

## **PROPHET OF PROFITS PROFESSOR EMERITUS MURRAY GILLIN ON HARNESSING ENTREPRENEURIAL INTUITION**

What makes a successful entrepreneur? Is it nature? Is it nurture? Are entrepreneurs born out of circumstance or are they just born? Countless papers have been written about the entrepreneurial mindset and what compels entrepreneurial behaviour. Most focus on personality traits, such as motivation, charisma and non-conformity. Others focus on environmental factors, such as necessity or upbringing. Professor Emeritus Murray Gillin has spent the majority of his adult life championing the importance of entrepreneurship. He has taught it. He has studied it. And despite a career largely in academia, he has lived it, pioneering a range of entrepreneurial endeavours, including the world's first masters degree in entrepreneurship and innovation. At the age of 71, Professor Gillin has reached one conclusion. There is more to entrepreneurial success than smarts, good luck and an extra-potent dose of chutzpah. In fact, Professor Gillin believes that successful entrepreneurs are guided by a deeper force, a level of intuition that allows them to predict future outcomes. And he has embarked on an academic study to prove it. Could this be true? Are entrepreneurs motivated not by memory or reason, but by energetically encoded information of the future? Are successful entrepreneurs born extra intuitive? Entrepreneurial editor-in-chief James Tuckerman met up with Professor Gillin in an attempt to second-guess his research outcomes (and maybe open a window on the future of Anthill).



**Your research paper is titled 'Before Cognition: The Active Contribution of the Heart/ANS to Intuitive Decision Making as Measured on Repeat Entrepreneurs'. That sounds awfully technical. In a nutshell, what is your research trying to achieve?**

We all know that entrepreneurs – typically serial entrepreneurs – use other means to make decisions; means other than analysis. Text books, business promoters, academics all focus on the role of analysis in the decision making process, and analysis is important – I'm not saying it isn't – but successful entrepreneurs don't make their decisions on analysis alone. They make decisions based on feelings, other experiences, and that's what we're trying to understand. We're trying to understand how successful entrepreneurs go about making decisions, and learning from the process so that it may be taught.

**So, are you suggesting that entrepreneurs are more likely to make decisions through ways other than cognitive analysis?**

Let me suggest it to you this way. We're all familiar with the feelings we have about making decisions. Sometimes we have them in our gut. Sometimes, we just have a sensation, or sense something, using our heads. But the important question is how these feelings and associated analytical ways are related in making decisions. Humans have a great propensity for looking at patterns. Using that information, those patterns, are just one way we make decisions and take certain actions. And that process is heavily influenced by the subconscious mind.

**And what's the difference between the conscious and the subconscious mind?**

The conscious mind has a relatively limited capacity to gather information and make fast decisions. The subconscious mind can access the whole database, the whole hard disk drive, if I can put it that way, and it can respond to demand hundreds of times faster than the conscious mind. What we are trying to find out is how 'gut feel' fits in. From where do we get that sense that we ought to do something? Now, humans call this intuition. However, in the cognitive sense, in the traditional sense, intuition has been all about brain pattern recognition. But what we have found is that the human body experiences a pre-

stimulus response, before the brain makes a decision. We're finding that the autonomic nervous system, that which controls the organs of the body – the heart, the liver, those sort of things – is actually picking up information, which then is passed to the brain, before cognitive decision making processes kick-in. We've found this out experimentally, by measuring the variation of the heart rate and also skin conductance. This autonomic nervous system could be what is often referred to as 'gut feel'.

### **So, 'gut feel' is the same as intuition?**

I'm not saying 'gut feel' is in itself intuition, but that those sorts of feelings represent bits of information, which we then process to the brain, or feed to the brain. The brain then makes decisions with all the information that is available. And that's the important issue – that has never been properly studied. There is information available to us, that we know we have, feeling-wise, but no one has ever been able to identify it in an holistic, electro physiological, quantum physics way.

