

8. Seeing The World Differently

It is because men have been ignorant of the probable consequences, or have disregarded them, that human history presents such a picture of the devastation and waste of human energy and of the wreck of human hopes. If there is any salvation for the human race from the woe and misery it is in knowledge and in training to use knowledge. (Sumner, 1902: 73)

I am very fortunate to have so many students share with me they're ideas on how they may create some form of new value in they're communities. Many of the ideas I hear are not merely pipe dreams, something that someone would love to achieve if they only ever gained the opportunity. Quite often, students have come to a realization that the time is right, that their motivation is in place and permissions have been granted for them to step forward and indulge an adventure. While I cannot see into the future with any more clarity than any other person, my life experience as an entrepreneur and an EE educator give me certain insights. Insights that raise concerns from time to time about just what is being risked and the extent to which I have encouraged any such contemplation. This chapter represents my response to ensuring my students have dotted as many i's and crossed as many t's as is possible within the time and other resource constraints they confront.

It is my intention to walk you methodically through this process. For this chapter is the heart and soul of the book. It is the primary contribution I seek to make. The preceding chapters have laid the groundwork for the thinking that has accompanied the development of this framework. My confidence in this framework is buoyed by hundreds of students experiencing it and acknowledging the new view of the world they have developed. I will make no outrageous claims that the use of this framework will increase the success rate for any start-up; for I do not wish to contradict my early statements regarding the separation of purpose and consequences. I merely state my confidence that the framework I will introduce you to will enable students to advance they're understanding of the factors that will undoubtedly influence the success or otherwise of the efforts to create new value. Rather than asking questions of you the reader towards the end of the chapter as is my usual practice, I will undertake to ask you a host of questions as proceed through

the different sections of the framework. I will also endeavour to supply examples related to each stage so that the framework's components can fit together in your mind as well.

Whilst the last component of this framework is the process of energy, it is important that I draw attention to it at this point in time to alert you of its significant importance. The concept of energy was developed by Odum (1995) and is defined as available (or stored) energy of one kind previously required directly and indirectly to make a product or service that can be converted into useful energy by other entities within an ecosystem. It is for all intentions a form of invisible energy that can be expected to influence the success or otherwise of entrepreneurs' efforts. The framework explicitly seeks to create the cognitive powers to see this invisible energy and to use it productively where possible. So while many of the components of the framework are well known and accepted, several are concepts drafted in from the domain of ecology, hence the title of environment interaction framework. Together, I believe they make this framework innovative and useful for both educator and student.

THE ENVIRONMENTAL INTERACTION FRAMEWORK

The Idea

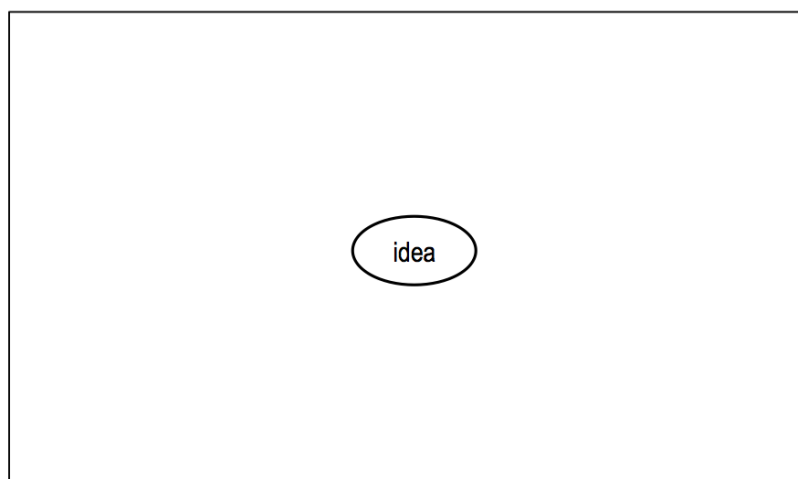


Figure 8.1 The Idea

Ideas are the lifeblood of social change. Entrepreneurs have ideas that challenge the status quo and thus are agents of social change. My discussion of the environmental interaction begins with the emergence of an idea (see Figure 8.1 above). Perhaps an idea related to profit-oriented motives or more altruistically conceived. The constant supply of ideas into a society provides the starting point of the framework. However, the framework is less concerned with ideas in aggregate than it is with individual ideas.

The Resource Profile

The idea a student voices is not merely an idea in isolation; it is an initial artefact of a potential agent of change. A dialogic relationship (Bryat and Julien, 2001) exists between the idea's conceiver and the idea itself. This is highlighted in Figure 8.2 below with the addition of the notations SC, HC and FC, which account for the student's social, human and financial capital.

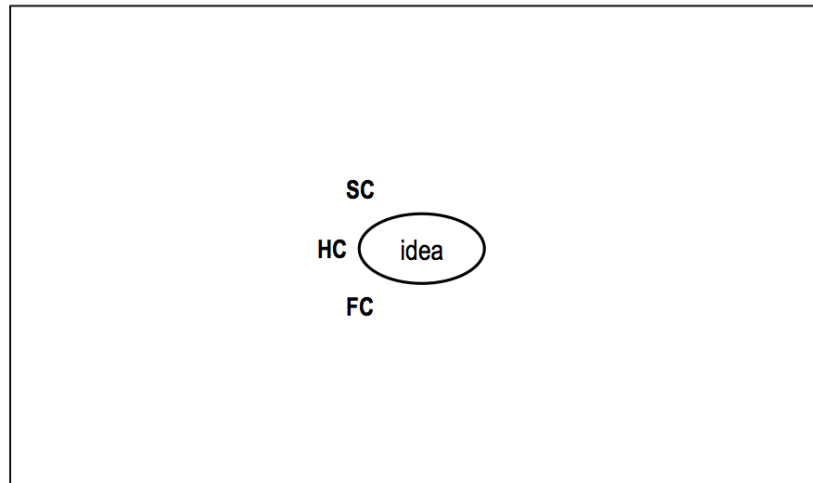


Figure 8.2 The dialogic relationship between student and idea

Essentially, the idea cannot exist in a vacuum, as cannot the agent of change without an idea. As discussed in the previous chapter, the first concern for the student is the extent of social relations they currently hold that would aid their future development of the idea. Just who should be known to advance the student's participation in championing the idea? To the extent that the student knows persons assumed to be able to contribute to the idea's development, how well are they known? Could they be relied upon to assist the student? Could they introduce the student to other important

persons? Could they be willing to also become involved in the idea's development?

The student's next concern relates to what particular knowledge and/or expertise would be required to develop the idea? That is, what type of human capital would be necessary to develop the idea? If the student doesn't have the required expertise, might their social capital provide access to it? Or, might such expertise be relatively easy to acquire regardless? How many resources might need to be acquired to move this idea forward? Would the student be expected to be able to gain access to any such resources? Or, stated another way, do they have sufficient financial capital to move forward in championing this idea?

