – i.e. NOR, CAN, and AUT. A fourth Norwegian company running an exchange for cryptocurrencies was solicited but unavailable to participate. Despite being constrained by time, triangulation is arrived with three diverse case study companies

Four themes originate from two relevant data categories. This first data category pertains to the entrepreneurial context. Two themes of value pursuit and work processes of the venture directed discussion to the early phase of venture and its context. The second data category pertains to the EES model. Two additional themes related to the nature of the informant-venture relationship and the EESs-venture relationships as perceived by the informant couple with the conception of venture work processes to drive discussion towards exploration of EES.

In theoretical treatment, a third unanticipated data category elicits awareness. This potentially relates to information suggesting that the resource-based utility transactions of EESs are insufficient to account for the integration and sustained relationship of EESs with venture.

Specifically, there is a concern for the gaps that may emerge when talking about value creation underpinning entrepreneurial activity and what people are involved. For example, when the term stakeholder is used, interviewees may be prone to externalise the definition and consider others, especially any agents beyond the venture – e.g. the community at large, the larger market, or the direct customer base. This gap is addressed by realigning discussion to personal and contextual aspects of the case defined by the unit of analysis. However, the semi-structured interviews remain largely conversational and situational.

Where the chain of evidence is inaccessible for external scrutiny, the presentation of data is structured according to the interview themes to facilitate external observation. This structured presentation is facilitating in analysis but is limiting by imputing the bias of a sole evaluator. To demonstrate that we attend all the evidence and address the most significant data, the case companies are first described and the interview setting is contextualised. General discussion captures any data that is non-thematic or possibly a-thematic before bullet form, factual and thematic data is presented.

#### 4.1 NOR

## Case description

NOR is a company comprised of venture subsidiaries. The firm is understood to be a corporate spin-off entity. NOR does not have the intention to be a long term owner of the venture it creates as far as capital base might be sustained. In this regard, NOR is an incubator to commercialise innovative technologies. It is a family owned business with operational origins from 2006. The founder established NOR with personal funds derived from the public offering of a global solar energy company. The founder was also involved in setting up this solar energy company.

NOR operates in the energy and material industries. Their portfolio of venture subsidiaries pertains to the commercialisation of novel and innovative technology. The mission statement echoed by each informant is "to create value and to make the world a little cleaner." Discussion with three executive level informants occurs. All are previously associated with the ventures that have established the firm in its present form. The data gathering is based on historical reflection and current entrepreneurial process and activity.

The firm is entrepreneurially established and initially represents the next best option with regard to the UoA. It is subsequently argued in discussion that NOR is misidentified with respect to the first operational criteria for case study selection. What is observed in the data that emerges is that the nature of study shifts to an orientation beyond a fundamental conception of EESs. This is initially identified as a weakness of the holistic design, and linkage of the UoA to the entrepreneurial context was an insufficient measure to guard against this. The data is included because it remains applicable for exploratory research.

### NOR – interview 1

#### **Interview setting**

The informant is the vice president of research and development. The interview occurs at the company in a private meeting room on 19 March. The informant explicitly agrees for the discussion to be recorded.

This interview is the first of all the cases. There is some difficulty to word the thematic prompts in an open manner. Additionally there is observed reliance on prompts from the

interview protocol. The interview format was more rigid but not procedurally invalidating because discussion pertains to the unanticipated data from a shift in orientation. What data is relevant is attributed to the case report presentation structure.

### General discussion points

- NOR presently exists in a stage of financial sustainability by virtue of venture subsidiaries. In the initial stages, the contextual environment is characterised by excitement. This is attributed to the unique structure of the company and the nature of the founder. From inception NOR was designed to create value.
- In the early phases as NOR establishes venture subsidiary, the venture draws
  resources. Differential and generic labour is embedded from NOR into venture
  according to resource criticality. Venture is then proximate to a capitalising entity that
  supplements other labourer resources as required. In these circumstances, there is an
  implicit dual role for an internal NOR stakeholder to recognise separate value for
  venture, and value for NOR.
- In the long run, NOR is not designed as an owner. They will monetise from dividends in the medium term or by selling stakes in the established venture. In the exchange of stake to external buyers, the informant depicts a challenge to communicate the value of venture. This implies a) bargaining power relationships might be involved in transactions or b) buyers would not recognise the same value potential expression of venture. This latter point may behaviourally account for a subjective faith or belief that venture will succeed. Both points also invoke consideration to knowledge discrepancy between stakeholders i.e. an insider is more familiar with the entrepreneurial context in which value is expressed.

#### Thematic discussion points

### (1) value pursuit of venture

NOR pursues value by incepting venture or by investing in technology and "assumes
the role of an active owner." Ultimately, exchange values are realised as rents from
economic venture sustainability or by selling a stake.

