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31 Aug – 1 Sept 2017 Makedonia Palace Hotel, 5* Thessaloniki, Greece



Developing a Staged Competency Based Approach to Enterprise Creation

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In this paper the authors will explore how educational frameworks applied in a university context can be devised to specifically support the development of entrepreneurial activity. Building on previous work (1-4), the authors will explore two frameworks to identify elements, which are useful and then develop these to propose a model, which, they believe, will support the facilitation of experiential entrepreneurship education. To achieve this the paper will propose a staged, process based approach to entrepreneurial education design which draws on the work of Kuratko and Morris, (5) to break the entrepreneurial effort into specific stages, or steps. The resulting framework provides an identifiable path for educators, researchers, managerial practice and quality assurance for the support of entrepreneurs and their businesses. In teaching, the approach should be structured around the frameworks to capture the full content of entrepreneurship as opposed to a more narrow focus on case studies, business plans, and other experiential exercises.

Keywords

Enterprise Creation, Entrepreneurship Education, Entrepreneurship Theory, Entrepreneurship Typologies, Competencies

1. Introduction

The definition of a broadly accepted set of entrepreneurial competencies is recognised as important (3,6,7) to support the development of specialist curricula at all levels of educational practice. Despite this, since the 2011, there have been surprisingly few peer reviewed articles seeking to advance or define these competencies into frameworks which might usefully operationalise them for educators. However, in the wider ecosystem, both national and transnational bodies have engaged in research projects and proposed frameworks (8,9) which may now find broad adoption across the sector as educators search for ways to validate their curricula (10).

This paper seeks to reinvigorate the discussion surrounding entrepreneurial competencies by exploring a number of these new frameworks to identify their central elements and search for







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consonance and dissonance between them. Then, using this information along with insights from the literature and practice the authors will propose a staged framework (5) based on focal competencies (9) which will be presented here for consideration.

The authors believe that by doing so they can contribute important insights to the broader ongoing discussion surrounding the development of experiential entrepreneurial education programmes (10,11), their impact (12) and the ways in which university-based entrepreneurship programs, incorporating real-life venture creation, can bridge the gap (11) between entrepreneurship education and enterprise creation within the university environment.

2. Critical Literature Review

A number of researchers (13-18) have found value in the concept of 'competence' to support the structuring of entrepreneurial education programmes. The challenge, it would seem, is to create more accurate and reliable frameworks which capture a broad conception of competence and, in doing so, enable educators to create better programmes through which students can understand and explore entrepreneurial activity (3).

The first hurdle to overcome in achieving this goal is that the concept of competence itself is very difficult to define. Delamare Le Deist and Winterton (19) go as far as to say that the confusion surrounding the term makes it impossible to arrive at a definition which reconciles all the different ways the term is used; meaning that competence frequently becomes a 'fuzzy concept' used to bridge the gap between educational and job requirements (20,21).

In the UK education sector competence has generally become synonymous with occupational standards for education, as distinct from academic standards. The reasoning for this is complex but, at it's heart is the drive of successive UK governments during the 1980's to address endemic failures in skills based education through the establishment of a nation-wide, unified system of work based qualifications. The resulting occupational standards of competence were heavily grounded in a functional analysis of occupations (22) and the ability to demonstrate performance to the standards required of employment in a work context (23).

Entrepreneurial education, however, tends to adopt a more American application of the concept of competence; a behavioural approach associated with superior performance and high motivation (24) in which competence is defined as a mix of knowledge, skills, abilities and sometimes other attributes (25). This American view of competence has been heavily influenced by management theory in the 1980's and early 1990's (26,27) and HRM (particularly leadership, selection, retention and remuneration) in the late 1990's and 2000's (28-33). Meaning that competence, in this form, has a wide-ranging conception encompassing: knowledge, skills, attitudes, behaviours, work habits, abilities and personal characteristics (19).