One can easily image a bank employee taking a redundancy payment and looking to establish an independent financial services business. Having been trained by his or her past employer and gained the accreditation to practice in the industry, they would be well set to exploit the social contacts cultivated naturally whilst an employee in the industry. Alternatively, consider the boilermaker welder who has always dreamed of opening a bakery so that he can share his grandmother's various tried and true recipes. Lacking any trade background training in his chosen industry, and not knowing any industry contacts, he may well struggle.

The initial questions at this stage are relatively simple. Is there sufficient alignment of the student's (and/or their team's) social human and financial capitals to consider their idea feasible at this point in time? If not, can these deficiencies be overcome easily? Assuming the answer is yes, let's move along to the next stage of the framework.

Cognitive and Socio-Political Legitimacy

Independent of the student's thinking and their resource profile, some degree of legitimacy most likely exists in relation to their idea. In Figure 8.3 below, both cognitive and socio-political legitimacy have been added to the framework. Two issues concern the student at this stage of their evaluation. First, is a concern for the extent to which the features and/or underlying philosophies of their idea are known within their community? That is, does their idea already have cognitive legitimacy, and if so, by whom and how many? To the extent that their idea already has that taken for granted status in society (Aldrich, 1999), they may be onto a winner. Alternatively, perhaps while society knows about it, perhaps important sections of society disapprove of the idea. Perhaps worse still, it is illegal or controversial in terms of its future development.

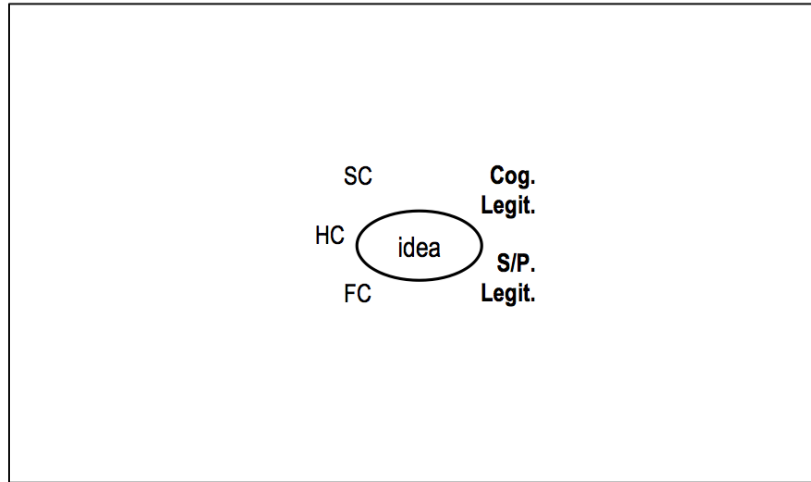


Figure 8.3 The legitimacy of the idea

Consider a young couple that wish to open a bungee jumping operation at a scenic location frequented by many adventurous white-water rafters. Lets assume that collectively they have a sound resource profile having worked in similar tourist ventures overseas and being actively involved in the adventure tourism industry. Lets assume that finance and access to a physical location are also not a problem, so far so good.

In terms of legitimacy, they have zero problems with cognitive legitimacy. As an activity, bungee jumping is well known and a reasonable level of their local community has either jumped elsewhere or indicated they would be willing to give it a try. However, in their local community, bungee jumping is considered very high risk by certain stakeholders, essentially it lacks socio-political legitimacy. Consequently, it is not possible to gain permits/licences to operate such a business, despite the likelihood of consumer demand.

At this stage, several questions emerge that need careful consideration. Consider an idea that has both cognitive and socio-political legitimacy, this is good news, and on the basis that a suitable resource profile is available, other questions surrounding these issues will emerge as we get deeper into the framework. Alternatively, consider an idea like the bungee jumping example. While they don't have to educate the consumer as to what the service is, they do need to expend potentially considerable energy trying to gain regulatory support. Do they have the sufficient resource to invest into such potentially time consuming activities? Or, switch things around, they have socio-political legitimacy but little if cognitive legitimacy exists. How much will it

cost in time and/or money to educate the potential consumer about the nature of the service? Might they be trying to develop primary demand for a new and novel service, or selective demand for a competing service? If their budget is tight, can they afford to attempt to do this? Finally, consider the case where neither form of legitimacy exists. Can they even try to educate the public when there is no guarantee that the service will ever exist? Given the cash-strapped nature of most start-ups, we need to ensure our students are asking these questions. The next component of the framework is the external environment.

The External Environment

Ideas always exist in a context. Legitimacy is a property of a local and/or external environment. We must ensure that the properties of the environment are fully understood as most processes contained within the framework operate in sync with the other properties of the environment.

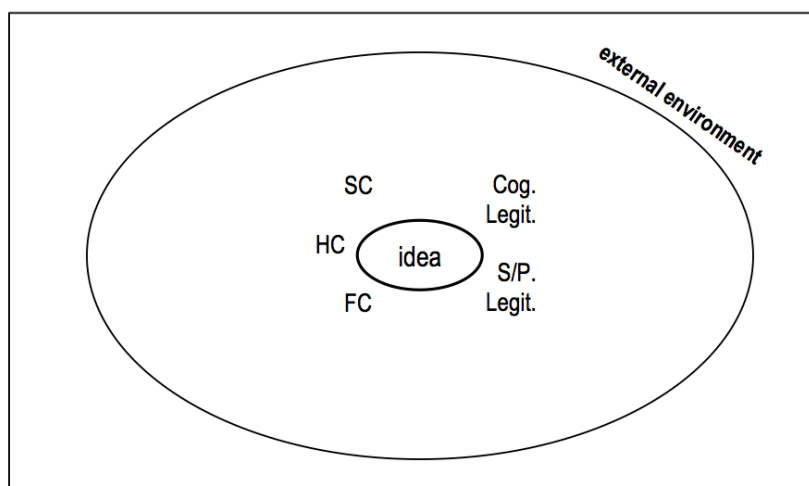


Figure 8.4 The external environment

With reference to Brandon's (1990) conception of the dimensions of the environment, we can consider the external environment. The external environment consists of all elements and factors that could reasonably be expected to influence the development of the idea. Whilst this overarching view of the environment does little to highlight which factors are of most importance to one idea or another, it is nevertheless very important. Students must understand that the environment that we so often speak of so casually

can be viewed at macro and micro levels. In this instance, we need for our students to be mindful of broad trends, for example, high interest rates that can influence many initiatives in society. It is also important that the student starts to make a connection between what factors in a community relate to the properties of the external environment that impact the degree of legitimacy that may exist for any given idea.

The Selective and Ecological Environments

Next, Brandon (1990) identifies a second dimension of the environment as the *ecological* environment, which refers to a narrowing down of focus, as illustrated in Figure 8.5 below. Now we are only concerned with those factors that specifically contribute to developing a specific idea. This could be the availability of any specific resources important in the idea's development. The third and last form of environment is the *selective* environment. The selective environment refers to those factors of the external environment that would specifically determine the differential fitness of any aspect of the idea's assumed interacting elements.

