

‘THE TRUST PROJECT’ BUILDING BETTER ACCESSIBILITY TO HEALTHCARE SERVICES THROUGH BEHAVIOURAL ECONOMICS AND INSPIRATION LABS

Mohamed Buheji

International Inspiration Economy Project, Bahrain

buhejim@gmail.com

Abstract

Many decisions are taken every day in important community organisations, based on perceptions of what customer would choose. The development of both behavioural economics and inspiration economy labs helped to put many perceptions to field test. In healthcare, perception based could make a great difference to life. For example, most of health centres, till today, in many developing and even developed countries take patients based on appointments, or based on first come first serve, or what is called walk-in system. This could risk that emergency cases reaching these health centres get mixed, or treated equally with non-emergency cases. Annually, many countries transparent statistics show that there are number of patients who die while waiting to be admitted to the physician clinic, i.e. before diagnosis. In this paper, we shall review the architecting of the patient codification system in five participating health centres and how this influenced patients' behaviour and thus elimination of the risk of patients' collapse, before being diagnosed in the right time. The psychology of trust using nudge and inspiration economies labs is discussed in relevance to their effective mechanism in creating positive change to all the stakeholders. Finally, the researcher recommends more work to be continued in this line where more field work would ease the life and the needs of the community.

Keywords: Health Centres, Behavioural Economics, Inspiration Economy Lab, Socio-Economy, Trust, Emergency Cases

INTRODUCTION

Latest behavioural economy studies show that field tested, small changes in the beneficiaries' environment can have a big influence on their behaviour and thus can impact the socio-economic situation. Such small interventions can encourage individuals to make different decisions (Wilkinson, 2013; Ariely, 2008).

Ariely (2008) seen that there are hidden forces that shape our decisions and that rationality plays a good deal of that. As we live in an era where many improvements and progress have been made on the way that people behaviour is analysed. Dealing with long-term problems as building trust between health centres and patients requires navigating the hidden intrinsic features and that what inspiration labs focus on. The idea of the labs is to test perceptions in the field and thus the problem exploration journey in inspiration labs would need to be explained.

With the advancement of behavioural economy and inspiration economy one would expect more social applications to spread; one of which the 'Trust' based projects. In this study, we shall explore the influence of nudging, the inspiration labs problem solving on building trust on patients for managing the self-prioritisation scheme.

In this paper, we shall explore 'The Trust Project' that managed to build higher accessibility to healthcare services in primary care centres in the Kingdome of Bahrain. The paper empirically illustrates how the project in the participating health-centres in Bahrain drastically helped to reduce the morbidity and mortality cases in the health-centres. The project thus shifted the responsibility for defining the urgency of the case from being only the responsibility of the medical staff to being the responsibility also of the patients, by making the patients opting to choose they are mostly non-emergency 'green' case.

LITERATURE REVIEW

Behavioural Economics

Behavioural economics incorporates the study of psychology into economic outcome (Sunstein, 2015). Over the past few decades, there have been many improvements made on the way that people behaviour is analyzed (Hansen, 2016). The concept Nudge, for example, which represent one of the leading tools of the behavioural economy depends focused on knowing how people think, i.e. through field exploration and then designing a procedure or a process that would make it easier for them to choose what is best for them. Thaler and Sunstein (2008) and Sugden (2009).

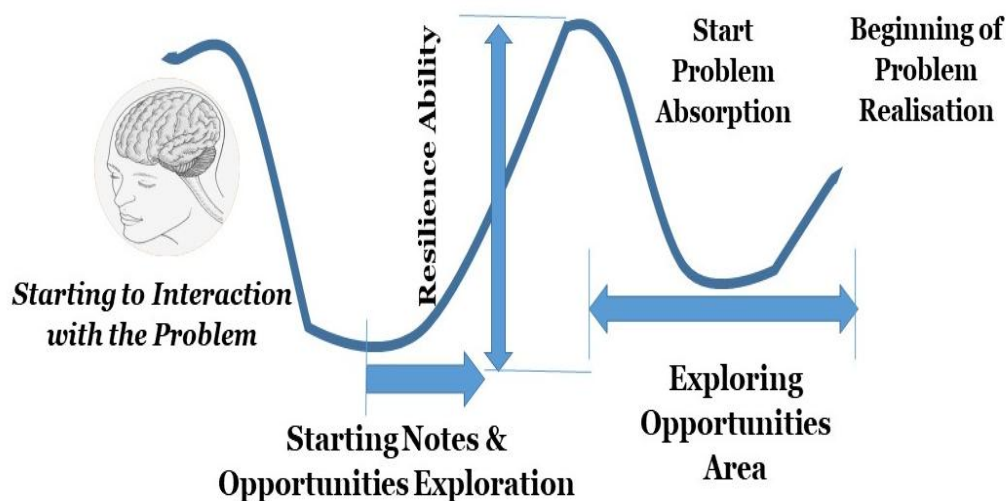
Defining Inspiration Economy Labs and How they work

Inspiration economy that focuses on raising the capacity of discovering the potential of human beings' abilities to be the currency of competition and source of a planned outcome and legacy.

