

Bringing an entrepreneurial mindset to health-care: a new tool for better outcomes

Laurence Murray Gillin and Lois Marjorie Hazelton

Introduction

The general perception is that doctors and nurses and allied health professionals practice within a highly regulated industry, predominantly in large institutions providing tertiary-level care and strongly grounded in management and administrative systems. Health-care practitioners are responsible for direct care activities that can be challenging when in an environment based on 24-h rotating shifts and multiple inputs focussed on one patient throughout that time. The focus of this paper is how nurses can become practitioners, not just of their profession but of entrepreneurial behaviour, which is often equated with the cultivation of an innovation culture as the organisation's most precious asset and a strong indicator of a healthy and successful organisation. The question is, "What gives rise to achieving such a culture?" This pilot case study discusses the notion of "entrepreneurial behaviour" as an outcome of an "entrepreneurial mindset".

Increased activism in the health industry and accountability to investors, patients, practitioners and policymakers is forcing boards and CEOs to be accountable for culture in ways they have not been before. Many health leaders are asking themselves: "What about our understanding of the health industry ecosystem and our need to strengthen and evolve identification of new opportunities as a performance priority?"

How then do organisations make the shift from *reactive cultural clean-up* to a *proactive entrepreneurial mindset*? In our view, to achieve an entrepreneurial strategy, leaders must make it possible for staff to engage in relevant behaviours by using knowledge of their staff and leaders versed in entrepreneurial mindset to achieve continuous and successful innovations. Such a vision-directed and organisation-wide culture results in behaviour that provides for the purposeful and continuous rejuvenation of the organisation by shaping the scope of its operations and practices to recognise opportunities for innovation.

But an organisation of itself is not entrepreneurially minded – the behaviour that may be present within the organisation is driven by the human propensity to be entrepreneurial as expressed by leaders and staff identifying opportunities with application to the marketplace. Such innovation does not happen by accident or from outside consultants. Rather, the best innovation comes from within, from people across all levels of the organisation and industry ecosystem. Entrepreneurship and innovation are inherently human behaviours and generated most effectively when staff work together. But how does one engage strategically to empower, educate and support and create the cultural shift that facilitates innovation now and ongoing? Health-care professionals may not think of themselves as "entrepreneurial", so how can the individual's and staff's mindset be changed to be both entrepreneurial and innovative? How does an organisation then value and act on the contribution from practitioners to ensure authenticity of the exercise? We have developed a validated entrepreneurial mindset audit tool that can assess the health organisation management/staff

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behaviour individually and as a team to learn about and facilitate entrepreneurial behaviour and effective collaboration. Such action needs more than rhetoric, it requires vision and strategic commitment to create an environment where both leadership and staff feel free and passionate to participate.

Such nuances and collaborative mindset are not simply a rework of the old “entrepreneurial personality”, as “wine in a new and more attractive bottle” (Shaver and Commarmond, 2019) but rather provide an holistic insight from integrating what were traditionally considered narrow personality traits, personality dispositions and cognitive processes with the spiritual aspects of human cognition, decision-making and proactive behaviours within the organisation. Shaver and Commarmond (2019) identified some 37 trait descriptors, many aligned to personality traits, others as descriptions of behaviour or personal preferences. Using factor analysis, they produced a statistically valid index. The index does provide a numerical indicator of entrepreneurial behaviour but fails to provide a visual presentation of behaviour of more interest and applicability to organisation leaders and staff seeking to deliver an innovation culture. Another emerging construct to study organisation behaviour is entrepreneurial passion (Obschonka *et al.*, 2019). The researchers find that conceptualising an entrepreneurial constellation of the main personality traits can predict entrepreneurial passion and that such passion and behaviour tend to couple with the entrepreneur behaviour.

But the human being expressing entrepreneurial behaviour is not composed simply of independent organs, brain or conscience expressed as a statistical whole but is, in all aspects, an interactive, integrated and collaborative being composed of body, soul, mind and spirit. The being acts holistically in response to the internal and external environment.