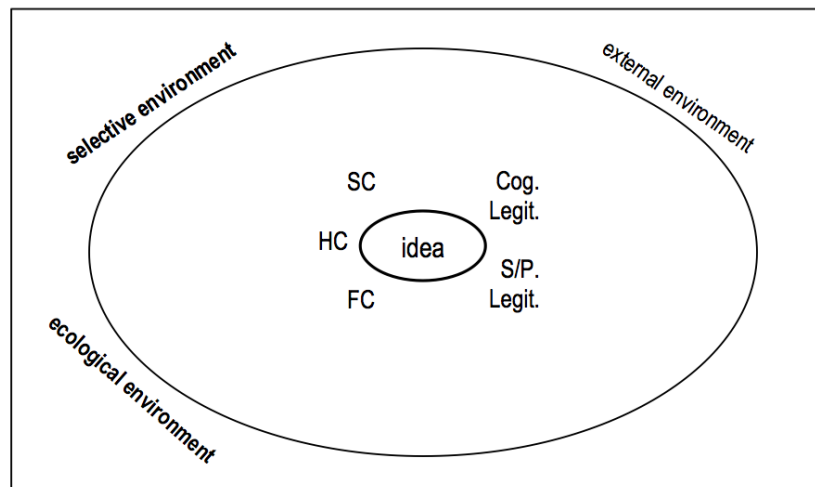


Figure 8.5 The selective and ecological environments

Under such a proposal, the *general* environment can exist independently of an idea, and aspects of it can be altered by other ideas, without any positive or negative impact on the nature of selection. However, the *selective* environment has no existence independent of the idea; it represents the actual *niche* of the idea. Once the dimensions of a given environment can be

accounted for, the ability of one or more ideas/initiatives to alter these dimensions can be considered.

Returning to the example of our boilermaker welder and his proposed bakery, assuming he has sorted out his resource profile, understanding the selective and ecological environment will be of great importance. In this example we need to consider which resources a bakery most needs from its ecological environment. Two come to mind. First, to be able to operate, they will need skilled staff. Assuming there is a reliable supply of qualified people, the next resource is money. The money must come from customers. Lets assume he intends to operate in the suburb, Poorville. In Poorville, income levels are very low and most locals buy their bakery products from the major supermarkets that sell cheap affordable bakery products. So while the ecological environment can supply some of the required resources, the negative influence of the selective environment may be too overpowering in this example.

Alternatively, if our boilermaker changed from a bakery to a bottle shop, things might look better. Now there is less reliance upon the ecological environment because any staff need not be qualified with a specific trade. Given that a disproportionate amount of the incomes of the locals in Poorville are spent on alcohol, the selective environment will be not as difficult to overcome. However, many locals disapprove of new bottle shops entering Poorville and this has lead to less socio-political legitimacy around the nature of this idea.

A better way of overcoming these issues may be to think of relocating the proposed bakery to the neighbouring suburb of Richville. There, higher incomes levels are common. There is still access to plenty of qualified staff and the locals tend to ignore the inferior quality bakery products from the major supermarkets. Leaving competition aside at this stage, the selective and ecological environments both look supportive of the idea.

Once we open our students' eyes to the various positives and negatives of the selective and ecological environments that relate to their specific idea, many questions arise. We need to ensure our students' eyes are lowered to consider what actual success factors are available and what factors are potentially working against the idea. If we ask our students to consider the places where other similar ideas have worked and/or failed, we can invite many questions. Why do we think someone has failed or succeeded? Are there resource shortages common to this idea? Are the community perception issues related to the idea? Are their legal issues related to the idea? Are there competition or resource sharing issues related to the idea? Drawing our students toward a consideration of such questions requires of them to develop an understanding the process of social change. This is the next stage of the model that our students need to master. When all is said and done, all change can be reduced to the three elements of the evolutionary approach.

The Process of Variation, Selection and Retention

In recent times, Aldrich (1999) has championed the use of an evolutionary approach through which to enable scholars of entrepreneurship to explain change. In Figure 8.6 below, the process of variation, selection and retention (VSR) is placed within the space of the environment. This placement signifies the central role that these three processes play at the intersection of the factors present in the external, ecological and selective environments.

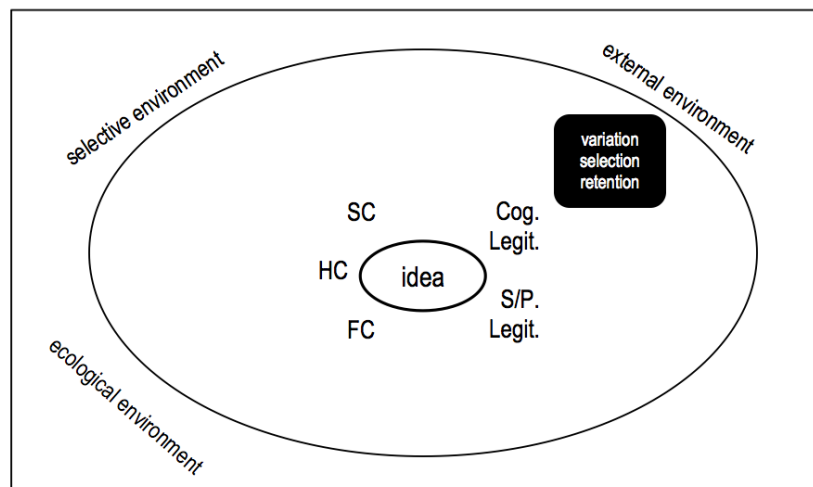


Figure 8.6 The evolutionary approach

The challenge for the students is to widen their appreciation of the contributing factors that ultimately relate to the process of social change. Let us first consider each of the VSR processes. Variations can be considered any change from the current norm. Unfortunately, many researchers assume that the norms of any specific practice can be quite widespread, arguing that certain established ways of organizing activities have achieved cognitive legitimacy with an industry. I tend to disagree, arguing alternatively that the level of diversity of organizing activities found is merely a mirroring of the variability of the selective and ecological environments related to any of the students' ideas.

This is a very important point to consider your position on. It is widely accepted that competing ideas and/or organizational forms are selected for or against within a common environment. Once we move away from a view that the environment and its contents should be accounted for in terms of the

macro level of the *external* environment, as discussed above, we expose ourselves to increased levels of environmental variation. If we accept that each idea has a *selective* environment that has no existence independent of that specific idea we have radically changed our conceptualization of the environment. We have in fact moved to a place in which the notion of selective neighbourhoods (Brandon, 1996) makes perfect sense. Now we are only concerned with the relative fitness of an idea within a given set of parameters that ultimately contribute to the success of otherwise of the idea. For example, if our boilermaker welder was to establish his bakery in Poorville rather than in Richville, his eventual success would be most likely explainable by environmental factors rather than any consideration of the variation in his idea vis-à-vis other similar ideas. I will further explain this idea when the notion of selection is addressed.