- The more venture curated by NOR, the less venture is created. Resources are committed from expressing new opportunity to "defend existing value streams."
- Key performance indicators (KPIs) and concrete value events enable coherence between expression of venture opportunity and VVG. KPIs and value events reflect the operationalisations of expression in the entrepreneurial context. With value events, VVG targets become more identifiable. These targets depict expression within a constraining VVG vector space.
- Early phase value creation efforts of venture subsidiaries are characterised with greater contextual uncertainty. As value accrues, the nature of uncertainty changes "you can't bet the whole company anymore."

## (2) work processes of venture

- Flat structure underneath owner of NOR. Ventures "operate in different constellations." This implies a network structure of stakeholders. NOR acts as an external supplier of active labour and capital for these networks.
- Prioritisation of venture subsidiaries occurs according to value potential creation or to defend existing value stream. This is connotes a salience of criticality. It is not clear from discussion what specific actions constitute "defense of mature venture."
- Establishing KPIs and determining value events occur in conjunction with expression
  of opportunity and prior to any commitment of capital to venture. Value potential is
  expressed with a degree of credibility before committing money to venture; value
  events ensure that VVG is aligned. Flexibility exists for issues and opportunities to
  redirect VVG or downstream expression. Labourer resources are not overcommitted to
  "analyse it to death."

## (3) informant background and venture affiliation

 The informant previously works with the founder at the global solar energy company and joins NOR in 2007. The informant's responsibilities evolve from evaluating new technology towards business development. • Personal appeal in affiliation with NOR derives from the ability to embed in uncertainty, "identifying opportunities and addressing issues as subsidiaries mature."

## (4) early-phase stakeholders of venture

- A core of ten people support new ventures. Each "plays a role" or provides a specific resource requirement that the venture subsidiaries will draw on.
- "The key people are the CEOs of subsidiaries." These people "shape the company in shifting industry. It is about creating new business, [sometimes] creating in a market that doesn't exist and a product that doesn't exist." This connotes entrepreneurial opportunity under allocative, discovery, and creation market processes.
- NOR will consciously distances itself from venture subsidiaries when external stakeholders are in play. NOR adopts a more "professional" disposition and "armslength relationship[s]." For example, "today I am wearing this hat" is used to depict singular perspective of value. When external stakeholders become involved this suggests that a resourced-based perspective of transactions is valid in an increasingly complex network structure of stakeholders.

### NOR – interview 2

#### **Interview setting**

The informant is the vice president of communications. The interview occurs at the company in a private meeting room on 11 April. The informant explicitly agrees for the discussion to be recorded.

This interview adopts the semi-structured interview format. Discussion flows well and touches on some of the themes related to relevant data. Thematic prompts are fluid but would have benefited from better guidance of the line of inquiry towards the research purpose.

## General discussion points

 The structure of NOR nucleates around the founder and past experience and knowledge to develop and implement innovative technologies.

- NOR becomes an external supplier and an agent or resource-based business transactions with maturing venture subsidiaries. Integration or embedding in venture "value chains" is dynamic and lessens over time. The nature of relationships change from ownership to consultancy. Personal relationships become important where trust emerges e.g. the founder relies on informant's knowledge of personal preference in slide presentation.
- The dynamic of the group is important. For example, shared offices make operational knowledge of business transferrable.

## Thematic discussion points

## (1) value pursuit of venture

- NOR specialises in the implementation of context specific opportunity according to
  founder's knowledge of technological innovation potential. "Momentum of value"
  creation is based on technological opportunity. It hastens transition from expression to
  VVG. Momentum comes from testing expressed hypothesis; "[the founder] likes to go
  directly to customers." Momentum is "not necessarily sequential, it may also be
  parallel."
- Make money: Financial value establishes a reputation in the business community and enables the establishment of new businesses in line with NOR's mission to make the world a little cleaner

### (2) work processes of venture

- The organisational structure is designed around the founder. Generic labour is endogenously embedded into NOR venture formation as it is required. This enables the entrepreneurial labour of the founder who is able to systemically express value potential. "There are no employees without the founder."
- "Volume for discount." This relates to optimality of labour commitment with respect to the depth and scope of a value stream.

Cooperative network of stakeholders reduce the contextual uncertainty and share risk.
 Accumulated pools of capital are used to implement factories. Dilution of NOR ownership reduces criticality of embeddedness of NOR role with respect to venture.

## (3) informant background and venture affiliation

- The informant is involved with one of the very first venture subsidiaries from the start.

  These roles evolve to those of a consultant or board member.
- The informant is an internal and external labourer providing communications for NOR and all venture subsidiaries as services are required

### (4) early-phase stakeholders of venture

- The founder is a penultimate stakeholder of NOR with an ability to identify opportunity and the willingness to take risk so as not to "lose momentum." Unique to the founder's behaviour is of enthusiasm and this is contagious.
- The internal stakeholders form an "organism that is capable of executing in all necessary professions to move things forward."
- Municipalities, co-investors, and other capitalisers are of fundamental importance to share the burden of resource commitment, uncertainty and risk.
- License agreement with "Finnish partners" to teach and train NOR operators for knowledge transfer to local context.