This broad definition of competence is widely applied (3) but, it has been suggested by Hayton and McEvoy (34) that in doing so a further level of confusion arises from the indiscriminate use of terms such as skills, knowledge, and abilities, alongside competence. Their position is that the unique characteristic of competence is that competencies are interactional constructs. In other words, they have three parts: individuals' differences, situationally defined behaviour, and socially designed criteria for performance. Competences







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are distinct from knowledge, skills, and abilities in that they are not only attributes of individuals, but also depend on situation and social definition.

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These debates contribute to a range of ontological confusions surrounding the use of the term competence in an educational context; the scope of which might render the term almost meaningless. Nevertheless, by drawing on a range of elements from the literature (3,25,34-36) the authors believe that a useful definition is possible. In this conception competence is interpreted as a holistic typology combining: knowledge (and understanding), skills, attributes and behaviours. These elements are not considered to be static but, instead, depend on context and interaction reflecting the 'total ability of the entrepreneur to perform a job role successfully' (15). To set these apart given the aforementioned confusions they will be referred to as focal competencies (borrowing from Bacigalupo et al., (9) reflecting their importance as key moments (37) in the entrepreneurial journey.

These focal competencies, once identified, will then need to be operationalised in a framework, this poses the next set of challenges; Mitchelmore and Rowley (7) suggested a competency framework, comprising four categories: entrepreneurial competencies, business management competencies, human relations competencies and conceptual and relationship competencies. Churchill and Lewis (1) proposed a five stage model based on the critical issues which face the business owner, looking at the internal characteristics of the business (2,39). Draycott and Rae (3) identified a range of frameworks which, while possessing some core similarities employed a number of different strategies and, generally disregarded the need for the competencies to develop over time (38) or relate to a particular context (13,25,40) or stage of development (5). From this discussion it has become clear that the required competencies will be based on the entrepreneur, the business situation (stage) and the education context.

To clearly identify the knowledge, skills, attributes and behaviours which these focal competencies will need to reflect it is imperative that a precise definition of entrepreneurship is available to underpin them.

The (8) definition of entrepreneurship which is widely used in UK higher education is focused on 'the application of enterprise skills specifically to creating and growing organisations in order to identify and build on opportunities'. The definition is comprehensive but, it reflects a narrow view of entrepreneurship as the creation of organisations. The authors, however, believe that this perspective is unhelpful given the broad application of entrepreneurial endeavour evident in the economy as whole. Instead, building on the work of (41-46) they define entrepreneurship as 'finding and developing opportunities to create value.' This value centric view of entrepreneurship allows for a more holistic interpretation of the term especially in reference to creative and social entrepreneurship.

Furthermore, this definition in conjunction with the paper's application of focal competencies means that entrepreneurship is firmly grounded as a 'processual phenomenon' (47:p.30) that locates entrepreneurs in a contextual framework of 'events, circumstances, situations, settings, and niches'. The approach means that the entrepreneurial effort will be broken down into specific stages, or steps. Although these stages may overlap and, one may have to periodically revisit an earlier stage to move forwards, they should evolve in a logical progression leading to the growth and development of the entrepreneur (25).







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3. Methodology

From the literature reviewed it is clear that focal competencies will include a complex range of elements linked to the authors definition of entrepreneurship. These elements will need to be broad enough to be grounded in a range of contexts and flexible enough to develop with the student as they learn and grow. In addition to this they will need to function within a non-linear construct allowing the student to explore the topics visiting and revisiting them as necessary as part of their personal journey.

To identify these elements the authors have selected two frameworks, the QAA Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers (8) and EntreComp: The Entrepreneurship Competence Framework (9) which have emerged since (3) reviewing them to identify:

- 1. The competencies they employ;
- 2. The similarities and differences between them;
- 3. Which of these are 'focal competencies'; and
- 4. If / how they address the development of competencies over time.

QAA: Enterprise and Entrepreneurship Guidance

The QAA (8) states that both enterprise and entrepreneurship education should focus on equipping students and graduates to develop their overall effectiveness beyond the traditional educational setting. The student journey through enterprise awareness, the entrepreneurial mindset and entrepreneurial capability provides a pathway using both in-curricular and extracurricular evidence, also discussed by Rae, Matlay, McGowan & Penaluna, (6) to create an entrepreneurial pathway for the student to follow without giving a prescription for the exact way this should be achieved.