Until then, let us continue our thinking around the idea of what variations are. Viewed as changes from the norm, variations can be seen to occur intentionally or through blind or accidental processes (Aldrich, 1999). So we accept that through human agency we can search for different ways to achieve any given way of organizing an activity. This can be considered an intentional variation. Such processes can be inspired by pressure from the selective environment or perceptions about opportunities in the ecological or external environments. Alternatively, and potentially independent of the environmental or selection pressures, fortuitous events may see the emergence and/or awareness of new ways in which we may approach a situation. The relationship between variation and selection be they intentional or blind, is complex.

I suspect my explanation of this complexity is more complex than most due to my treatment of the environment and its dimensions. However, there are no apologies for any initial steeper learning as the eventual view afforded is significantly clearer and of more value to my students. To explain my different approach it is important to briefly state my philosophical position vis-à-vis my approach to using ecological and evolutionary concepts and theories. My approach is consistent with autecology and thus, I define the environment differently from more mainstream approaches such as Hannan and Freeman's (1977) organizational ecology (or population and community ecology). From an autecological approach, it is the idea (or firm) and its relations with the environment that of most interest. So, the idea (or firm) is not seen as merely an entity within a hierarchy. I therefore see each proposed idea (or firm) as potentially being 'adapted to a particular subset of the environmental circumstances that prevail within any locality' (Walter, 2013: 342). I also hold open the possibility that an idea (or firm) can influence any such particular subset in ways to increase its eventual fitness. I readily admit that my approach is very uncommon, but hold that it is consistent with such

ideas in mainstream ecology and that ultimately, this is what makes it so potentially useful to my students. Let us now return to the issue of selection.

From the simplest perspective, Aldrich (1999) notes that selection can occur through external or internal processes. So we can imagine that the lack of socio-political legitimacy could constitute an external process of selection, something that may lie beyond the control of the student. Alternatively, having sensed that there may be issues regarding securing socio-political legitimacy, the proponent of the idea may seek to arrange their activities in such a way to overcome any such problems. Now it is the proponent internally selecting for a specific approach, presumably from a given set of possible variations.

A key issue from the perspective of an idea (or firm) is; (1) are very similar ideas (or firms) operating and interacting in a common environment? That is, do they share common external, ecological and selective environments? If the answer is yes than the more traditional process of natural selection is a logical approach. We can assume that the environment will do an indiscriminate job of sorting the fit from the less fit. However, if the answer is no (i.e. because we incorrectly assume they (a) are similar, (b) interact and (c) experience a common environment, or we know this not to be true), then environmental selection provides a valid means to explain the actual fitness of a single idea (or firm) and/or other surrounding/related ideas (or firms).

This approach actually makes the student's life much easier. Trying to understand all manner of factors present in the external environment is almost impossible; yet we commonly ask this of students. Once we can zero in on the potential fitness of a given idea and the specific nature of its ecological and selective environments we provide a clean space for our students to develop and test their assumptions. In this thinking space students can get closer to understanding how the process of external selection is operating and how they might be able to counter such external pressure.

Despite recognition that the process of selection can be viewed as operating in a variety of complex ways (see Amburgey, Dacin and Kelly, 1994), very little advancement has been made to investigate this (although see Jones, 2007). Ignoring the reality that selection can be seen to occur in various observable patterns does our students a disservice. All too frequently selection is cast as force that acts to stabilize (or preserve) specific factors that aid the fitness of entities in a population. While it is true that we can think of *stabilizing* selection performing such a function, selection may also work in *directional* and *disruptive* ways. Indeed, for our students to appreciate the way in which selection is present in the local environment to which they're thinking is being applied, they must fully understand all three processes. They must also appreciate the likely combinations the three

processes. Understanding which external forces are present or likely to be present in a local environment is critically important to any nascent entrepreneur. Such knowledge contributes to the eventual decision-making about which variations to select internally for and which existing methods of organization to preserve with.

The last component of the VSR process is the mechanism of retention. Aldrich (1999: 30) argues that 'retention occurs when selected variations are preserved, duplicated, or otherwise reproduced' to ensure their repetitive use. Most commentators of the VSR approach also highlight the importance of the struggle for resources that continually surrounds the entrepreneurs' decision-making. I prefer not to lead my students towards this way of thinking. It has the potential to put the VSR processes into the realm of black-box processes. Once students can envisage the actual nature of the selective and ecological environments for they're ideas that tend to sidestep many of the challenges of this issue.

Lets again consider the bank employee taking a redundancy payment and looking to establish an independent financial services business. He or she will most likely have been exposed to many operating formats in the financial services industry, although a true understanding may not be possible from afar. Nevertheless, their planning will lead them to consider various ways to operate. Perhaps the underlying trends with regards to regulation will be of specific importance. In this instance, normal stabilizing selection processes would be insufficient. This is an industry in which best practice is forever emerging based on the external controls of regulators. External selection is typically operating in a directional manner in terms of increasing accountability. So consideration of external variations needs to factor in the direction of the prevailing direction selection is taking, especially if a long-term approach is being undertaken.

However, ultimately it will be the ability of the new venture to attract specific resources that will matter. Simply adopting the practices apparently favoured within an industry will not ensure survival. As a fledging start-up, the most important resource is income. The principle's social capital will be of critical importance in this respect. To the extent that the principle can use his or her human capital and social networks to access initial income, they will most likely succeed in the short-term. However, in the long-term, the venture will require deeper levels of engagement and exploitation of the ecological environment to succeed. Thus, selection for or against the start-up will be based on the fit between the venture and its ability to acquire income streams from its ecological environment more so than the actual natural of what types of activities are by and large assumed to be favoured by the external environment.

This process of thinking requires of our students a far deeper level an analysis and insight than most normal approaches. Frequently when the processes of VSR are discussed, it is assumed that an evolutionary process is being referred to. While that is correct, what is more important for the student to understand is that any such process is being driven by complex ecological processes. It is these processes that our students need to understand. Can our students connect the dots that join the presence or otherwise of legitimacy for their idea? Can they see the importance of one's resource profile in being able to exploit the actual ecological environment related to their idea? Is the student able to discern between selection for various forms or organization or practice and actual factors that would specifically work for or against their actual idea? This is the real crux of it. Being able to move the students beyond unexplored assumptions to actual critical thinking about how selection is and might be present.

The Process of Value Creation

The next addition to the framework is the processes of value creation. As highlighted in Figure 8.7 below, three processes are suggested; the value chain, the value shop and the value network (Stabell and Fjeldstad, 1998). Exposing our students' thinking to these three value creation logics is important to enabling them to 1) envisage how they will create value, and 2) ensuring they comprehend the relationship between selection for or against and the processes of creating value.