Many established organisations do not encourage entrepreneurial behaviour despite its potential to create value by contributing to improved organisational performance. Entities often have structural impediments in place that stifle or prevent them from occurring. Commonly, these structural impediments are the product of bureaucratic routines that have outlived their usefulness. Leaders need to develop an internal work environment capable of cultivating both employee and professional search for creativity in delivering innovations across all levels of the organisation and industry ecosystem.

Our purposes in this case study of health-care organisations are to:

- describe the health-care organisation ecosystem and the opportunities for entrepreneurial behaviour and innovation practice;
- identify the role of an entrepreneurial mindset and its contribution to developing an organisation-wide entrepreneurship and innovation strategy;
- discuss the dimensions and format of the entrepreneurial mindset audit instrument; and
- describe an internal work environment that supports the mindset at all levels of the ecosystem.

“What about our understanding of the health industry ecosystem and our need to strengthen and evolve identification of new opportunities as a performance priority?”

The resulting audit instrument essentially frames the organisational actors as co-creators with leadership and staff delivering a successful entrepreneurship strategy as part of a commitment to entrepreneurial behaviour and innovation.

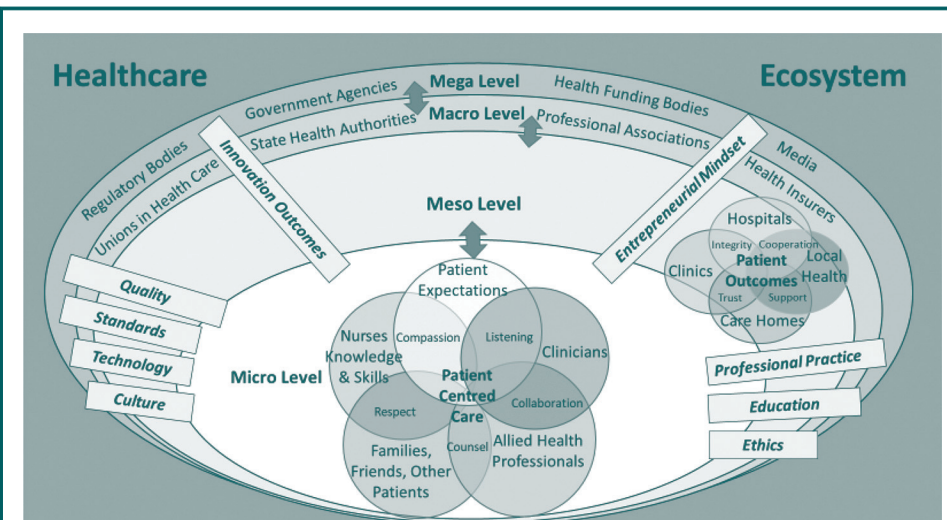
Organisation ecosystem and opportunities – health care

Our approach seeks to assess entrepreneurship and innovation within a real ecosystem which includes human behaviour and organisation culture. Seeking to exploit these opportunities is an investment in a healthy organisation culture and ultimately in better business/user outcomes (Clayton, 2019). For this pilot study, nurses were selected with experience across all levels of the health-care ecosystem in both the USA and Australia. Many factors influence the demand for nursing services. Indeed, nurses invest their time and energy in working with numerous stakeholders and care, treatment, management and administrative structures that collectively make up their ecosystem. Therefore, it is not unreasonable for CEOs of health organisations to reflect on nurses and staff asking, “What’s in it for me?” in considering development of a value driven company culture.

How do we describe a health-care ecosystem? Using the four levels of ecosystem theory (Frow *et al.*, 2016): micro, meso, macro and mega levels, Figure 1, we can broaden the current focus of health care on nursing practice to an ecosystem perspective by integrating patient-centred care (see interactive dimensions) and patient outcomes management (see interactive dimensions) within the ecosystem. Within this ecosystem concept, expanded opportunities arise for practice innovation and nursing entrepreneurship by adding value creation within the nursing profession, clinical and care practices, medical and health sciences, patient and community satisfaction and regulatory and policy levels of the system.