While the framework does not talk about competencies, it does provide a series of enterprising behaviours, attributes and skills; showing how these can be mapped onto the development of enterprise awareness, the entrepreneurial mindset, entrepreneurial capability and effectiveness. It expects students not to approach their learning in a linear fashion; rather their journey may pass through different stages in an iterative fashion and also allows the student to engage with different stages simultaneously.

EntreComp: Entrepreneurship Competence Framework

The Entrepreneurship Competence Framework (9) aims to establish a common reference framework and consensus around entrepreneurship competence by defining 3 competence areas, a list of 15 competences, learning outcomes and proficiency levels. The 3 major competence areas are: 'Ideas and opportunities', 'Resources' and 'Into action'.

The framework provides a comprehensive list of 442 learning outcomes, reflecting the complexity of the entrepreneurship. These learning outcomes offers an insight for those designing and applying the topic into curricula. It does however state that the framework has not yet been adapted to, or tested in real settings. The 15 competencies also fit within a progression model (level 1 to 8) which demonstrate higher levels of expertise and reflect the development of the student over time.







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There is a considerable degree of overlap between these two frameworks. As an example looking at the first stage of entrepreneurship, the opportunity recognition process. The QAA (8) competency set contains 'Opportunity recognition, creation and evaluation' while the Entrepreneurship Competence Framework (9) contains 'Ideas and opportunities', 'Spotting opportunities', 'Creativity', 'Vision', 'Valuing ideas' and; 'Ethical and sustainable thinking'. In short, the newer framework deals broadly with the same issues but, encompasses a greater degree of granularity in the way it addresses them. Furthermore, while the QAA framework seems geared towards developing the student for either enterprise and/or entrepreneurship the EntreComp is primarily looking at developing entrepreneurial activity as it's core output.

In total these two frameworks encompass 37 competencies, many of which exhibit the same degree of overlap. For the sake of brevity the authors have chosen to present these in a table (Table 1) in which the competencies can be categorised, sorted and key focal competencies identified.

To do this the authors needed a system of categorisation; from a review of the frameworks and the broader literature (1,5) it became apparent that a number of identifiable stages might exist onto which the competencies could be mapped. The first five stages which emerged were: Discovery, Modelling, Startup, Existence and Survival. These are reflected in the competencies set out in the two frameworks. It is considered that the first three stages bring about a robust business idea and formation which are core developments within an educational setting while the last two develop the venture and the entrepreneur into viable business and professional entrepreneur.

In the table each competency has been grouped into one of the five categories. Building on previous work in developing enterprise creation frameworks (1,5) this grouping has been based upon the competencies meaning (3), context, fit to the developmental stage and potential outcome (13,40,48). This allows overlapping elements to be clearly visible and makes it simpler to identify the key focal competencies. The focal competencies have been identified based on the author's previous definition and will be used in the next section to help illustrate how the stages could be populated to create functional framework.

4. The Stages of Enterprise Creation

Based on the mapping of competencies against the emergent stages of enterprise creation it quickly became apparent that this methodology could present a staged framework for enterprise formation. However, it was also obvious that five stages might not provide enough opportunity to express the breadth and depth of the entrepreneurial process.

As a result an additional four stages (Success, Adaption, Independence and Exit) were identified from the literature (5,49). These final elements complete the model by focusing on the success of the business, how the entrepreneur progresses beyond the business, their separation into different entities and the entrepreneurs eventual exit.

For each of the nine stages the authors then used the focal competencies to create 'value statements' describing the stage and it's key elements. These statements were then used to shape a final presentation which combined the focal competencies and the stages into a fully realised framework (Table 2). The value statements and, by extension, the framework they represent, while organised in a linear fashion do not necessarily have to operate as such.







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This choice has been made by the authors for simplicity and ease of presentation. Instead, each of the statements represents a point in a journey which students can visit and re-visit as necessary (6,50).