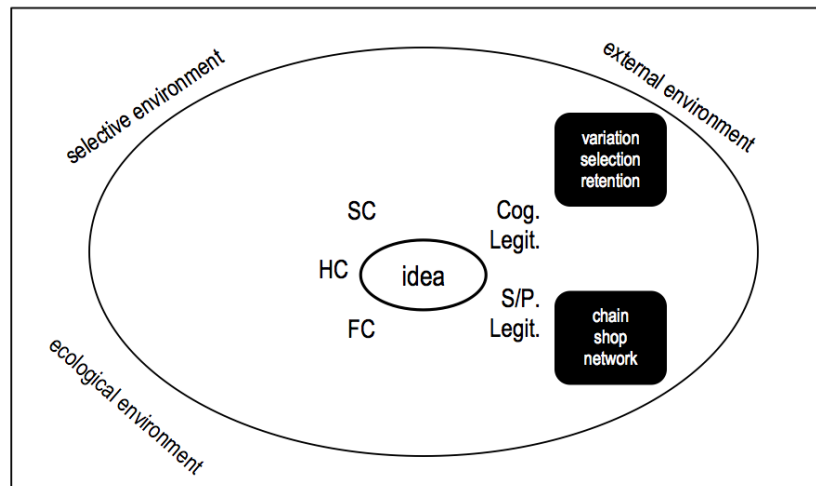


Figure 8.7 Value creation processes

I observe that quite frequently the value chain logic is defaulted to when the process of value creation is discussed. While this may be perfectly appropriate for a good many ideas, it is also most inappropriate for an increasing number of ideas our students contemplate. Our students increasingly contemplate action in online worlds and via superior service delivery. To fully appreciate the availability of resources and the nature of selection likely it is important our students know these three value creation logics. Put simply, are our students transforming a lesser resource into a higher value resource? Are they allocating resources in unique ways to satisfy the unique individual requirements of a specific customer/opportunity? Are they exploiting network relationships by using a mediating technology? Perhaps they are employing a combination or all three of these approaches to create value.

Once our students can visualize the processes through which they plan to create and capture value, they can also understand the primary activities required to do so. They can envisage the key cost and value drivers along with the nature of organizational structures required to support such drivers. Armed with such insight, students are able to further examine the nature of the selective and ecological environments. This is the true nature of the framework; it is like peeling layers off an onion. The further the students are drawn into the framework's elements, the more clarity around each component develops.

Let us return to the boilermaker welder and his desire to operate a bakery. There is no doubt Porter's (1985) value chain logic will serve him well. Alternatively, the value shop approach of Stabell and Fjeldstad (1998) will also be required to offer individual services that satisfy the diverse needs of any such customer base. What about a student who wishes to start an online travel agency? They will need to customize service and product offerings and exploit the nature of the online business environment, so a combination of value shop and value network processes.

What is important is that our students are able to state how they believe they will create and capture value. Our challenge is to get them to explore further how in reality this may actually occur. Once we can move our students' thinking into this space, we succeed in getting them to view the operation of their idea from the end-user's perspective. This is important as it again sharpens focus on the processes of selection, for and against their idea.

The next component of the framework (see Figure 8.8) relates to opening our students' minds to the positive and negative interrelationships that significantly shape the nature of the environments they will encounter/shape. It has been noted that 'the most important attributes of a system are the regular interactions (Lidicker, 1979); or coactions as they will be referred to here.

Accounting for coactions

In his seminal paper on coaction theory, Haskell (1949: 46) claimed that in any activity occurring in society, ‘there are diversely powerful individuals which can be separated in two groups or classes, the weak and the strong’. Further, that ‘these two main classes can have nine, and only nine, qualitatively different relations towards each other’. Lastly, he noted that ‘the major properties of societies vary with coaction’. I know that when my students can comprehend the nature of interactions that may be expected to exist vis-à-vis their idea’s operation, they have uncovered another level of valuable thinking.

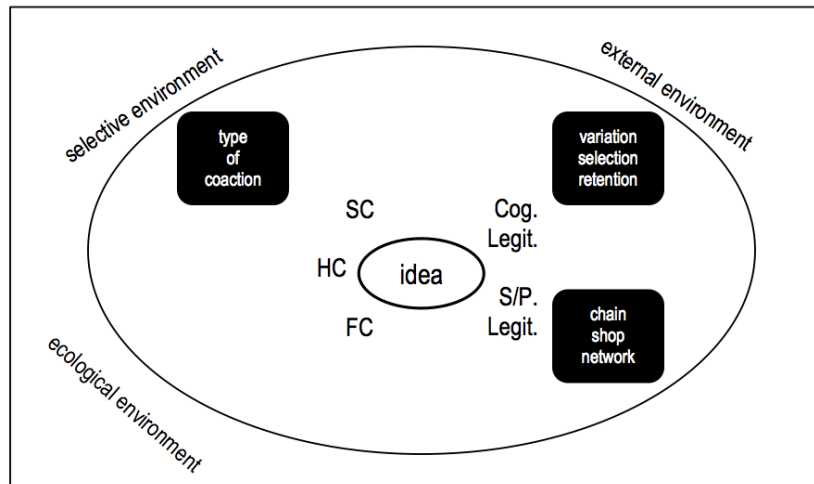


Figure 8.8 Type of coaction

Encouraging students to view themselves as either strong or weak in relation to other aspects of society is beneficial to their thinking. It increases the likelihood that they will contemplate more processes of selection than may likely occur. It increases the likelihood that they will consider who controls the nature of the resources they require. It encourages them to contemplate who is best placed to influence/create legitimacy for related aspects of their idea. The first starting point is to consider the types of relations possible. There are various types of relations in which positive outcomes are possible for either or both the weak and strong.

Let us assume two entities ‘A’ and ‘B’. The relations between ‘A’ and ‘B’ can be categorized as containing negative (-), positive (+) and neutral (o)

outcomes. With the outcomes for 'A' illustrated on the left-hand side, and 'B' on the right-hand side, we can have the following outcomes where 'A' always has a negative outcome: -/-, -/o, or -/+. Alternatively, 'A' may receive the following positive outcomes: +/-, +/o, or +/+. The remaining three types of outcomes would be o/-, o/o, or o/+. So while there are 3 possible types of interaction between 'A' and 'B' in which 'A' receives positive outcomes, there are six in which 'A' doesn't, and vice versa for 'B'.

Ensuring students contemplate such a range of interactions allows the nature of the ecosystem into which they see they're ideas playing out to become more transparent. Importantly, it also allows them to understand the extent to which their ideas might also change aspects of the selective and ecological environment. This process, known as niche construction (Odling-Smee, Laland and Feldman, 2003) requires the students to look beyond to how selection might work for or against them. They need to also consider how their individual actions may over time produce changes in the environment. For example, the mere presence of a particular type of operation may over time change the nature of socio-political legitimacy experienced. Therefore, it is important students understand how their actions may influence the potential nature of selection processes experienced over time.