Health organisations, policymakers, doctors and nurses face a challenge in translating rapidly increasing health knowledge, regulation and quality patient care into opportunities and outcomes that impact their professional activities. Such opportunities can occur across the system-wide dimensions of quality, informatics, entrepreneurial mindset, professional practice, standards, technology, education, culture and ethics and thus add value to the delivery of health care and patient satisfaction (Figure 1). Such an opportunity focus

Figure 1 Nursing ecosystem stakeholders



Source: Hazelton and Gillin 2019 adapted From McColl-Kennedy, Payne 2016

“Fundamentally, an entrepreneurial mindset is not achieved by writing business plans.”

enables the development and implementation of a strategic vision around entrepreneurial opportunities across one or all levels of the ecosystem.

Other factors influencing the performance of the ecosystem include collegiality, teamwork and technical knowledge as well as external factors such as regulation frameworks and policy directives. Indeed, the ecosystem is a rich source for opportunities to collaboration on a “lived” culture of compassion, care, excellence and professional practice in the delivery of nursing services. Nursing practice and processes are key contributors to the nursing ecosystem.

Culture and behaviour: the individual mindset

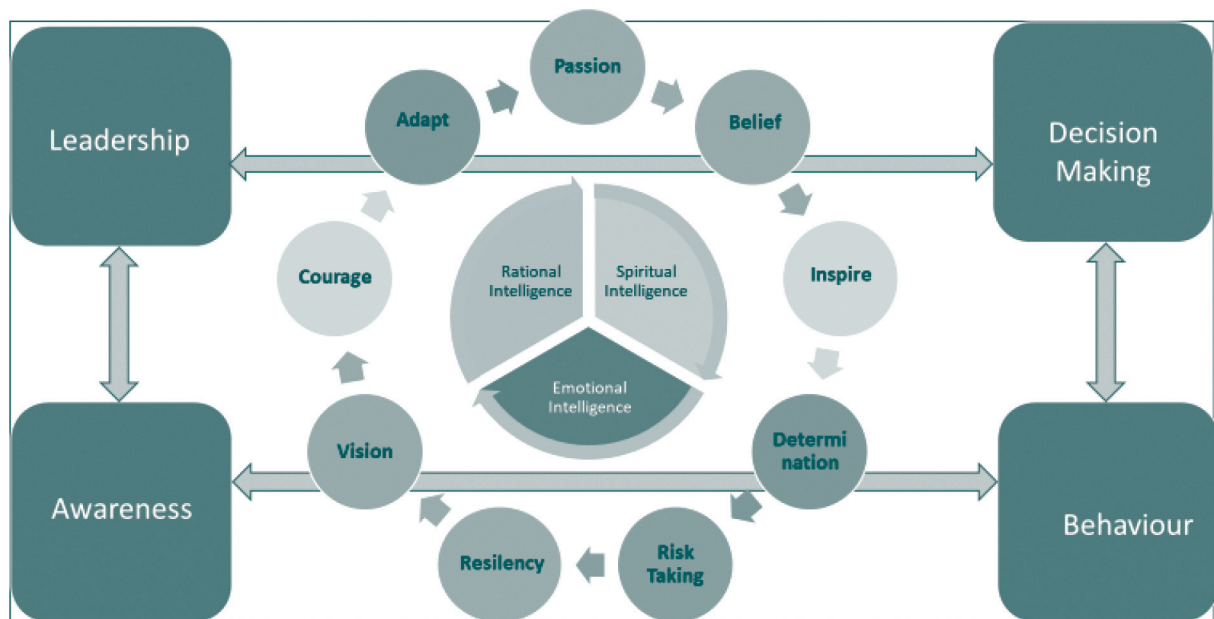
The health industry is known for system-wide cultures that contribute to silo-driven and non-holistic environments. Managers and staff may ask, “Is there a collaborative solution?” This case examines the positive contribution of developing leaders and staff with an entrepreneurial mindset. The dimensions of such a mindset include *leadership, decision-making, behaviour and awareness* within a practice-based health-care (nursing) ecosystem and integrated to produce a culture that delivers innovations valued by the user/patient. [Shepherd et al. \(2010\)](#) observed that interdependencies exist between the manager's mindset and the staff/organisation culture so that “entrepreneurial culture and entrepreneurial mindset are inextricably interwoven”.