## NOR – interview 3

#### **Interview setting**

The informant is the founder and chairman of NOR. The interview occurs at the company in a private meeting room on 30 April. The informant explicitly agrees for the discussion to be recorded.

Past errors in poor wording are mitigated with experience and new comfort of the researcher in an interview setting. The founder is behaviourally animated which facilitates an unstructured interview that touches on the context in which the relevant data was anticipated

to emerge. Guiding the unstructured interview is unnecessary such that the unanticipated data which emerges is comprehensively rich, though less structured.

## General discussion points

- "If ten people all have the same ingredients and the same recipe to make a loaf of bread, all the outcomes will be different, and some maybe even terrible." This frames contextual specificity of uncertainty in the entrepreneurial context.
- The founder has a strong technical passion for solar energy based on silicon.
- Good (external) relations are established on a resource or business need and personal
  relations. This enabled legal and human communication. "After the business meetings
  we went for dinner or fishing." This made personal relations possible and developed
  loyalty. The idea is that relationships should be memorable. Such relationships give
  flexibility to account for poor output to customers who were lenient.
- A capital base is essential to bridge to concept to implementation.

## Thematic discussion points

## (1) value pursuit of venture

- A powerful vision, "to make something valuable that makes the world a little cleaner," makes the value creation efforts potent.
- "We did not understand the quality of a silicon wafer until we made a solar cell... we did not understand the quality of a solar cell until we made a solar modular." This relates to the dispersed knowledge in which opportunity is rooted.
- Value is created when opportunity is perceived. NOR believes they are good at demonstrating concepts in a commercial capacity but not of running business. "There is a difference in mental behaviour" in innovation and in production.

### (2) work processes of venture

• To know your customer is essential. Contextually this is construed as a knowledge of business needs and on a personal level.

The work processes are guided with sufficient knowledge to follow a gut feeling
decides opportunity expression. It is an effectual logic to value creation. Decisions are
taken on intuition, augmented with sufficient analysis and the availability of a capital
base.

## (3) informant background and venture affiliation

• The founder started NOR with the intention and desire to create something. NOR is a tool for venture creation, capitalised from the founder's personal wealth.

## (4) early-phase stakeholders of venture

- The notion of a stakeholder to the founder is taking care of your business ecosystem as if they were shareholders.
- Early stakeholders had a lot of fun to work on what they were passionate about there is potency to the shared interest and common business and of working together.
   Stakeholders have implicit trust and have autonomy within the boundaries of NOR.

#### 4.2 CAN

## **Case description**

CAN is in the pharmaceutical industry. It does not have revenues and falls within the UoA. The venture is engaged in the production and commercialisation of vaccines for pneumonia. The venture had a precursor incepted in 2001. The precursor was largely exploration effort to test market potential for several projects. The venture was renamed as focus shifted to the manufacture of a sole pneumonia product. The venture gained momentum in 2008 with the purchase of a discounted, fully equipped, and operationally validated production facility in Canada.

#### **Interview setting**

The interview is initially planned as a face-to-face meeting. However, the informant, both a founder and the CEO, is directed to engage with critical stakeholders and unable to meet in person. The interview is held over Skype on 29 March. The informant explicitly agreed to be recorded.

The semi-structured format is discarded and an unstructured interview format is adopted because the accumulation of data was rich and touched on all themes. The data is therefore less structured according to theme but is more comprehensive concerning the entrepreneurial context and with regard to the timeline of entrepreneurial process. In relation to the entrepreneurial context, this relates well to the dynamic time and uncertainty constraints.

Listening in the unstructured interview format was easily performed as the flow of conversation flowed smoothly. Prompts for clarification were sparse as the relevant data is coherent. Guided discussion after having discussed the factual elements of the entrepreneurial context uses the informant's perspectives to further explore its nature.

### General discussion points

- Consideration of EESs arose indirectly as discussion focuses more on the facts and opinionated of process of CAN's entrepreneurial context.
- "To do useful work you need raw energy, or enthalpy, and information energy, or entropy. The way to make mistakes is to have only enthalpy or entropy. You need them both together to do useful work."
- Information energy is a prerequisite. The informant is well connected in industry to gather information and capital. In the informant's methodological approach to reduce uncertainty, expression and re-expression comes first. This imputes a causal logic of entrepreneurial i.e. Do I have this resource? Do I need this resource? Internally, generic labour is actively avoided. This depletes venture resources that might be committed to value adding activity bound by time constraint.
- Venture initially addressed the adult market for pneumonia vaccines. This is borne of
  opportunity where half the global supply disappeared when a market incumbent exited
  the adult market. The market for child pneumonia vaccine is later addressed with a
  stakeholder interest to target this market in Asia. Therefore, existing market demand
  frames the contextual uncertainty of venture. The differential labour for value
  transformation exists but CAN innovates the process.
- The informant displays a high level of entrepreneurial labour to transform value stream expression from a market discovery process into a market allocative process.