Let us again consider the bank employee taking a redundancy payment and looking to establish an independent financial services business. He or she may struggle to achieve cognitive legitimacy at the time of commencing operations. At that very moment in time, selection is working against he or she, with potential and important initial incomes limited. However, over time, their engagement with local factors in the community, such as sponsoring local sporting clubs on the basis on any patronage from members of a particular club can change the nature of selection, and importantly, the nature of coaction.

When the financial services business began, the nature of coaction between it and the assumed local sporting club was o/o. Neither entity was affected negatively or positively by the presence of each other in the local community. The offer to provide the sporting club with a financial reward if its members used the financial services business for their insurances and investments in exchange for signage around the sporting club's premises changed the nature of coaction. At that moment in time, a commensalistic relation (o/+) had started to occur, within which the host sporting club was unaffected, whilst the financial services business gained benefits from the signage. Hopefully, as the relationship continues, a symbiotic relationship (+/+) would emerge whereby both entities gain from the relationship as members of the sporting club become users of the financial services business and they return financial support to the sporting club. The power from this

type of thinking is that my students become strategic in their conceptualization about the nature of interaction that may occur between their idea and the environment they will encounter/create.

The Strategic Orientation

The next component of the framework relates to how this strategic thinking manifests itself into the structures and positioning required to best support their idea. In Figure 8.9 attention is drawn to r and K strategies and the issue of specialization or generalizing.

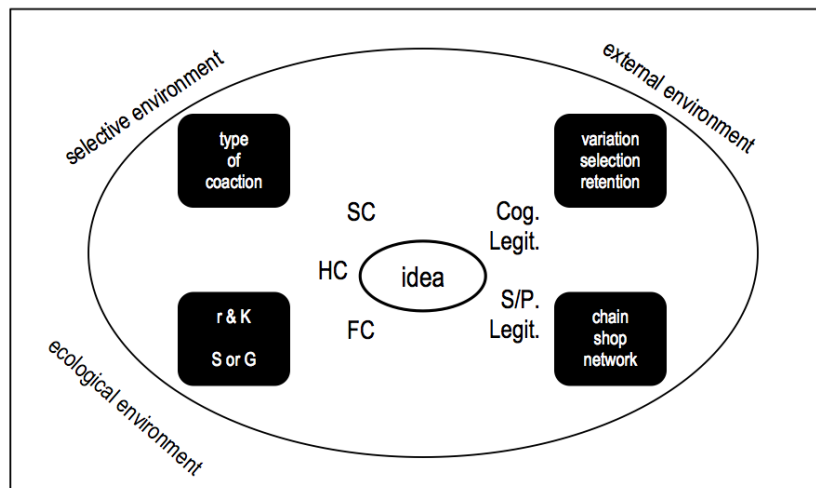


Figure 8.9 Strategic orientation

Once students accept that the nature of selection will vary over time and with different forms of coaction, they can plan accordingly. They can understand the nature of risk inherent in starting something that lack cognitive and/or socio-political legitimacy. They can sense what resources are available and which are not. They can understand how strong or weak their resource profile is. They can sense the sense of direction and power of selection in the environment. Sadly, academics have reduced the complexity of our world by encouraging nascent entrepreneurs to view the attractiveness of the environment using Porter’s (1980) five forces model or categorizing resources into valuable and rare. These tools all have a potential value if employed correctly, sadly that occurs too infrequently.

At the risk of offering yet another set of typologies for my students to use and therefore joining the ranks of those that seek to demystify the complexity of the environment, I offer this explanation. In the above paragraph I have alluded to a range of factors I feel my students have discerned about the environment they may encounter. That is, I have ensured they're familiarity with such matters is more than cursory. It is only once that they have been forced through such mental and exploratory gymnastics that issues related to strategy are broached.

Therefore, my students become aware of several strategic choices, choices that assume the possibility of better aligning structure and strategy with a concern for the environment. Notice, I am not assuming they are held captive to the environment's forces, nor capable of plotting a way to overcome such forces. I am helping them to become aware of the likely nature of interaction between themselves, the environments they interact with, including other entities that may be stronger or weaker than them.

They have a choice to commit themselves in such a way that they can potentially minimize their losses if things don't go as planned. This is referred to as an 'r' strategy. Alternatively, they have a choice to commit themselves for the long-term, perhaps seeking to take advantage of economies of scale, a 'K' strategy. These two approaches have been made popular by the works of Aldrich (1999) and many others. These ideas build on the initial work of MacArthur and Wilson (1967) who observed that the natural disposition of some entities in nature predisposed them under certain environmental conditions to hold a selection advantage. Introducing such thinking to our students is useful in that it allows them to again think about the forces of selection and to attempt to match their structure to the environment.

The 'r' strategist typically is opportunist, staying nimble, trying to sense the way forward in an environment subject to sudden and potentially unpredictable change. Thus, the 'r' strategist adopts a short-term outlook, perhaps leasing rather than buying, perhaps working with scaled up prototypes rather mature products. Alternatively, the 'K' strategist seeks the surety that comes from exploiting economies of scale, of financing over the long-term, and operating in more assumed stable environments. Determining which strategic orientation should be used is confounded by the reality that many firms adopt both strategies within various aspects of the operations. It is quite expected that a 'r' strategist will evolve into a 'K' strategist as industries mature and environments become more predictable.

Our next concern is with the degree to which we see our student's offering appealing to a broad audience or a narrow audience. The choice to specialize or generalize also is connected to the extent to which our chosen industry is emerging or already established. To the extent that it is still emerging and

consumer preferences are yet to become obvious, being a generalist make sense. However, if we know what consumers want and if selection already favours 'K' strategists, then being a specialist may make more sense. One of the challenges in our students' thinking in this regard is not to fall into the trap of assuming that because other firms appear to be selected for by the environment, they might be too. In reality, our students may not be able to replicate the types of coactions they experience. They may also operate with radically different selective and ecological environments. They may hold positions of strength in their environments vis-à-vis our students' likely position. The key issue is to understand how selection forces and resource availability/exploitation will differ if we offer a product (and/or products) to a wider audience than if we were to offer a product (and/or products) to a narrower audience.

Let us return to the example of our boilermaker welder and his proposed bakery, again assuming he has made sense of all of the other issues raised above. He will face the option of leasing a bakery, buying a bakery or even building a bakery. Clearly leasing a bakery as an 'r' strategist would carry less risk. The business would have a track record that should provide some surety about its expected performance. Alternatively, He could buy an existing bakery as a 'K' strategist, committing himself to a long-term schedule of loan payments. In conjunction with that decision will be a determination on how best to allocate resources. Might it be best to specialize in wedding cakes or be a generalist and offer all forms of bakery products? Again, the importance of understanding the selective and ecological environments looms large. How many weddings are there in the region that could be expected to consider his bakery for a wedding cake? How many other bakeries act as generalist?

By now we have developed with our students a capacity for asking questions that are not normally found in textbooks where prescriptive processes are given most attention. While we have not dealt with the issues of luck, good or bad, in any detail, I have come to the conclusion that the next component of the framework tends to retrospectively explain both forms of luck. Indeed, many of the decision-making challenges that have emerged above can now be revisited through the introduction of the next component of the framework.