Being entrepreneurial in a health organisation is essentially about thinking and doing something that is new to the organisation to develop real value/benefits to patients. The benefits may come from assessing a situation, designing alternatives and choosing a new way, or perhaps a combination of ways, that may lead to something better. Such professional health-care practice results from applying nursing care, care procedures, technology, image processing, pharmacology, data acquisition and analysis by exploiting opportunities that solve problems and deliver solutions.

Fundamentally, an entrepreneurial mindset is not achieved by writing business plans but by developing the personal attributes and behaviours associated with recognising opportunities and pursuing these with passion and commitment to make them happen. [Figure 2](#) illustrates the multi-layer nature of personal attributes and performance contributing to exercising an entrepreneurial mindset.

We are all human and at our core is an integration of rational, emotional and spiritual intelligence ([Figure 2](#)) in evaluating recognised and potential opportunities. Firstly, rational intelligence, which includes calculating or logical thinking, is basic to all our cognitive behaviours, but it is not the whole story in identifying how we think and act. Secondly, emotional intelligence, defined as instinct, intuition and the “heart” all contribute to our perceptions of opportunities, reality and decision-making within our ecosystem, and identifies with one's ability to understand and feel for other people and staff. It is about relationship and a capacity to read the social and practice situation one is in. Thirdly, spiritual intelligence refers to our capacity to access our deepest meanings, values, purposes and motivations ([Zohar and Marshall, 2004](#)). Non-local intuition is closely associated with spiritual intelligence by accessing the richness of imagination, insight, deep values and meaning. These three concepts form the basic building blocks to establishing an entrepreneurial mindset.

Figure 2 Entrepreneurial mindset – personal insight



Source: Hazelton and Gillin 2019 adapted Gapingvoid art 2018

The middle ring (Figure 2) represents a synthesis of the traits (Shaver and Commarmond, 2019) associated with entrepreneurial characteristics and behaviours, including the attributes of passion, belief, inspiration, determination, risk taking, resilience, vision, courage, instinct and adaption to produce an action-centred entrepreneurial mindset.

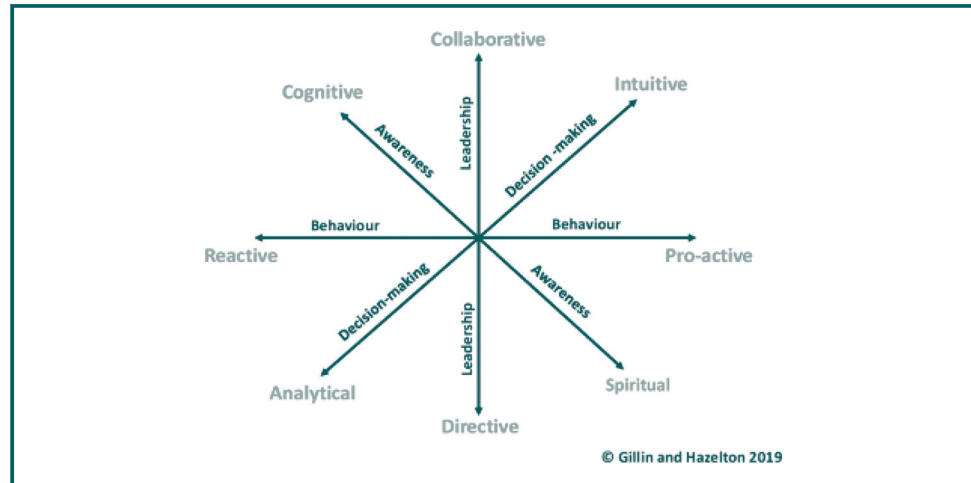
The four mindset dimensions (outer four points) comprising the entrepreneurial audit (*leadership, decision-making, behaviour and awareness*) are derived from the integration of the identified intelligence states and the ring of attributes associated with the entrepreneur's holistic involvement in a culture of entrepreneurial thinking, practice and behaviour. These four dimensions (Figure 3) are each scaled in terms of two alternative characteristics (see alternative characteristics) and measured on a five-point scale. The implication for visually displaying these action styles is to provide holistic insight and understanding into the subject's personal *entrepreneurial mindset*.