### **Now you're getting technical on me again (laughs). Can you tell me about the scientific process you are using to measure these 'pre-stimulus responses'?**

Initially, and this is how I got into this, we organised a series of interviews with serial entrepreneurs at the Cambridge Technopol. The Cambridge Technopol is an exciting place. Twenty-four years ago, Cambridge University and Cambridge, the city, was a sleepy hollow – very much a market town. There were only about 50 high tech companies with around about 2,000 employees. That's it. In what indeed is one of the world's best universities, with terrific new knowledge being created all the time, there was no commercialisation. No entrepreneurial exploitation. Anyway, twenty-four years later, they have 3,500 high tech businesses, which are related to the university and its network, employing 50,000 people. What's really interesting is the contribution to the GDP of the UK this precinct creates – approximately £7.6 billion. That's a tremendous transition. But I digress. The important thing is that the area has also become a breeding ground for successful 'serial' entrepreneurs. So, we started to interview a number of these very successful entrepreneurs. In the interviews, we wanted them to tell us what were the things that affected their decision-making. We recorded the interviews, like you're doing now, and transcribed them. We then analysed the content, and what came back, loud and clear, was that the entrepreneurs said that their decisions were influenced by feelings. They said, 'Yes, we use analysis, but when we make decisions, we often have a gut feel, an instinct, some sense of intuition.' These were the sorts of words that were used, again and again. So we said, 'Ah-ha! There is something happening here.' Twice now, I have returned with electro-physiological equipment to measure heart rate and skin conductance.

### **How do you test subjects?**

We use certain protocols, on a computer. We begin with a simulated roulette wheel, where the subjects make a betting decision. While they're making that decision, before they have all the information they need to make a decision, we are measuring their heart rate skin conductance – monitoring their autonomic nervous system. Then we turn to business cases. And we use something like 50 cases, all high growth businesses. I separate SMEs from entrepreneurial businesses on the basis of growth – like Anthill and the companies you write about. And so, 25 are case studies of successful growth companies. Twenty-five have failed. We present the subjects with very limited data – on the industry, the way the project is being funded, the structure of the enterprise, who owns it – that type of thing. We give them \$100,000 to invest in the case studies they believe will be high growth. Of course, they are also using their cognitive decision making processes. There is no question of that. I watch them, and if they know the industry well they are more likely to be decisive. But you see, what we're doing, is measuring what's happening just prior to that. And that's where we're picking up that the autonomic nervous system is actually collecting information from the quantum, from the surrounding environment, and then feeding that information up to the brain.



### **So, what have you found?**

Well, what we've found at this early stage, because I am talking about a pilot study, is that there is a correlation between prestimulus behaviour and a response. For example, the heart rate changes, it decelerates before a subject makes a correct/incorrect decision. Now, I am talking about trends. But the whole purpose is that if we can understand what makes intuition effective then we can design interventions to enhance the capacity of the individual to improve their decision-making performance.

**Are you suggesting that entrepreneurs have a greater propensity than other people for making decisions using methods other than analysis?**

I'm not arguing that entrepreneurs are the only people who use intuition. Don't get me wrong. The reason I decided to study serial entrepreneurs was quite deliberate, because serial entrepreneurs have started several successful businesses. This eliminates the argument that their success is based on luck. And they freely acknowledge that there is something that they rely on, which is not just analysis.

**Are you the first person to consider the role of intuition in business decision-making?**

I'm certainly not the first to look at the role of intuition in business decision-making. But they only look at cognitive intuition. We're certainly the first to look at what you might call an electro-physiological explanation for components of intuition. I have to keep emphasising that what we're looking at is not just intuition, because intuition does, in fact, take into account what happens in the brain and the process of cognitive analysis.

**Have you applied the model to a set of managers rather than entrepreneurs for comparison?**

That's the next experiment. We used serial entrepreneurs, because they have to use intuition. Entrepreneurial decision makers are never given all the facts. They have to operate in an environment of uncertainty. We have another tool, which was developed in the UK. It doesn't use electro-physics. It's a simple index. Using pencil and paper, subjects are asked to answer a series of questions. It measures the propensity of the subject to think intuitively or to think analytically. The span is one to 76. Extremely analytical is 76, while totally intuitive is one. Business managers typically come out, with a mean of 43. The serial entrepreneurs score a mean of 23. By choosing to research entrepreneurs, initially, we can monitor a group of people who are likely to think intuitively and because electro-physical signals are very faint, this group of subjects is likely to generate stronger signals that can be detected.