The approach is persistent and methodological to correctly express the value stream potential for VVG under a contextual uncertainty of analysis and not estimation.

Governments are a nuanced latent stakeholder. Venture formation capitalises from
contextual availability of national grants. Government regulation at a national and
international is inhibitive in terms of producing biopharmaceutical products for
market. There are large barriers to entry in terms of sunk costs.

### Thematic discussion points

### (1) value pursuit of venture

- The venture expresses the potential of a value stream contextualised to favourable market conditions. In the entrepreneurial context of CAN, limited contextual uncertainty is therefore attributed to the market, but high contextual uncertainty is attributed to regulatory procedures, though they are stable and predictable. High operational uncertainty derives from scarce venture resources with regard to VVG. Contextual uncertainty deriving from clinical trials is not apparent in discussion: the informant has knowledge of the use value output but innovates on the use value transformation.
- The VVG is constrained by vector space as prior labour commitments limit outputs are to be derived.

### (2) work processes of venture

- The work processes of venture are largely observed to be the methodological planning
  of the informant with regard to venture inputs, labour transformation, and venture
  outputs. The confluence of opportunity shaped the expression of the value creation
  efforts over time
- The work structure is noted to be very flat. There is no distinction in role; all internal EESs are enabled to perform independently and efficiently with regard to communal value creation. There are no boundaries in task distinction and no internal gatekeepers as might arise in a hierarchical structure. Effort to "expand what a person can do with as little restriction as possible" is consciously applied.

## (3) background and venture affiliation of the interviewee

• The informant holds a PhD in Biology. Previously, the informant was involved in full time consulting for biotechnology for two years. Around 2004-2005 the informant was involved in creating a vaccine for HIV as the president of a venture in Asia. This venture effort failed after a large investment in facilities occurred. "This was a good experience in entrepreneurship." Part ownership of that company endowed the informant with personal capacity to fund CAN. Experience and connections in the industry endow the informant with capacity for a predictive search of opportunity

### (4) early-phase stakeholders of venture

- The venture is founded as a family activity.
- The acquired production facility had been unoccupied for a length of time. Bargaining power in the relationship with its supplier facilitated favourable terms. A facility manager is hired 2012.
- University affiliation with a university programme to embed differential labour from chemical engineering students occurs. This is an activity to operationalise the expressed vaccine output. Affiliation with a university engenders important patent license for the venture.
- An intended distributor of the commercial product in Asia adopted a funding role in 2011. A new company was formed to accommodate their financial stake. Their involvement precipitated targeting the children market for the vaccine. Venture formation is dynamic according to context specificity.
- Timely philanthropic donation occurs before resources are exhausted. Their stake is intangible with respect to the intended use value output of venture
- Clinical trials are implied. It is unclear if these are performed on human patients and
  what their salience would be. Regardless, their affiliation as a stakeholder category
  would be mandated by regulation.
- Latent stakeholders are acknowledge with respect to the broader society and economy

#### 4.3 AUT

## **Case description**

AUT is in the IT and web industry. It was initially a data-purposed venture to aggregate data for content analysis of expansive user information. After establishing the venture, securing venture capital financing and locating in a start-up accelerator, the venture failed to grow in the conceived manner.

A complete re-expression of the venture was rooted in previously observed opportunity based on a large quantity of data and a capacity for content analysis. In July 2013, a search service took priority over the prior data store. Existing infrastructure was repurposed to create a privacy-preserving search service. The venture was never revenue generating. This depicts that the case falls with the UoA.

### **Interview setting**

The informant is a founder and the CEO of the venture. Solicited by email, the interview took place at a café in Vienna on 23 April. The informant explicitly agreed to be recorded allowing focus to be purely conversational. In this respect, the setting did not have observable effect on the extraction of relevant data.

The focus of the interview touched on the previous expression (E1) and the current venture service (E2). The informant succinctly and comprehensively addressed each theme per a semi-structured interview format. In departure from the interview protocol to pursue additional lines of inquiry, several points of clarification due to poorly worded questions lead to leading statements. However in the context of the greater interview, the data gathered is relevant to the entrepreneurial context and to EESs.

### General discussion points

• In E1, AUT incorrectly expressed the value potential a product feature and exhausted a portion of venture resources. In E2, AUT expresses successful outcome by monetising user data in a neutral manner deriving anonymous statistics for commercial sale. There is however anticipated flexibility in an emergent path to revenue. Notably, monetising the value stream seemed of secondary consideration for the informant who neutrally perceived this eventual future outcome. This suggests that

the commercial entities later sustaining the value stream are neither embedded nor critical stakeholders. More critical to the nature of the value stream are service users.