Stage 1 - Discovery

This stage is centred around the focal competency of opportunity recognition, creation and evaluation (8) and (9). These are the processes by which entrepreneurs identify and evaluate potential new business opportunities. An opportunity by definition is a favourable set of circumstances which creates a need for a new product, business, or service (45,51,52). Opportunity recognition is the process by which the entrepreneur comes up with a prospective idea for a new venture. Evaluating the opportunity takes research, exploration, and understanding of current needs, demands, and trends from consumers and others. The process of researching and surveying allows the product or service idea to develop, so that it can be modelled.

Stage 2 - Modelling

The second stage is about developing the business logic to create a business model. This is split into three parts and starts by setting out a Strategy, formulating a business model and setting the business processes to achieve the strategy (49,53). These form the key elements for the plan to start the business and, are an integral piece of submitting any proposal for an entrepreneurial or intrapreneurial business (54). The model should be underpinned by the resources available and those which may still need to be secured. Resource allocation and availability are extremely important to startups because sustainability and profit (not loss) depend on proper planning and understanding of the internal and external environments.

Stage 3 - Startup

The fourth stage is starting the enterprise (2). Once the resources detailed in the business plan are mobilised the entrepreneurial process can be effected and implementation can take place. In this stage the business may be trading or begin to research or develop a product. The aim of this stage is to have the processes in place so that the business can have a scalable, repeatable and profitable business focused on distinct customers within an identified market.

Stage 4 - Existence

At this stage the business has two core focuses; to gain enough customers to create a profitable business and, at the same time establishing production or product quality. The majority of businesses fail at this stage due, in part, to either one or both of these factors. At this stage the organisation is a simple one, the entrepreneur does everything and directly supervises subordinates, who should be of at least average competence. Systems and formal planning are minimal to nonexistent. The company's strategy is simply to remain alive (16) which requires the focal competency of tolerance of uncertainty, risk and failure

Stage 5 - Survival

At this stage the business should be a viable entity in terms of cash flow and resources, it has enough customers and satisfies them sufficiently with its products or services to gain repeat sales. The organisation is still simple. The company may have a limited number of employees supervised by a junior manager or supervisor. Neither of them makes major decisions independently, but instead carries out the rather well-defined orders of the entrepreneur. Formal planning is, at best, cash forecasting. The major goal is still survival, and the







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entrepreneur is still synonymous with the business. The entrepreneur starts to implement ideas through leadership and management which provides opportunities to scale.

Stage 6 - Success

Entrepreneurs at this stage have a number of options: capitalise on the company's accomplishments, expand or, keep the company stable and profitable. The entrepreneur has a number of ways to capitalise, from exit to taking a 'founders dividend' from the business. If the entrepreneur want to expand (37,40) then the core tasks are to make sure the basic organisation stays profitable so that it will not outrun its source of cash and, to develop managers to meet the needs of the growing organisation. Through the entrepreneurs leadership all managers within the business should now identify with the company's future opportunities rather than its current condition demonstrating a success to its stakeholders.

Stage 7 - Adaptation

Businesses which reach this stage normally have a number of factors pushing them to adapt, these are normally grounded in changes either to the micro or macro environments. Businesses at this stage will normally be entering a phase of rapid change and will have to have secured the required finances to develop. At this point key management is in place with a set of operational systems. Operational and strategic planning are now a key focus. The organisation is decentralised and, at least in part, divisionalised. The key managers must be very competent to handle a growing and complex business environment. The systems, strained by growth, are becoming more refined and extensive. Both operational and strategic planning are being done and involve specific managers. The entrepreneur and the business have become reasonably separate, yet the company is still dominated by both the entrepreneur's presence and stock control.

Stage 8 - Independence

A business at this stage should now has the advantages of size, financial resources, market share and managerial talent. Innovation and Intrapreneurship (55) are now key factors in keeping the business in market position. The organisation has the staff and financial resources to engage in detailed operational and strategic planning. The management is decentralised, adequately staffed, and experienced. Business systems are extensive and well developed. The entrepreneur and the business are quite separate, both financially and operationally.