**Have you encountered any scepticism or opposition to your research?**

If I am to be honest, whenever I talk to entrepreneurs, they are excited. They almost always say, 'This makes sense to us. Intuitively, it makes sense, so how can we find out more. We want to support it.' But whenever I speak to hardheaded cognitive academics they say, 'Can't happen.' Now that intrigues me. Academics and researchers should want to explore new ideas, not shut them off. But because it doesn't fit the norm, they say, 'Uh-uh,' naughtily. The people who actually practice intuitive decision-making are the ones that are really encouraging us to do more and more. The academic process knocks creativity out of you. We've become so imbued with what I call linear thinking. But we've forgotten that life is not linear – it's a complex holistic system. And, you know what? It all comes back to physics. Newton discovered the laws of mechanics and they are correct to a certain level of magnitude. But then, just over a hundred years ago, they discovered the need for uncertainty, called quantum physics or quantum mechanics. The resistance to quantum mechanics was enormous, because it did not say what linear thinking said. Now, without quantum physics we wouldn't be able to understand theoretically what's happening in intuition.

**What lead you to this particular area of entrepreneurship? Has your background in engineering assisted?**

Now, I'm a bit keen to say my gut lead me to these studies, but I won't say that (laughs). I've always had a very Christian background, where one always talked about prayer and things like that. And I've always wondered, 'How does this work?' It's not magic surely. And then, as a result of getting educated in the quantum side of things, as an engineer, and coming to understand the way energy transmits and is absorbed, the way energy can carry information, which is part of the universal activity of life – because life is energy, that's all

it is – I began to wonder whether the comments I mentioned about ‘gut feel’ could be related.

### **Where do you believe this research will take you?**

Once we understand what it is that makes somebody better at what they’re doing, we can then develop master classes, special courses, and training things, activities that enhance that capacity to make decisions more reliably. That’s what gets me excited.

## **PROFESSOR EMERITUS MURRAY GILLIN (A biography of entrepreneurship)**

**1975:** Attempted to facilitate a commercialisation culture within the Australian Defence Science and Technology Organisation (DSTO) on return to Australia (an ambition too early for its time).

**1975:** Directed by then Chief Defence Scientist Dr. John Farrands to move to Canberra as Head of Laboratory Programs, interact with all laboratories within DSTO and develop a commercialisation culture (another ambition too early for Australian culture).

**1979:** Appointed Dean of the Faculty of Engineering at the then Swinburne Institute of Technology (now Swinburne University of Technology).

**1981:** Following the Australian Government introduction of “Enterprise Workshops” to final year engineering and science students in 1979, appointed first Workshop Director, held until 1992 (recognised an opportunity for integrated learning in entrepreneurship).

**1985:** Designed Graduate Diploma in Entrepreneurial Studies, hailed a breakthrough in entrepreneurial education.

**1988:** A visit to Babson College, Boston USA, the Babson Entrepreneurship Research Conference, and the Price-Babson program for training teachers of entrepreneurship led Gillin to create (in less than five days) the curricula for the world’s first Masters Degree in entrepreneurship and innovation, the Master of Enterprise Innovation. Some 19 years later, the MEI is the flagship of Swinburne’s Australian Graduate School of Entrepreneurship.

**1989:** University politics forced the MEI to be offered in a separate entity (The Institute for Innovation & Enterprise). With the agreement of the Vice Chancellor, a guarantee to cover start-up loans from the bank, and the hiring of premises off-campus, the program commenced with seven students.

**1992:** Appointed President of the Institution of Engineers, Australia. Joint program with Waikato University in New Zealand and Centre for Innovation and Enterprise, to share curricula, academic-practitioners and the local case studies in teaching entrepreneurship. Deal struck with private business school in Singapore to share resources and teach MEI in Singapore. Courses ran from 1992 to 1997.

**1994:** Following another university restructure and transfer of MEI from engineering to business the opportunity arose to form a joint company with Ernst & Young registered as Centre for Innovation and Enterprise Pty Ltd with its administration, teaching space and teaching delivered at 120 Collins Street, Melbourne.

**1995:** The Institute for the Study of Entrepreneurship and Management of Innovation in Tel Aviv, Israel, franchises the MEI following a world search.

**1997:** Joint company dissolved and MEI program moves back into the Swinburne Graduate School of management in late 1997. The joint company added significant growth to student intake. Reverse effect occurred when program is moved back to Swinburne.

**1998:** Took early retirement, before returning as Professor Emeritus in Entrepreneurship and Innovation, as well as providing consultancy services to the university.

**2001:** MEI became the flagship program in the newly established Australian Graduate School of Entrepreneurship.