Using the entrepreneurial mindset audit in your organisation

We can use this audit instrument as a diagnostic tool for managers to gain the needed knowledge on leader and staff culture. They can use the audit repeatedly to assess both leadership and staff readiness to engage in strategic organisation entrepreneurship.

Using the “opportunity screening tool” template, as developed by Timmons *et al.* (2011), we adapted this audit tool (Figure 4) to provide for the self-assessment of emotional intelligence among selected nursing practitioners in the health industry and also for senior partners associated with a financial services partnership (Gilllin *et al.*, 2018; Gillin, 2020). For each of the four dimensions from Figure 3, the subject self-assesses her propensity for active behaviour in terms of the presented characteristics as performed in practice on a five-point scale.

Figure 3 Entrepreneurial dimensions associated with evaluated personal propensities



Assessing audit results for staff entrepreneurial mindset

The nursing ecosystem developed in [Figure 1](#) shows opportunities that can facilitate the development at all levels across the organisation, including improved communication and understanding in care delivery services that result in better patient satisfaction. Entrepreneurial leadership ([Ireland et al., 2006](#); [Mazzara, 2014](#); [Shepherd et al., 2010](#)) encourages entrepreneurial behaviour, and an entrepreneurial culture supports the development of innovations and “entrepreneurial mindset”. The two results reported in our pilot study show nurses with an entrepreneurial mindset increase their ability to sense opportunities and mobilise the resources and knowledge required to exploit them.

Leadership dimension

The leadership style of entrepreneurially behaving nurses and leaders ([Hazelton, 2013](#)) reflects a “collaborative” trust- and value-based approach to leadership in group work and organisation management. Collaboration plays a strong role in future strategic thinking, particularly in identifying collaborations that may lead to desired goals or strengthen the impact one is trying to make. Such goals are top of mind but not all are operationalised, as only those with a good chance of adding value are pursued. For nurses with high emotional intelligence, the directive characteristic is not top of mind and comes into play when required to execute necessary action to achieve goals and when necessary to manage the business and general operations of the organisation. The visioning map in [Figure 5](#) shows that each nurse in the test cases (known as TB1 and TB2) is committed to collaborative leadership over a directive practice.

Such behaviour was instrumental in nurse TB2 gaining support for the opportunity to decrease the number of perinatal and infant deaths through a collaborative leadership and partnership of like-minded organisations in each state and territory led by an entrepreneur nurse.

Another opportunity (TB1) existed to give certified informatics courses in the new discipline of “informatics”. Collaboration at all levels of the ecosystem enabled qualifying nurses to add an annual amount of \$20,000 to their salary in recognition of acquired skill levels.

Figure 4 Entrepreneurial mindset audit instrument

Entrepreneurial Mindset Audit Instrument

We are interested in learning how you perceive your entrepreneurial behaviour in your workplace and organisation. Using the scales below, please indicate how much you agree or disagree with each of the characteristics applying to each primary dimension of your performance. It would be helpful you provided some explanation and examples of your performance. All responses will be kept confidential.

LEADERSHIP: Collaborative

Strongly Agree				Strongly Disagree
0	0	0	0	0

LEADERSHIP: Directive:

Strongly Agree				Strongly Disagree
0	0	0	0	0

List Examples.....

DECISION-MAKING: Intuitive:

Strongly Agree				Strongly Disagree
0	0	0	0	0

DECISION-MAKING: Analytical:

Strongly Agree				Strongly Disagree
0	0	0	0	0

List Examples.....

BEHAVIOUR: Proactive:

Strongly Agree				Strongly Disagree
0	0	0	0	0

BEHAVIOUR: Reactive:

Strongly Agree				Strongly Disagree
0	0	0	0	0

List Examples.....