- An ability to recognise which geographical regions search users came from would have allowed segmented functionalisation of E2 to express possible value capture.
   However, there was no estimation of how many user instances were running because the nature of the search service accumulated data in a distributed manner.
- A dual focus of customer markets, where revenue would be derived from consumer interaction or business interaction would have stretched venture resources too far.
- The team structure is flat and this is a good thing to engender self-organisation. Whether this is accommodating of behavioural characteristics of EES is not clear. For example, the shared information via a flat structure might serve to motive individuals in terms of understanding how labour input contributes to a whole. In such a case there is room to further consider the non-applicability of resource-based transactions to a framework of EESs. However, EES integration occurs according to labour task. This is a return to the notion that venture resource requirements will be prioritised according to resource-based transaction.

#### Thematic discussion points

### (1) value pursuit of venture

Of E1 and E2, value for the venture is associated with user acquisition; it is the priority. In favourable conditions of contextual uncertainty, the user base of E2 search service grew significantly. We consider only E2 below:

• The value stream output is an augmented perceived use value for web searchers: First, the search is open in nature where competitive incumbents adopt a black box model. Second, the underlying search algorithm engendered innovation with respect to how content was prioritised. Third, the search service is privacy-preserving. The innovation pivoted around an intangible use value that weakens the validity of a resource-based transaction assumption.

- Timing of service launch coincided with external factors augmenting the perceived use value of transparency and trust. Namely, these were the documents released by Edward Snowden.
- Value for the venture and the Venture Capital input is attributed directly to user growth. User acquisition is organic. Press covered the use value of the E2 service.
   Indirect feedback regarding their proximate geographical locations was valuable.

## (2) work processes of venture

- The work processes are mutually dependent, and independently performed. In this respect, a flat organisational structure was self-organising. "It doesn't make sense to have a hierarchal structure in a company that is small and still forming." A small team size was receptive and significantly influence by dynamic forces. Things change and task boundaries or responsibilities are shifting. There were no formal hours; progress centred on task completion.
- Stand-up meetings to discuss task occurred every day. Unbound creative meetings
  took place on Friday. Whether this was in attempt to better express value potential for
  the firm or an outlet to accommodate EES behaviour is uncertain. They are considered
  mutually reinforcing. Every Monday, development based meetings set goals.
- The differential labour of the venture stakeholders visibly contributed to steer the venture in an emergent direction.

# (3) background and venture affiliation of the interviewee

- The informant initially studied visual arts. Independence was a large appeal for all
  personal pursuit of the informant. The informant had been involved in a number of
  projects not bound by geography.
- The informant is a founder and the CEO of the venture. Explicitly, the label was used for accountability because the work processes were of a flat nature. The informant exhibits signs of entrepreneurial labour in systemic construction of an emergent value stream: "see where we are, and where we go."

## (4) early-phase stakeholders of venture

- Venture foundation occurred in cooperation with an E1 competitive stakeholder of similar product. They became friends and formed venture together.
- Venture Capital was used to fund the venture. Due to the relationship, failure of E1 and E2 prohibited further influx of resources to sustain E2.
- A public relations organisation is enfolded in E1 but discarded. At the peak AUT included ten labourers internal to the organisation.
- An inner circle of labourers accounted for a higher propensity of labour commitment. The boundaries of the inner circle are flexible people come in and out. Fundamentally, the core team consisted of labourers who would address venture requirements of high criticality, whatever they might have been. Additional internal labour of lesser value stream scope would have increased overhead, and coordination would have suffered. Selection criteria to include a person with venture is predominantly characterised with perceived fit on the team; several were turned down. Finding the right people was difficult; a head hunter was used to locate differential labourers and embedded in other start-up ecosystems was invaluable to meet other people. Whether this was also a benefit to address disperse knowledge is unclear but rather implicit.
- The ESSs all contributed to product expression indirectly. The valuable EESs had the ability to "think outside the box." All EESs were informed of the expressions that venture commits to

# 5 Discussion

In its own right, the entrepreneurial context is appealing it unifies the three streams of literature that conceive entrepreneurship as attributed to an organisational context, to performance criteria, or to behaviours. Each of these facets is better depicted as part of a process of opportunity expression and VVG. Contextually, the process is dynamically bound in time due to resource constraints and conceived in a shifting regime of uncertainty.

The EES is internally valid only within the entrepreneurial context. From a resource dependent venture perspective, it depicts the salience of stakeholders in terms of embeddedness and criticality. Its application is valid where perception of bargaining power will determine the nature or resource integration into venture with respect to external and competing resources. The model is however suggested to be unreliable where intangibles are considered. (McVea and Freeman 2005; Garriga 2014)

NOR is mistakenly identified to be contained in the UoA. The incongruence with study arises from the fact that a single preeminent value stream cannot be identified. In this respect, the EES framework breaks down because the nature of stakeholders independent. Select observance of relation to the framework is due to a stakeholder manifesting some feature of resource control with regard to the ternary modalities of EES integration with respect to the value component that they relate.