Inspiration Labs works on experiential learning psychology and on creating a cognitive process of reflection through a test and then performing observation as part of the exploration of the problem, in our case the problem is the perception of patients self- prioritising for reaching out the family physician in the health centre. The inspiration labs analyse the thoughts and feelings of the concerned stakeholders during the problem-solving process. Such analysis helps us to reveal the 'hidden opportunities' which influence the behaviour development of the patients (Buheji, 2016 and Levitt and List, 2009).

Dealing with long-term problems requires navigating its intrinsic hidden features and that what inspiration labs focus on. The idea of the labs is to test perceptions in the field and thus pushes us to start to interact with the problem by taking notes and observations to explore the opportunities inside it. In this case, making a pilot of how patients would code themselves. The uniqueness of the inspiration labs is that it engages the stakeholders, i.e. the medical staff in the health centre and to be resilient to manage the problem complexity. Once the opportunities of the problem are identified through the pilot study, we can start realising the potential outcome for the problem and its type of requirement. This is called problem absorption stage. Figure (1) represents the way problem is realised through inspiration labs (Levitt and List, 2009).

Figure 1 Illustration Problem Exploration Journey in Inspiration Labs



Social Applications of Nudges and Inspiration Economy

Nagatsu (2015) explored the use of social nudges in policy interventions that would induce voluntary cooperation in social dilemma situations which can be defended against two ethical objections that is the objections from coherence and autonomy. Thaler and Sunstein (2008) popularized libertarian paternalism, the idea that behavioral economics and psychology “the emerging science of choice” provides policy makers with new tools to influence people’s economic and other choices for their own benefit without compromising their freedom of choice.

Nudges are subtle behavioural interventions that are distinct from standard regulations that operate with incentives (Sunstein, 2015, Sugden, 2009 and Sunstein and Thaler, 2009). Although nudges have already been applied as behavioural public policy in a wide range of domains (Shafir 2013), nudge paternalism has attracted ethical and moral debate. IE labs have been having many social applications in public, civil and private sector. For IE, coexistence and establishing effective social cohesion programmes are able to bring about more productive citizens that provide value added to the broader community (Buheji, 2016). The observation of the current market setting in both Nudge and IE labs leads societies to go deeper in understanding individualistic behaviour (Buheji and Ahmed, 2017a, b and Nagatsu, 2015).

Understanding the Economics of Trust

Covey (2006) seen that trust is the main issue in service complication and failure. Covey confirm that the availability of trust in organisation process it can affect its speed and cost outcomes. When trust goes down, speed goes down and cost goes up. There are many examples in everyday life and in services delivery that shows how the issue of trust can influence our economic and socio-economic decisions, or obstruct it.

In health centres the issue of patients’ appointment and reaching the physicians trust can be categorised to be societal-trust, self-trust and relationship-trust. This means it is a complicated problem that needs a behavioural change.

How Behavioural Economics and Inspiration Lab Work on Building Trust?

Trust between suppliers and customers is one of the main challenges that still face service industries in general and healthcare services specifically. Studies one of the way to solve a complex problem like the lack of trust between the supplier and the customers change the environment or distract it.

Influencing the mindsets to make organisations and communities get more engaged to create a focused outcome (Hogg and Cooper, 2007; Mathieu et. al, 2000). The level of influence can vary based on people engagement, level of distraction and the learning from the pilot

(Buheji, 2016 and 2017). The work of Thaler and his colleagues also focus on influencing change through diverting people decision to what is believed to be towards their own benefit.

In today busy life we need to influence with minimal resources and the quick impact that can be felt by more people. Both concepts of behavioural economics and IE labs use influencing without power as part of problem-solving and problem finding that lead to overcoming complexity and the creation of development.

Distraction is one of the greatest methodologies for inspiration, because when we are distracted we are more prone to think outside of the problem. Overcoming distraction, or disruption can lead to an inspiration that leads to something real and tangible. Many scientists create an intentional psychological obstacle to stimulate the ability of their targeted beneficiaries to learn beyond the traditional environment.

Studies shows that what prevents us from finding a solution is not a distraction, but rather a functional fixation. Therefore, we sometimes need to appreciate 'ill-structured problems', since in reality, they have more probability for creating a suitable engagement for learners. Even though 'ill-structured problems' start with fuzziness and distraction, they possess multiple solutions.

