

Existing in the wild: designer-entrepreneurs moving from invention to innovation via an advantage-seeking mindset - a brief discussion of concepts

Jose Aldo Valencia Hernandez
Newcastle Design School, Northumbria University
jose.valencia@northumbria.ac.uk

Dr. Alison Pearce
Newcastle Business School, Northumbria University
alison.pearce@northumbria.ac.uk

Abstract

Entrepreneurially talented people inside organisations know how to navigate adversity, to leverage the elements of their ecosystem in order to make things happen, and how effectively to utilize the given means to drive change. In a new venture these characteristics are crucial to thrive. Start-ups rely on their talent to adapt to constant change and unstable situations. This paper describes two concepts in how design talent becomes entrepreneurial, through 'cognitive harmony' and 'cognitive dissonance'. Designer entrepreneurs navigate from the design to the business discipline, adapting business theory and practice in a different sequence. Designers are known for their creative skills, which help them to realise products and services in a desirable, viable and feasible way. They increase revenue in companies in a two-to-one ratio, but they also impact other areas of the organisation, such as culture, customer experience and brand value. This paper discusses these ideas and proposes developments of the 'opportunity-seeking mindset' more accurately describing the designer-entrepreneur. We propose that designers can be considered talent in any organisation due to their contribution to business goals.

1. Introduction

Makers, inventors and innovators have a hands-on attitude towards building and realising their ideas. However, they serve different purposes. On one hand, makers like building things they find interesting with the

available technology, integrating them for the sake of exploring their technical capabilities. Inventors stretch out their technical capabilities to discover new boundaries in processes, objects or technologies. Innovators improve, change or create new products out of objects, processes or technologies aiming to compete with, or to differentiate themselves, from other offers. They consider the impact they can have (economic or social). Steve Jobs, the founder of Apple inc, indicated in 2011 [1] that Apple was organised as a start-up. This meant that there were no committees: every person was empowered to deliver value and responsible for a specific task. They operated through ideas not hierarchy. The key to retaining the best talent was to let them take decisions and bring their ideas to the table. In this case, Jobs referred to innovative traits in the talent Apple was recruiting. That led them to become open to entrepreneurial behaviors, in order to retain the best talent.

2. Designers managing startups

Management studies have overlooked designers' ability to manage new ventures.

Designers and entrepreneurs share some personal and professional characteristics that make them suited to developing new products and managing new venture creation. However, there are no studies reporting how they changed their mindset from being only designers to transform themselves into entrepreneurs or which characteristics differentiate non-designers from designer entrepreneurs.

Designers make sense of complex data about the product trends, user needs, and latest technology to build their products. However, when it comes down to business decisions, their tools are not limited to product development. They provide rich information to generate meaningful experiences to their customers and to form a business model.

On the other hand, entrepreneurs connect products or services with the market, seeking to generate profit. Their business knowledge can be empirical and specific. They are not limited to meeting business goals however. Entrepreneurs apply business acumen such as metrics and strategies to make decisions related to the product. If we consider start-ups as hypothesis testing machines, designers and entrepreneurs are the scientist behind the experiments, picking up any subtle signal that can lead to business growth. However, they follow different methods to experiment, test and learn about the business. In this paper, we explore the mindset behind designer entrepreneurs and show evidence of how they benefit from this dual role inside product start-ups.

2.2. Designers: entrepreneurs or freelancers?

Designers are known for their creative skills, which help them to realise products and services in a desirable, viable and feasible way. They increase the revenue in companies,

almost in a two to one ratio [2] but they also impact in other areas of the organisation, such as culture, customer experience and brand value, to name a few. In this study we infer that designers can be considered talent in any organisation by their contribution to the business goals. Designers are also recognized as natural entrepreneurs, due to their competences in the idea-generation and product development processes [3]. There is an interplay between the talent and the type of business they create. As Bianchi mentioned in 2009 [4], talent and wealth are the decisive factors in becoming an entrepreneur or self-employed.

One example is the founder of a consultancy design firm based in London. She commented that the transition from being a freelancer to becoming an entrepreneur happens in a short time. In her case, she worked as a freelancer for several years, but as the calibre of clients improved, their requirements grew. A client request for an invoice was the minor event that triggered the need to incorporate a studio, look for a name, find a physical address and consider hiring more people. At that moment she labeled herself an entrepreneur. There was no complexity in doing it, but it was clear that now she was representing a brand and the identity of her company.