The more correct depiction of NOR is to consider it fostering the entrepreneurial context for subsidiary venture. Any coherence of NOR with the research purpose is related to exhibited characteristics of stakeholders in the entrepreneurial context. However, the case interviews are included because they depict the entrepreneurial context of venture from an external perspective. This is interesting for insight of exploratory work.

What NOR shows is that it is suitable to conceive expression as a value potential of operationalised opportunity (NOR1/2/3), and that VVG will occur and seek to align with expressed opportunity by virtue of KPIs and value events. (NOR1)

Indirectly, NOR 1,2 and 3 treat stakeholders. While the salience of NOR will exist under a model that is not well explained by the EES framework, the data suggest that the stakeholder

network for value creation is flat, emergent, and grows according to venture value needs. This is further supported with data from CAN and AUT.

Where data from CAN should be liable to treat external stakeholders in terms of embeddedness and criticality by virtue of a single coherent value stream, they tend not to. Consider that CAN EESs philanthropic donation. There resource exchange is unidirectional and the stakeholder entity does not integrate with the value stream regardless of an anticipated shared interest in the outcome of the venture.

AUT data also suggests that criticality and embeddedness are not good salience categories. Consider that the venture sought for differential labour, ultimately relying on a head-hunter, but turned several down because of a poor perceived fit on the team.

Taken together, it appears inappropriate to consider resource dependence as the sole saliencies for integration in venture. A more appropriate model would at an EES level would be the "Names-and-Faces" approach.

However, consider that the resource dependence relationship is apparent where in NOR1 and 2, the firm would consciously distance itself from subsidiaries and act as paid consultants in apparent removal of human relationships. To these ends, perceived bargaining relationships would dominate the resource saliences only in relation to where alternatives exist. This presupposes that the firm would select an alternative on merit of resources alone. This is not reliable because NOR 3 suggests that resource dependencies are subordinate to actual human relationships where customers are liable to be lenient to poor quality in the beginning.

## How does start-up enterprise integrate stakeholders into value creation?

External to venture, the resource-based framework for saliency would suggest integration where exchanges are dominated by relative bargaining relationships of stakeholders with respect to economic substitution or switching costs and in the absence of personal relationships. However, these personal or intangible relationships are observed in data.

Therefore, venture will integrate stakeholders into value creation not according to venture resource requirements alone.

How does start-up enterprise manage stakeholders integrated in the process of value creation?

What CAN, AUT (and NOR1, 2 and 3 despite it being outside the UoA) do show is that the management of EESs is largely self-organising where highly-cooperative and autonomous individuals are driven to the shared interest or goals of venture. This is also supported in literature concerning stakeholder networks.

The practical implications for entrepreneurs are to pay attention to personal characteristics, and to ensure that flat network structures encourage cooperation and participation in value creation. Future exploratory research might prove fruitful in deriving an EES framework from entrepreneurial behaviour and stakeholder theory. Additional examination of the entrepreneurial context might also be interesting.

## References

- Abzug, R. and N. J. Webb (1999). "Relationships between nonprofit and for-profit organizations: a stakeholder perspective." <u>Nonprofit and Voluntary Sector Quarterly</u> **28**(4): 416-431.
- Acs, Z. J. (2010). High-impact entrepreneurship. <u>Handbook of entrepreneurship research</u>, Springer: 165-182.
- Acs, Z. J. and D. B. Audretsch (2010). Introduction to the 2nd Edition of the Handbook of Entrepreneurship Research. Handbook of Entrepreneurship Research, Springer: 1-19.
- Acs, Z. J. and D. B. Audretsch (2010). Knowledge spillover entrepreneurship. <u>Handbook of Entrepreneurship Research</u>, Springer: 273-301.
- Acs, Z. J., P. Braunerhjelm, et al. (2009). "The knowledge spillover theory of entrepreneurship." <u>Small Business Economics</u> **32**(1): 15-30.
- Aldrich, H. E. and A. Kenworthy (1999). "The accidental entrepreneur: Campbellian antinomies and organizational foundings." <u>Variations in organization science: In honor of Donald T. Campbell</u>: 19-33.
- Aldrich, H. E. and M. A. Martinez (2010). Entrepreneurship as social construction: a multilevel evolutionary approach. <u>Handbook of Entrepreneurship Research</u>, Springer: 387-427.
- Alvarez, S. A. and J. B. Barney (2010). "Entrepreneurship and epistemology: The philosophical underpinnings of the study of entrepreneurial opportunities." <u>The Academy of Management Annals</u> **4**(1): 557-583.
- Alvarez, S. A., J. B. Barney, et al. (2010). Debates in entrepreneurship: Opportunity formation and implications for the field of entrepreneurship. <u>Handbook of entrepreneurship research</u>, Springer: 23-45.
- Audretsch, D. (2012). "Entrepreneurship research." Management Decision **50**(5): 755-764.
- Azevedo, J. (2002). "Updating organizational epistemology." <u>Companion to organizations</u>: 715-732.
- Baker, T. and R. E. Nelson (2005). "Creating something from nothing: Resource construction through entrepreneurial bricolage." Administrative science quarterly **50**(3): 329-366.
- Berger, P. L. (1969). "Luckmann. 1966. The social construction of reality." A treatise in the sociology of knowledge, NY: Doubleday.
- Black, J. A. and K. B. Boal (1994). "Strategic resources: Traits, configurations and paths to sustainable competitive advantage." <u>Strategic management journal</u> **15**(S2): 131-148.
- Bowman, C. and V. Ambrosini (2000). "Value creation versus value capture: towards a coherent definition of value in strategy." <u>British Journal of Management</u> **11**(1): 1-15.