In relevant to building trust and effective communication model in health centres both the techniques of behavioural economics and inspiration labs work together to reduce the uncertainty. The first step to reducing this uncertainty is interpreting the problem and synthesising the opportunities that the problem brings. The second step in dealing with the uncertainty of the problem is to capitalise on the opportunities exploited from the challenges of the problem or its characteristics to come up with new learnings that solve the problem (Tversky and Kahneman, 1974).

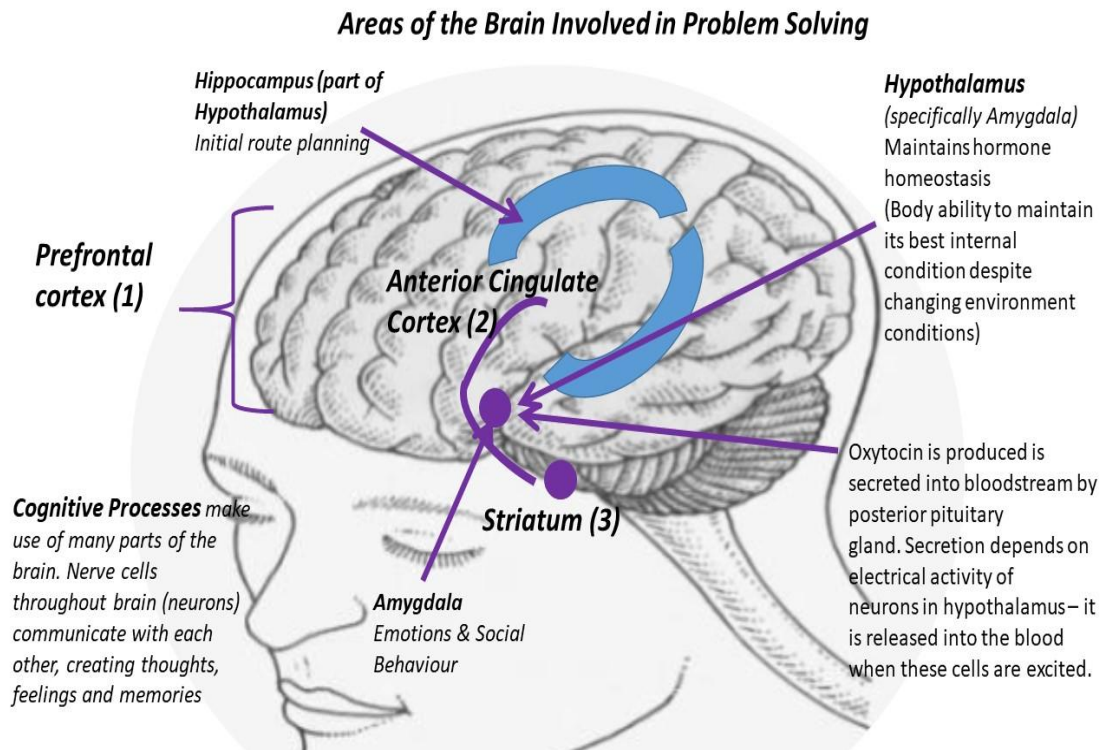
Shaping social, environmental and economic decisions need shaking of the assumption of the stakeholders through behavioural and psychological factors. At the heart of these texts is a critique of economic theory which is based on rational assumptions; where social and behavioural factors matter (Ariely, 2008 and Shiller, 2005). However, one needs to take into account what Sugden (2009) concluded that humans make choices without 'full attention, perfect information, unimpaired cognitive ability and complete self-control' (Nagatsu, 2015).

To establish more certainty, i.e. trust mindset, the cognitive process starts to stimulate the Prefrontal-Cortex, then the Anterior-Cingulate Cortex and then the Striatum, as illustrated in Figure (2). The hypothalamus (specifically Amygdala) helps to maintain the hormones homeostasis during the stages of building the trust throughout the field study as shown in Figure (2). This help to maintain the body internal condition, despite changing external environment conditions due to the dynamics of the problem challenges. The problem investigation excites the

Oxytocin which is secreted into the bloodstream, by the posterior pituitary gland. This help to enhance the management of the problem certainty where the electrical activity of the neurons would be regulated (Buheji, 2018, Kahneman, 2011, Tversky and Kahneman, 1974).

Markman (2015) emphasise that there is many neuroscience research that is interested in the behavioural effects of oxytocin in increasing trust in humans. However, as Markman confirms later that this relation is not yet fully confirm and it still depends on preliminary evidence.

Figure 2 Areas of the Brain Involved in Problem-solving



APPLICATION OF NUDGE AND INSPIRATION ECONOMY LABS IN HEALTH CENTRE PATIENT PRIORITISATION SCHEME

The situation before the implementation of the project

Before applying the BE or ILs the patients used to arrive at the Clinic (with or without appointment). Then they used to queue to take a number for registration, then they would have a waiting time for about 30 minutes. Then patients would be called for doctor clinic for diagnosis. Then the patient would go to treatment room, or transferred for emergency clinic or directly transferred to the hospital by ambulance.