Emergy

The idea of emergy is without the most powerful concepts that my students need to grasp. For once it is understood, my students have a capacity to see their world in an entirely new way. Comprehension of this component removes a large degree of potential ignorance, and opens the way for an

exciting new process of opportunistic speculation. Emergy can be thought of as types of energy directly and/or indirectly used in creation of a resource, product or service (Odum, 1995). In Figure 8.10 below, an arrow moves from left to right signifying the presence of energy that while independent of any student's initial idea, will ultimately be present in any explanation of the nature of selection operating on the student's idea.

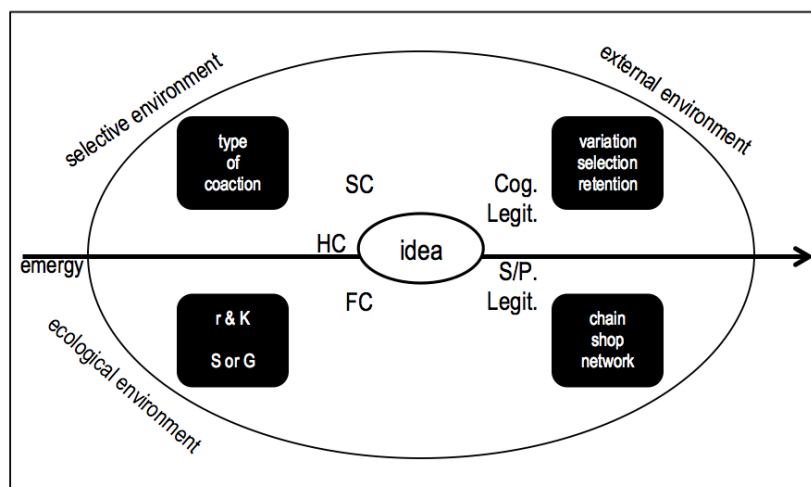


Figure 8.10 Accounting for emergy

Entrepreneurs do not and cannot control all the resources that ultimately determine their futures. That is why luck is never far from an explanation of success or failure. Entrepreneurs merely seek to exploit what resources are available, regardless of ownership. Borrowing from the ecological literature, I ensure my students understand the importance of ecological versatility (Mac Nally, 1995: 19), or 'the degree to which ... [firms] ... can fully exploit resources in their local environment'.

I am yet to meet a student who could not identify sources of emergy related to their idea. But I rarely meet students who are already aware of such freely available emergy. This is why the idea of emergy is so powerful. To fully explain this idea the use of some actual examples will assist. I have been researching the survival of pizzerias in the restaurant industry for several years. What became obvious very quickly is that the survival of many pizzerias is determined by factors beyond their control; but factors nevertheless that they can exploit.

Since the emergence of the large and powerful franchised pizza chains, constant pulses of emergy have been transmitted into western households on a

daily basis through the use of television advertising. So, powerful firms, geographically spread throughout global landscapes use television advertising to draw in the resource they most require; consumer dollars. Unlike the local independent pizzerias, the franchised pizzerias have a business model built upon the need for very high levels of turnover to satisfy their low operating margins. Put simply, metaphorically, the metabolism of a franchised pizzeria is faster than the local independent pizzeria. The franchised pizzeria must consume more resources in order to survive, that is they must achieve significantly higher levels of turnover. To achieve this they must commit higher than normal levels of energy to forage; or to advertise.

In terms of our previous discussion on coaction relations, the franchised pizzerias are the strong and the local independent the weak. However, because of the niche constructing activities of the franchised pizzeria, quite frequently the ecological and selective environments of the local pizzerias are altered in favourable ways. Essentially, primary demand for pizza is increased across the community to the benefit of all, especially the local independent pizzerias who have not had to expend energy to acquire consumer dollars; they merely had to exploit the available resources. This is a classic commensalistic coaction (o/+) whereby the strong is unaffected by the presence of the weak, but the weak gains a specific benefit from the presence of the strong.

Once students understand the idea that other entities are contributing energy into the external environment, and that sometimes this energy directly influences the selective and ecological environment of their specific idea, they can see their world quite differently. They begin to step back and ask how they can exploit the environment, much like a surfer considering which beach to use to access the best waves. Rather than assuming that they may be locked in a battle to the death with bigger and stronger entities, they see the opportunity to co-exist alongside such entities. Or perhaps to locate their operations out of harm's way, yet still close enough to benefit from the available energy. In the example used above, this makes sense as the nature of advertising from the larger franchised operators is very predictable, it is their sole means of survival.

Other Predictable Sources of Emergy

There are two other sources of emergy that can be quite easily found. As indicated in Figure 8.11, our students can be alert to top-down government interventions and also bottom-up community driven interventions. It is quite amazing how often when discussing an idea with a student or colleague that no mention is made of the opportunity to tap into top-down or bottom-up

initiatives. In many instances such initiatives may be only short-lived, but they may provide specific assistance to our students' ideas in terms of ensuring adequate cognitive or socio-political legitimacy. It may therefore ensure that the ecological environment is sufficiently primed to favour the nascent entrepreneur's activities. Or, perhaps the edge will be taken off the selective environment. Let us consider an example.

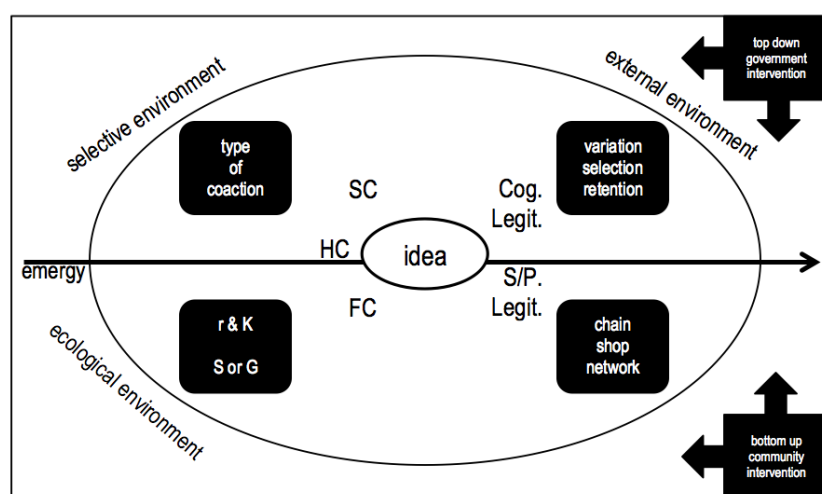


Figure 8.11 *Other sources of emergy*

Returning again to our bank employee taking a redundancy payment and looking to establish an independent financial services business, how might he or she find emergy? Well let's suppose the government is concerned about financial literacy, and they decide to sponsor some year-long programs that offer free education about such matters to adolescent youth. Such a program may ensure the financial services business has its initial costs covered during the period when other resources are being committed to developing a brand in the local community. Indeed, the fact that the business is delivering such a service on behalf of the government lends socio-political legitimacy to the entity. The key here is to be aware of such programs, to actually be looking for such initiatives to attach the business to in the short-term.