2.3. The core overlap

Generally speaking, designers and entrepreneurs speculate about the future by integrating complex information, ranging from human-centered insights, state of the art technology and socio-cultural changes into a product or a service. They imagine how, when who and why people would use their product or service. They form scenarios representing different time horizons that are event-dependent; This is, they can change depending on the situations, leveraging the incoming circumstances. Both profiles are

considered creative. By definition, the main difference is that the one that focus on the execution of the object or service is considered the inventor, whereas the one focused on the implementation of the “solution” with the real market is consider the innovator.

Entrepreneurs seek favourable circumstances in which to launch their products: timing, technology readiness, market maturity and funding can interplay to make things happen. This is called the ‘opportunity seeking mindset’ [5]. On the other hand, the mindset of a designer is arranging tangible and intangible characteristics to form a coherent proposition perceived as desirable, viable and feasible. This can be called a ‘configuration-seeking mindset’.

But there is a midpoint between these two positions that can help describe designers moving towards business and business people interested in design. It can be assumed that a combined profile between designer and entrepreneur can be a favourable position when it is time to invent and innovate. This profile occupies a strategic position that understands the users’ needs and how to make things happen to reach the market. This profile can leverage their skills to speed up the iterations needed to make people want and pay the product. We call this the ‘advantage-seeking mindset’.

3. The mindset of the designer-entrepreneur

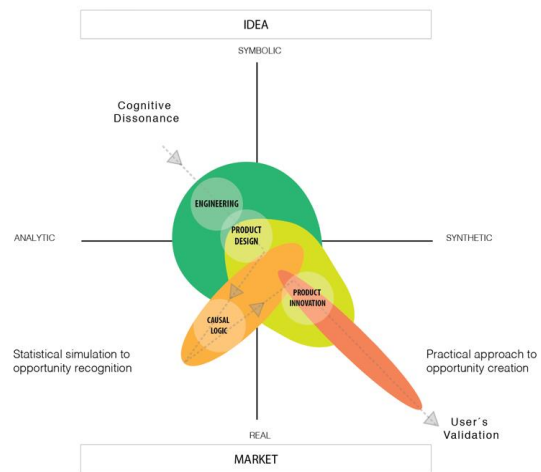
What does it take for a designer to become an entrepreneur and what should they learn in order to excel in a business setting? There is no definitive way to combine these ‘opportunity-seeking’ and ‘configuration-seeking’ profiles. Formal business education does not offer a suitable ‘major’ as it is still a crossbreed of disciplines. Designer entrepreneurs happen to exist ‘in the wild’:

they learned the hard way the nuances that design and business can add to the entrepreneurial path.

3.1. Cognitive harmony and dissonance

Fig. 1 below shows a map of the creative process from idea generation to implementation based on Charles Owen’s work [6]. This schematic consists of 2 axes. The horizontal axis represents two poles, the analytical and synthetic cognitive poles. The vertical axis is formed by the symbolic and real realms of activity. At the very early stage of the product/start-up, where the solution is still vaguely configured and the business yet to be defined, inventors (in this case engineers and product designers) are realising their ideas without thinking of a particular market. These actions bring the inventors towards the quadrant where synthetic and real thinking happens. Innovation must be perceived as an integral solution, pointing out that product innovation lies at the bottom right of the diagram. This flow of thinking represents a line that is coherent between product development and the start-up setup.

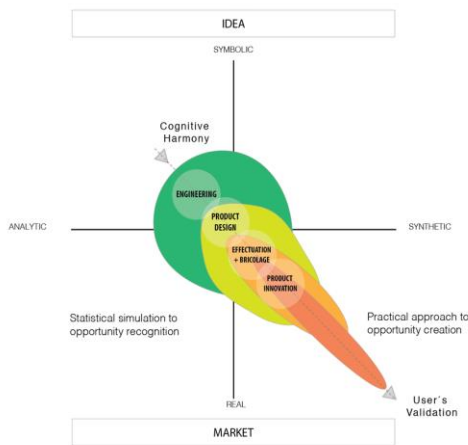
Figure 1: Cognitive dissonance (schematic by the authors, based on Owen, 2007).



In this quadrant, the first loops of feedback refine the proposed solution as well as the business idea. Cases like Airbnb and Dyson show clearly this way of thinking from their founders. Airbnb started with an idea, then they prototyped it to have their first customers. That in turn provided feedback to improve the platform. But when an analytical approach to business is taken, this coherence is broken. In Figure 2, also based on the work of Owen [6], interruption to the flow can be seen.

The left-hand quadrants are more involved in discovery (finding) and those on the right in invention (making). A symbolic/real vertical axis divides the map, according to content or realm of activity. Upper quadrants show an abstract, symbolic world and the institutions, policies and language tools that enable people to manipulate information, communicate and live together. Lower quadrants map the real world - artefacts and systems necessary for managing the physical environment.