Stage 9 - Exit

At this stage the entrepreneur is focused on exiting the business and making their separation permanent. An exit strategy will give the entrepreneur a way to reduce or eliminate their (49) stake in the business and, if the business is successful, make a substantial profit. This stage removes the entrepreneur from primary ownership and decision-making structure of the business. Common types of exit strategies include Initial Public Offerings (IPO), strategic acquisitions and management buyouts. The organisation at this stage is generally profitable, has a definable set of resources with a clear and realistic strategy to continue. The CEO and founder(s) are separate.

5. Conclusions







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This paper, while limited in its scope, set out to reinvigorate the discussion surrounding entrepreneurial competencies by providing a tightly constrained study reviewing two existing frameworks and a broad range of elements from the literature.

This is important because, as highlighted by Leitch (56), it is only by significantly increasing skills levels that the UK (given its economically uncertain future) will improve its productivity; crucial skills are identified as leadership, management and innovation, which drive productivity-led growth; or to put it more directly entrepreneurial focal competencies that can marshal the factors of production.

The key findings for this paper were that focal competencies are not only definable and, identifiable but they can also be mapped against a series of emergent stages (of enterprise creation) to provide a operationalised framework which meets the challenges more broadly highlighted in the literature.

In doing so the paper also provides an insight into the focal competencies which could be incorporated when designing curriculum for experiential entrepreneurial education programmes and how this could be staged based. These focal competencies are a key aspect of the education programme when considering the development of both the entrepreneur and their venture at each stage.

It is the hope of the authors that this paper provides educators with an original position on the dynamic nature of entrepreneurial competencies, their selection and operationalisation, which, may be especially useful for those who lead university-based entrepreneurship programs, incorporating real-life venture creation. It is also hoped that this leads to further discussion on the topic and, an increase in co-operation between researchers and educators to explore this topic as a potential method for providing more grounded curricula, especially given the challenges highlighted by (12).

Although this paper was limited in its scope it has highlighted a number of additional research themes which merit further reflection, namely:

- This research has centred on the two competency frameworks of the QAA and Entrecomp. There are other competencies frameworks which if mapped may provide better focal competencies.
- Further research will be needed to ensure this has a positive influence for the
 entrepreneur. It can also be extended to mapping the managers, supervisors and
 employee competency to each stage of the business, thereby looking at ways to
 optimise the business strategy.
- Research into which competencies are focal and the required pedagogical practices which provide a significantly increased efficacy/impact of entrepreneurship education.







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Appendix

Table 1: Competency Mapping

Framework	Competency	Discovery	Modelling	Startup	Existence	Surviva
EntreComp	Spotting opportunities	✓				
EntreComp	Vision	√				
EntreComp	Valuing ideas	√				
QAA	Understanding what enterprise means to me	✓				
QAA	Opportunity recognition, creation and evaluation	Focal				
QAA	Personality and social identity	✓				
EntreComp	Ethical and sustainable thinking		✓			
EntreComp	Self-awareness and self-efficacy		✓			
EntreComp	Financial and economic literacy		Focal			
QAA	Ambition, motivation & goals					
QAA	Self-discipline & personal organisation		Focal			
QAA	Personal values: ethical, social & environmental awareness		√			
EntreComp	Taking the initiative			✓		
EntreComp	Mobilising resources			Focal		
EntreComp	Mobilising others			✓		
QAA	Independent self-direction			✓		
QAA	Implement enterprising ideas			✓		
QAA	Generate business and career options			✓		
QAA	Undertake new venture creation			✓		
QAA	Identify and approach target markets			Focal		
QAA	Personal confidence and resilience			✓		
EntreComp	Creativity				✓	
EntreComp	Coping with uncertainty, ambiguity and risk				✓	
EntreComp	Motivation and perseverance				✓	
QAA	Creativity & innovation				✓	
QAA	Decision-making supported by critical analysis & judgement				√	
QAA	Reflection & Action				✓	
QAA	Appreciate and create multiple forms of value				✓	
QAA	Tolerance of uncertainty, risk and failure				Focal	
QAA	Go beyond perceived limitations to achieve results				✓	
EntreComp	Planning and management					✓
EntreComp	Working with others					✓
EntreComp	Learning through experience					Focal
QAA	Implementation of ideas through leadership &					Focal