AWARENESS: Spiritual:

Strongly Agree				Strongly Disagree
0	0	0	0	0

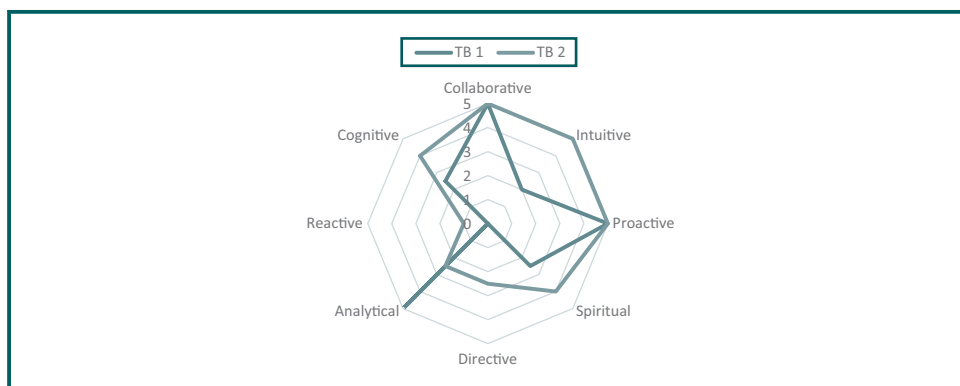
AWARENESS: Cognitive:

Strongly Agree				Strongly Disagree
0	0	0	0	0

List Examples.....

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Figure 5 Entrepreneurial mindset propensity for each case



Decision-making dimension

Decision-making is a critical aspect of entrepreneurial behaviour, but the interplay between rational and intuitive decision-making is not well understood. Both of these characteristics contribute to effective patient-centred decision-making. However, health-care decision-making is often “rule driven” rather than “data driven”. Many organisations are moving towards becoming more data driven, but it is a slow process hindered by the lack of investment in systems. There are many policies, procedures and guidelines which rely on the best available evidence in clinical care. Yet, actions that cross-unit divisions often limit strategically driven management decisions. For example, A linear focus on finance and management procedures will overly limit opportunity evaluation and trials. The fatal flaw here is the policy and management thinking that focusses on financial solutions alone.

Behaviour dimension

Entrepreneurial organisations are usually prepared to intervene in, or control, an expected occurrence or situation by being proactive in causing the change and not simply reacting to change. Similarly, proactive has the same meaning when applied to the entrepreneurial mindset and is a well-established characteristic of an entrepreneur. This is the opposite of a reactive behaviour where the individual or organisation reacts to events or situations rather than acting first to change or prevent something. [Figure 5](#) shows that each nurse exhibits maximum propensity to deliver proactive behaviour.

Nurse TB2 expressed feeling very uncomfortable when operating more in the reactive space than in the proactive space: “I like to feel ahead of the game and achieve good outcomes”. “With good strategy and commitment by all involved (the full team) it makes achievement possible and enjoyable. There is nothing better than playing a leadership role within a high performing team”.

Awareness dimension

Awareness is usually defined as knowledge that something exists or as understanding a situation based on information or experience. Indeed, self-awareness is knowledge and awareness of one’s own personality or character. Together, cognition and spirituality form the natural characteristics for an aware person. Cognition is the mental process involved in knowing, learning and understanding things. Spirituality is the quality of being concerned with the human spirit or soul as opposed to physical or material things. This reflection is fully incorporated in the model of entrepreneurial mindset ([Figure 2](#)) where the rational, emotional and spiritual aspects of intelligence are at the core of the holistically focussed entrepreneur. [Figure 5](#) shows each nurse exhibiting a strong spirituality characteristic with a balance on cognition. Of course, such characteristics are not absolutes or mutually exclusive, but in the entrepreneurial mindset, the spirituality characteristic is very much associated with entrepreneurial activity and behaviour.

Visionary maps for interpreting entrepreneurial mindsets

Using the “visionary map” concept ([Figure 5](#)) developed by [Kakabadse and Kakabadse \(2008\)](#) for assessing boards, it is possible to measure entrepreneurial mindset as reported by each subject and lay the measure on a “radar” style map to capture how each individual sees the potential for acting in an entrepreneurial way. Such a vision enables the leadership to align creative focus with the organisation strategic vision and action to add value across all levels of the ecosystem. Such visualisation of creative staff behaviour within the organisation allows management to balance the need to support staff energy, commitment,

knowledge and resources with a sense of “spiritual” care that can overcome bureaucratic difficulties within governance levels of the organisation.