Figure 2: Cognitive harmony (schematic by the authors, based in Owen, 2007).



Start-ups working in consumer products realise solutions by integrating technology into devices that will be used, operated or handled by a human being. The problem emerges when, instead of gaining traction by testing such ideas with potential

customers to gain progress and speed, the founders have to put aside the developing process to learn business and management skills. Business planning, building cost structures, forecasting revenue models and staff management can undermine the hands-on attitude of product entrepreneurs at a very early stage. This creates mental discomfort through performing actions that contradict their natural procedures, and confronting them with new processes and information. In psychology this phenomenon is named cognitive dissonance [7]. Cognitive dissonance is described by Harmon-Jones & Harmon-Jones [8] as follows: “when individual holds two or more elements of knowledge that are relevant to each other but inconsistent with one another, a state of discomfort is created. This unpleasant state is referred to as dissonance”.

Designers in consumer end products need a practical way to start up a business: a way in which they are able to get closer to a tangible solution faster, to be marketable and produce something for which customers are willing to pay. Bricolage [9] and effectuation, instead of asking for detailed analysis, focus on a set of principles aimed at always making progress. What is available determines the outcome, and the scarcity of the environment focuses creativity. Inside a corporation, the gap between the prototype and product innovation can be filled by Burgelman’s ‘autonomous strategic behaviour’ [10] which he calls “the motor of corporate entrepreneurship” (p.241). ‘Autonomous’ is as opposed to ‘induced’ strategic behaviour i.e. that directed and managed through the strategy. So influential are the autonomous initiatives of ‘strategic entrepreneurs’, when successful, that Burgelman [11] proposes that “strategy follows autonomous strategic behaviour” (p.62), which is a possibility [12] under an ‘umbrella strategy’ [13]. Outside a corporation, the gap can be filled only by entrepreneurial effort by the

Business schools have traditionally focused on analytical tools and methods to bridge the distance between an initial idea and getting to market. But analysis usually relies on understanding what has gone before, and when a new path does not easily relate to previous experience, as in the case of discontinuous innovation, there is no reliable process or method.

10. References

- [1] Jobs, S., [2011]. *Interview: Steve Jobs: Apple Startup Culture, Management and Leadership*, available at <https://www.youtube.com/watch?v=a5b4nn3ZEVU> (accessed April 2019).
- [2] Sheppard, B., Kouyoumjian, G., Sarrazin, H. & Dare, F. (2018). The business value of design, *McKinsey Quarterly*, October, pp.1-17.
- [3] Møller, N., Anders, Wikström Christian, Tollest, 2013, Design based entrepreneurship, International conference on engineering design, Sungkyunkwan University, Seoul, Korea
- [4] Bianchi, M. (2009). Credit constraints, entrepreneurial talent, and economic development, *Small Business Economics*.
- [5] Sarasvathy, S. & Venkataraman, S. (2010). Entrepreneurship as method: Open questions for an entrepreneurial future. *Entrepreneurship Theory and Practice*, 35(1), pp.113 – 135
- [6] Owen, Charles (2007). Thinking: Notes on its Nature and Use, *Design Research Quarterly*, Vol. 2, No. 1, pp. 16-27
- [7] Festinger, L. (1957). *A Theory of Cognitive Dissonance*. California: Stanford University Press
- [8] Harmon-Jones, E. & Harmon-Jones, C. (2008). Action-Based Model of Dissonance: A Review of Behavioral, Anterior Cingulate, and Prefrontal Cortical Mechanisms, *Social and Personality Psychology Compass* 2/3, pp. 1518–1538,
- [9] Weick, K. (2000). *Making Sense of the Organization*, John Wiley & Sons, Oxford: UK.
- [10] Burgelman, R.A. (1983a). A process model of internal corporate venturing in the diversified major firm, *Administrative Science Quarterly*, No. 28, pp.223-244.
- [11] Burgelman, R.A. (1983b). A model of the interaction of strategic behaviour, corporate context and the concept of strategy, *Academy of Management Review*, Vol. 8, No. 1, pp.61-70.
- [12] Grigg, T. (1994). Adopting an entrepreneurial approach in universities, *Journal of Engineering and Technology Management*, Vol.11, No.3/4, pp.273-98.
- [13] Mintzberg, H. & Waters, J.A. (1985). Of strategies, deliberate and emergent, *Strategic Management Journal*, No. 6, pp.257-272.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 734824