After the Implementation of the Project

The project started by adopting the following triage codes protocol in the piloted project:

Red Code Case – where patients should see the physician in zero minutes,

Yellow Coded Case- where the patient needs treatment and should be seen in less than 30 minutes,

Green Code Case – where the patients need a check-up and they can wait for 30 minutes or more.

The project called 'Trust' where the health centre would pilot trusting the patients for the first time to code themselves. Five public health centres agreed to participate in such a project and they were among the highest patients demands centres. Once the coding auto machine is set, the patients were directed to decide first their level of urgency to see the physician, i.e. to autonomously prioritise themselves. Based on the colour coded ticket the sign and the steps direct the patient for either entering directly to the physician in the emergency room or set down for triage prioritisation if the yellow code is chosen.

The outcome of this piloted 'Trust' study showed that red patients that chosen red code were seen by physicians within 5 minutes in Emergency Room and there ten critical cases from all the five health centres that were considered emergency complicated cases that needed to be transferred to the hospital.

In a pilot of the five collaborating health centres and with the 'Trust' project run for one month only, more than 87% of the patients (19500) chosen Green code for their case. Only 12.7% chosen a yellow code and 0.35% only evaluated themselves as red and they were all right. The project shown that giving trust to patients to verify their condition reduced the load and risks of emergency patients being collapsed while waiting for the diagnosis. Figure (3) compares the influence of 'Trust' project in the streamlining of the patients' pathways. Figure (3) Illustrate the Accessibility to Physicians before and after 'Trust' project.

Patients satisfaction increased from 43% seeing the service to be (very good), to more than 71% being satisfied (very good) after the project. Family physicians believe they are now more relaxed with patients as they trust the triage of the colours of green and yellow, while giving the most appropriate time for patient instead of trying to giving them all 5 minutes regardless of the case, like used to be before. Nurses believe that now they have better communication with both the physicians and the patients and which reduced their stress by 20%.

The project revealed more data about red cases coming to the health centre and thus improvement of the treatment protocol and resources. I.e. cases as chest pain, asthma, severe

vomiting and diarrhea, bleeding, high blood pressure, very high diabetes, severe injuries or traumas and infants with high temperature are known to be red cases that patients would be comfortable to choose.

The codification system enhanced also the interest of the medical team (the physicians and the nurses) in the peer-review.

According to behavioural economics and inspiration labs, this distraction to the process influenced the patients' behaviour in predictable ways, by changing their choice architecture. This intervention brought significant change to the socio-economic benefit of the patients and health services providers and reduced the risk of non-noticed emergency patients waiting for physician call by 90%.

DISCUSSION

There are lots of learning that can be discussed from the 'Trust' project. Inspiration Labs using behavioural economics works to effectively inspires people to make more compassionate choices targeting social change. Life observations and reflections, as per IE labs would help people and organisation to see and visualise the big picture that to create better realisations of certain life, organisational or social challenges by turning them into opportunities. Through the practices of (Inspiration Engineering) the ability to challenge many status quo situations through distraction. This provides the organisation, or the community with rich opportunities for innovative ideas to follow and which usually are socially ignored or resisted.

The colour coding and giving patients the autonomous responsibility to decide about the priority of their case created new level of accountability and different level and type of behavioural change amongst the patients and health centre staff. This created better capacity development and lead to influence on the social welfare and created mindset change.

CONCLUSION AND RECOMMENDATIONS

This paper set a good practice of using behavioural economics and inspiration labs to re-building trust between supplier and customer in many service industries, including healthcare. The paper shows the role of behavioural economics and IE labs for creating behavioural change outcomes.

The paper shows also that their might many misperception or misconception about citizens biased judgment with they are given the autonomy of choice.

'The Trust Project' managed to illustrate a model of how we can improve lots of public services, such as having higher accessibility to healthcare services and thus reduce the morbidity and the mortality effect through simple, non-resource based behavioural techniques.

Such projects not only reduce the malfunction in services designs, but also build healthier relations in the communities and within the organisation. This project could be studied further from the point of economically value added outcome that came as a result of making more time for the family physicians and the nurses to focus on the patient diagnosis and treatment, rather than triaging and managing the patients' appointments system.

Since the paper shown the importance of autonomous codification on the public services in general and in healthcare specifically, the researcher recommends more work to be continued in this line. The paper would have more benefits too on the services where cases of urgency are mixed up with normal cases. Due to the richness of the data available and the need to the improve many communities' services based on 'Trust' mindset and designs, more work empirical work is needed on how to build trust in specific decision making points which would improve the quality of life of all the stakeholders. This would not only help better communication and quality of services, but even could save lives and have drastic effect on our socio-economic outcome.

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