Brinckmann, J., D. Grichnik, et al. (2010). "Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning—performance relationship in small firms." Journal of Business venturing **25**(1): 24-40.

Burt, R. S. (1992). "The social structure of competition." <u>Networks and organizations:</u> <u>Structure, form, and action</u> **57**: 91.

Bygrave, W. D. (2009). The Entrepreneurial Process. <u>The Portable MBA in Entrepreneurship</u>, John Wiley & Sons, Inc.: 1-26.

Campbell, D. (1974). Evolutionary epistemology. <u>The philosophy of Karl Popper</u>. Lasalle, Open Court. **14:** 413-463.

Carree, M. A. and A. R. Thurik (2010). The impact of entrepreneurship on economic growth. <u>Handbook of entrepreneurship research</u>, Springer: 557-594.

Coff, R. W. (2010). "The Coevolution of Rent Appropriation and Capability Development." <u>Strategic management journal</u> **31**(7): 711-733.

Dew, N., S. Read, et al. (2008). "Outlines of a behavioral theory of the entrepreneurial firm." <u>Journal of Economic Behavior & Organization</u> **66**(1): 37-59.

Driscoll, C. and M. Starik (2004). "The primordial stakeholder: Advancing the conceptual consideration of stakeholder status for the natural environment." <u>Journal of Business Ethics</u> **49**(1): 55-73.

Eckhardt, J. T. and S. Shane (2010). An update to the individual-opportunity nexus. Handbook of entrepreneurship research, Springer: 47-76.

Eckhardt, J. T. and S. A. Shane (2003). "Opportunities and entrepreneurship." <u>Journal of management</u> **29**(3): 333-349.

Freeman, R. E. (2010). <u>Strategic management: A stakeholder approach</u>, Cambridge University Press.

Freeman, R. E., J. S. Harrison, et al. (2007). <u>Managing for stakeholders: Survival, reputation, and success</u>, Yale University Press.

Freeman, R. E., J. S. Harrison, et al. (2010). <u>Stakeholder theory: The state of the art</u>, Cambridge University Press Cambridge.

Frooman, J. (1999). "Stakeholder influence strategies." <u>Academy of management review</u> **24**(2): 191-205.

Garriga, E. (2014). "Beyond Stakeholder Utility Function: Stakeholder Capability in the Value Creation Process." <u>Journal of Business Ethics</u> **120**(4): 489-507.

Gartner, W. B. (1990). "What are we talking about when we talk about entrepreneurship?" <u>Journal of Business venturing</u> **5**(1): 15-28.

Gartner, W. B., N. M. Carter, et al. (2010). Entrepreneurial behavior: Firm organizing processes. <u>Handbook of entrepreneurship research</u>, Springer: 99-127.

Hancock, D. R. and B. Algozzine (2006). <u>Doing case study research: A practical guide for beginning researchers</u>, Teachers College Press.

Hayek, F. A. (1945). "The use of knowledge in society." <u>The American economic review</u>: 519-530.

Hisrich, R. P., MD (1998). Entrepreneurship. Boston, Irwin/McGraw-Hill.

Holmen, E. and A.-C. Pedersen (2003). "Strategizing through analyzing and influencing the network horizon." <u>Industrial Marketing Management</u> **32**(5): 409-418.

Hsieh, P.-F., C.-S. Lee, et al. (2012). "Strategy and process of value creation and appropriation in service clusters." <u>Technovation</u> **32**(7–8): 430-439.

Jawahar, I. and G. L. McLaughlin (2001). "Toward a descriptive stakeholder theory: An organizational life cycle approach." <u>Academy of management review</u> **26**(3): 397-414.