Let's also return to our boilermaker welder and his proposed bakery. Many community groups are springing up that seek to provide information and resources for people suffering from celiac disease, or intolerance to gluten. What if our new bakery was to work closely with such groups and specialize in gluten free products? He may be able to develop a reputation

and wholesale gluten free products to other local bakeries not willing to cater to this segment of the market. In this way, he might be able to exploit what was a negative aspect of the selective environment through tapping into a growing bottom-up intervention. So, there we are, a framework that while simple in design holds the possibility of radically changing the way our students' see their surrounds. Perhaps now it is appropriate to consider the views of my students who have experienced this approach in thinking. One aspect that hasn't yet been discussed is how to operationalize the process.

Giving More Than One Set of Glasses

A key aspect of the sense-making process is not simply the process of moving through each additional component. What seems to really make the process come to life is through *workshopping* each student's thinking. I deliberately seek to have a group discussion of each student's judgement. This provides space for other members of the class to add to their judgement by lending ideas and perhaps even providing suggestions of how to improve one's resource profile or how to improve overall legitimacy. What also happens through this process is that where some aspect of the process may have been over looked, or misunderstood, this process of group discussion fills in the gaps. It also provides an opportunity for the students to become the focus of everyone's' attention, thereby increasing the responsibility upon each student to prepare for their moment in the sun. They tend to thrive on the opportunity to share their thinking knowing that many other sets of eyes will now consider the nature of their opportunity.

When I reflect upon the comments students have shared with me about the value of the sense-making process I see several things. First, I see that the process helps them to make sense of how their idea might play out in reality. Second, I see the confidence it brings to their thinking. Third, I see the organization it brings to their thinking so that they know what is expected of them. Lastly, I see many students using process in evaluative situations that lay beyond their graduation. Many of these sentiments are captured in the student comments below.

As an adult learner, the knowledge I have most readily acquired and indeed retained has been that which was provided to me through a sense-making framework - that which was taught to me in a manner that enabled my referencing of the knowledge to concepts relevant to my life and experiences, which in turn legitimized the new-found knowledge for me. (student comment no. 1)

I liked the model Colin used to help us understand the implications of the wider influences on our decision-making, and the way we could frame our research project through it. (student comment no. 2)

The sense-making framework was of benefit because it showed us you can take any idea and consider it via a framework to see if the idea has legs. It shows the strengths and weaknesses of the idea. (student comment no. 3)

I use this approach when assessing the viability of a number of initiatives at my current job. Whether they are fundraising initiatives or development projects in Southern Africa, assessing the market and the legitimacy of an idea are extremely important! (student comment no. 4)

To see the big picture and the possibilities within this framework has allowed me to follow up and bring to fruition a particular idea/project. (student comment no. 5)

I strongly believe that your approach provided me with access to a sense-making framework. I am better able to *see* what needs to change, assess, compare and contrast possible solutions and use what I have to make that change. (student comment no. 6)

The sense-making framework provided an over-arching guideline in which the learning and academic development could take place. This benefited us as learners because it gave a clear indication of requirements and structure as related to the learning outcomes. (student comment no. 7)

Colin's approach to examining an idea or an issue provided a strong framework for sense and decision making. This has provided great benefits already with regard to me having a better approach to examining business opportunities and challenges by mapping the resources I have and need. (student comment no. 8)

Colin was able to ask questions of an individual presenting or trying to sell an idea that made them reassess a potential critical aspect of an idea in a manner that was not degrading or embarrassing to the individual, but rather created a light bulb moment for the group and class. (student comment no. 9)

For me this remains an essential framework to interpret any situation I have needed to analyse, and I have used it in my practice many times since it was introduced to me. (student comment no. 10)

You encouraged students to question their interpretation of a situation relative to the opinion of others and I believe the way you approached this gave students greater respect (and tolerance) for the opinions of others. (student comment no. 11)

Seeing the World Differently

A key issue here is not whether there is a right way to work with your students in this regard, but whether your students see you as an authority of

the approach you support. For it is in you and your stewardship of their learning that that seek assurance. I see a weakness for educators of EE who uses an approach to sense-making that they don't truly believe in. Students know when you believe in something and when you just borrowing an idea to occupy their thinking for a class or two. My students engage with my framework prior to us meeting for the first time. And they use it continuously thereafter. I demonstrate my commitment to the framework and to they're learning outcomes by staying on song throughout the process.

GLOBAL PERSPECTIVES

From the range of response to the IE-II Survey I can sense that discussion between students is an important element of many sense-making processes. Entrepreneur and invited lecturer at the University of Western Australia, Dr Alicia Castillo places the onus on students to come up with a *meaningful* test: does this add value to my life as an individual? Then she goes to the interactions: do I enjoy my clients? The production system? Interactions with my suppliers? etc.. Alicia also adds a component of pleasure and relevance which, through the discussions in class, are noticeable individualistic.

Peter Balan at the University of South Australia gives his classes a single business idea, and then gets the whole class to work on that idea during the lecture/workshop sessions. The challenge is to be creative in evaluating and developing that business idea into a possible venture. Dr Jane Nolan at the University of Cambridge in the UK uses case studies from real life, inspiring people, real life issues and problems which relate to wider society. Students need to be able to evaluate these ideas and understand the opportunities and they work on what makes new ventures viable. In a twist on this process, Dr Elena Rodriguez-Falcon at the University of Sheffield in the UK presents her students with day-to-day problems, such as people with disabilities. This enables her students to use their skills to enhance the lives of others whilst thinking about the commercial implication of their own ideas.

Monica Kreuger of Global Infobrokers in Canada uses several tools to guide this process - and then provides coaching support to help them evaluate what opportunities make the most sense for them given their personal and professional. But perhaps the simplest approach was that undertaken by Dr Caren Weinburg at the Ruppin Academic Center in Israel, who sends her students out to talk to entrepreneurs. Like all things in EE, there is never likely to be a best way to approach such matters. What matters is that you have clearly thought through how you can best help your students to make sense of their ideas and the environment into which they may step. As an EE educator there are several questions that must be contemplated.

REFLECTING UPON THE UNKNOWN

To what extent do your students remain naïve of the unknown? This is perhaps an impossible question to answer. Let me rephrase it. To what extent do your students become less ignorant of the probable consequences of their possible actions? I have a saying that I display in my office, it says *in the company of my ignorance anything is possible*. I should also display another sign that says *what is possible depends upon who my ignorance keeps for company*. We and our students cannot know the unknown unknowns. We can however spend more time questioning and looking from different perspectives. We can ensure that many new eyes are brought to focus on all the ideas that grace our students' minds; especially when those ideas which relate to a world that our students have little experience of; just like the worlds to be contemplated in the next chapter.