This strong innovation behaviour and entrepreneurial mindset is shown in Figure 5, where both nurses demonstrate a strong propensity for *collaborative leadership*, *intuitive decision-making*, *pro-active behaviour* and *spiritual awareness*. In one case, the nurse with a strong science background demonstrates a balancing capacity for *analytical functions in leadership*.

Conclusion

Entrepreneurial mindset is a way of thinking about opportunities that surface in the organisation's internal and external environment together with the commitments, decisions and actions necessary to pursue them.

This pilot case study demonstrates the value of setting organisation strategy and performance within the ecosystem and providing the basis for understanding and assessing opportunities to innovate. In this case, we used nurse-directed patient-centered care activities, including improved communication and understanding in care delivery services that resulted in higher levels of patient/user value satisfaction. The research confirms that entrepreneurial leadership encourages entrepreneurial behaviour, and an entrepreneurial culture supports innovations and “entrepreneurial mindsets”. Indeed, nurses with an entrepreneurial mindset increase their ability to sense opportunities and mobilise the resources and knowledge required to exploit them.

Keywords:
Culture,
Health care,
Nursing,
Entrepreneurial mindset,
Ecosystem,
Audit instrument

References

- Clayton, S. (2019), “6 Signs your corporate culture is a liability”, *Harvard Business Review, Crisis Management December 05*, available at: <https://hbr.org/2019/12/6-signs-your-corporate-culture-is-a-liability>
- Frow, P., McColl-Kennedy, J.R. and Payne, A. (2016), “Co-creation practices: their role in shaping a health care ecosystem”, *Industrial Marketing Management*, Vol. 56, pp. 24-39.
- Gillin, L.M. (2020), “Facilitating intuitive decision making and an entrepreneurial mindset in corporate Culture – a case study”, in Sinclair M. (Ed.), *Handbook of Research Methods on Intuition*, Vol. 3, Edward Elgar Publishing, Cheltenham.
- Gillin, L.M., Gagliardi, R., Hougaz, L., Knowles, D. and Langhammer, M. (2018), “Teaching companies how to be entrepreneurial: cultural change at all levels”, *Journal of Business Strategy*, Vol. 40 No. 2, doi: [10.1108/JBS-09-2017-0138](https://doi.org/10.1108/JBS-09-2017-0138).
- Hazelton, L.M. (2013), “Governance and stewardship in the aged care industry: evaluating a model for corporate social entrepreneurship: the relationship of board culture to entrepreneurial behaviour”, Thesis, University of Adelaide.
- Ireland, R.D., Kuratko, D.F. and Morris, M. (2006), “A health audit for corporate entrepreneurship innovation at all levels. Part 1”, *Journal of Business Strategy*, Vol. 27 No. 1, pp. 10-17.
- Kakabadse, A. and Kakabadse, N. (2008), *Leading the Board: The Six Disciplines of World-Class Chairmen*, Palgrave Macmillan, New York, NY.
- Mazzara, D. (2014), “Future of health & Wellbeing- Key trends and business opportunities”, Accenture (April 10th). Trento.
- Obschonka, M., Moeller, J. and Goethner, M. (2019), “Entrepreneurial passion and personality: the case of academic entrepreneurship”, *Frontiers in Psychology*, Vol. 9, pp. 1-15. Article 2697.
- Shaver, K.G. and Comarmond, I. (2019), “Toward a comprehensive measure of entrepreneurial mindset”, in Laveren, E. Blackburn, R. Hytti, U. and Landström, H. (Eds), *Rigour and Relevance in Entrepreneurship Research, Resources and Outcomes*, *Frontiers in European Entrepreneurship Research Series*.

Shepherd, D.A., Patzelt, H. and Haynie, J.M. (2010), "Entrepreneurial spirals: deviation-amplifying loops of an entrepreneurial mindset", *Entrepreneurship Theory and Practice*, Vol. 34 No. 1, pp. 59-82.

Timmons, J.A., Gillin, L.M., Burshstein, S.L. and Spinelli, S. (2011), *New Venture Creation – Entrepreneurship for the 21st Century: A Pacific Rim Perspective*, McGraw-Hill, Sydney.

Zohar, D. and Marshall, I. (2004), *Spiritual Capital*, Bloomsbury Publishing, London.

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