Katz, J. and W. B. Gartner (1988). "Properties of emerging organizations." <u>Academy of management review</u> **13**(3): 429-441.

Kirzner, I. M. (1999). "Creativity and/or alertness: A reconsideration of the Schumpeterian entrepreneur." The Review of Austrian Economics 11(1): 5-17.

Kirzner, I. M. (2009). "The alert and creative entrepreneur: a clarification." <u>Small Business</u> <u>Economics</u> **32**(2): 145-152.

Kochan, T. A. and S. A. Rubinstein (2000). "Toward a stakeholder theory of the firm: The Saturn partnership." <u>Organization science</u> **11**(4): 367-386.

Koppl, R. and M. Minniti (2010). Market processes and entrepreneurial studies. <u>Handbook of</u> entrepreneurship research, Springer: 217-248.

Laplume, A. O., K. Sonpar, et al. (2008). "Stakeholder theory: Reviewing a theory that moves us." <u>Journal of management</u> **34**(6): 1152-1189.

Lepak, D. P., K. G. Smith, et al. (2007). "Introduction to Special Topic Forum: Value Creation and Value Capture: A Multilevel Perspective." <u>The Academy of Management Review 32(1)</u>: 180-194.

McGrath, R. G. and S. Desai (2010). Connecting the Study of Entrepreneurship and Theories of Capitalist Progress: An Epilog. <u>Handbook of entrepreneurship research</u>, Springer: 639-660.

McMullen, J. S. and D. A. Shepherd (2006). "Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur." <u>Academy of management review</u> **31**(1): 132-152.

McVea, J. F. and R. E. Freeman (2005). "A Names-and-faces approach to stakeholder management how focusing on stakeholders as individuals can bring ethics and entrepreneurial strategy together." <u>Journal of Management Inquiry</u> **14**(1): 57-69.

Merton, R. K. (2008). Focused interview, Simon and Schuster.

Miller, D. and J. Shamsie (1996). "The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1965." <u>Academy of management journal</u> **39**(3): 519-543.

Mitchell, R. K., B. R. Agle, et al. (1997). "Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts." <u>Academy of management review</u> **22**(4): 853-886.

Murman, E. M. (2002). <u>Lean enterprise value</u>: insights from MIT's lean aerospace initiative, Palgrave Macmillan.

Parmar, B. L., R. E. Freeman, et al. (2010). "Stakeholder theory: The state of the art." <u>The</u> Academy of Management Annals **4**(1): 403-445.

Patton, M. Q. (2005). Qualitative research, Wiley Online Library.

Phillips, R., R. E. Freeman, et al. (2003). "What stakeholder theory is not." <u>Business Ethics</u> <u>Quarterly</u>: 479-502.

Porter, M. E. (2008). <u>Competitive strategy: Techniques for analyzing industries and competitors</u>, Simon and Schuster.

Read, S., N. Dew, et al. (2009). "Marketing under uncertainty: The logic of an effectual approach." Journal of Marketing **73**(3): 1-18.

Rowley, T. J. (1997). "Moving beyond Dyadic Ties: A Network Theory of Stakeholder Influences." <u>The Academy of Management Review</u> **22**(4): 887-910.

Sarasvathy, S. D. (2001). "Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency." <u>Academy of management review</u> **26**(2): 243-263.

Sarasvathy, S. D. (2008). Effectuation: Elements of Entrepreneurial Expertise, Edward Elgar.

Sarasvathy, S. D., N. Dew, et al. (2010). Three views of entrepreneurial opportunity. <u>Handbook of entrepreneurship research</u>, Springer: 77-96.

Sen, A. (2003). On ethics and economics. Cambridge, MA, Blackwell Publishing.

Shane, S. (2000). "Prior Knowledge and the Discovery of Entrepreneurial Opportunities." Organization science 11(4): 448-469.

Shane, S. and S. Venkataraman (2000). "The promise of entrepreneurship as a field of research." <u>Academy of management review</u> **25**(1): 217-226.

Vandekerckhove, W. and N. A. Dentchev (2005). "A network perspective on stakeholder management: Facilitating entrepreneurs in the discovery of opportunities." <u>Journal of Business Ethics</u> **60**(3): 221-232.

Venkataraman, S. (1997). "The distinctive domain of entrepreneurship research: An editor's perspective." <u>Advances in entrepreneurship, firm emergence, and growth</u> **3**: 119-138.

Von Hippel, E. (1994). ""Sticky information" and the locus of problem solving: implications for innovation." Management science **40**(4): 429-439.

Wiltbank, R., N. Dew, et al. (2006). "What to do next? The case for non-predictive strategy." Strategic management journal **27**(10): 981-998.

Yin, R. K. (2000). "Rival explanations as an alternative to reforms as experiments." <u>Validity and social experimentation: Donald Campbell's legacy</u> 1: 239-266.

Yin, R. K. (2009). Case study research: Design and methods, sage.