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	management	
QAA	Interpersonal skills	✓
QAA	Communication & strategy skills	✓
QAA	Progress individual goals & approaches	✓







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Table 2: The Final Framework

Stage	Discovery	Modelling	Startup	Existence	Survival	Success	Adaptation	Independence	Exit
Description	This stage is centred around opportunity recognition. These are the processes by which entrepreneurs identify and evaluate potential new business opportunities.	At this stage the entrepreneur begins to operationalis e the opportunity by creating abstract models to test key hypotheses.	A new business venture in its first stages of operations, either has started trading or developing resources with the aim of trading.	These businesses have two issues to master, gaining enough customers and stabilising either production or product quality.	A viable business entity in terms of cash flow and resources, it has enough customers and satisfies them sufficiently with its products or services to keep them.	Entrepreneurs at this stage have two options: capitalize on the company's accomplishment s and expand or keep the company stable and profitable.	The business is set to grow rapidly and has secured the required finances. Key management is in place with a set of operational systems. Operational and strategic planning are now a key focus.	The business now has the advantages of size, financial resources, market share and managerial talent. Innovation and Intrapreneurshi p are now factors in keep the business in market position.	The shareholder s want to release the value in the business. Common types of exit strategies include initial public offerings, strategic acquisitions and managemen
Enterprise Development	At this stage the enterprise is only a set of ideas.	A formalised model of the enterprise, it's goals, reasons they are attainable, and plans for reaching them.	The organisations core processes will be geared to the refinement of a scalable, repeatable and profitable business model.	The organisation is a simple one, the entrepreneur does everything and directly supervises subordinates , who should be of at least average competence. Systems and formal planning are minimal to nonexistent. The	The organisation is still simple. The company may have a limited number of employees supervisor. Neither of them makes major decisions independently, but instead carries out the rather well-defined orders of the entrepreneur.	Core tasks are optimised to ensure the basic organisation stays profitable and is able to meet the needs of the growing organisation. Managers identify with the company's future rather than its current condition. Systems are installed to ensure strategic planning and business	The organisation is decentralised and, at least in part, divisionalised. The key managers must be very competent to handle a growing and complex business environment. The systems, strained by growth, are becoming	A organisation in this stage has the staff and financial resources to engage in detailed operational and strategic planning. The management is decentralised, adequately staffed, and experienced. Systems are extensive and well developed.	t buyouts. The organisation is profitable, definable with a clear and realistic strategy to continue. The CEO and founder are separate. The senior managemen t team have good retention packages.







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				company's strategy is simply to remain alive.		oversight.	more refined and extensive. Both operational and strategic planning are being done and involve specific managers.		
Entrepreneuria I Development	Opportunity recognition represents one of the most important early aspects of entrepreneurship	The nascent entrepreneur can see that the concept provides either: a good marketable opportunity, a protectable idea, and/or a favourable cash flow forecast.	The entrepreneur's role is to build a product customers want to buy; recruit a team; find funding from customers, partners, or investors; and overall prioritization of work.	The entrepreneur is the business, performs all the important tasks, and is the major supplier of energy, direction, and, with relatives and friends, capital.	Systems development is minimal. Formal planning is, at best, cash forecasting. The major goal is still survival, and the entrepreneur is still synonymous with the business.	The entrepreneur consolidates the company for business sustainability. If expanding then the entrepreneur establishes the borrowing power of the company and risks it all in financing growth.	The entrepreneur and the business have become reasonably separate, yet the company is still dominated by both the entrepreneur's presence and stock control.	The entrepreneur and the business are quite separate, both financially and operationally.	An exit strategy gives a business entrepreneur a way to reduce or eliminate their stake in the business and, if the business is successful, make a substantial profit.
Focal Competency	Opportunity recognition, creation and evaluation	Financial and economic literacy. Self-discipline & personal organisation.	Mobilising resources. Identify and approach target markets.	Coping with uncertainty, ambiguity and risk. Tolerance of uncertainty, risk and failure.	Learning through experience. Implementatio n of ideas through leadership & management.	Operational & Financial planning.	Investor Management. Delegation.	Mental ability to coordinate activities.	Negotiation. Merger and acquisition.







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