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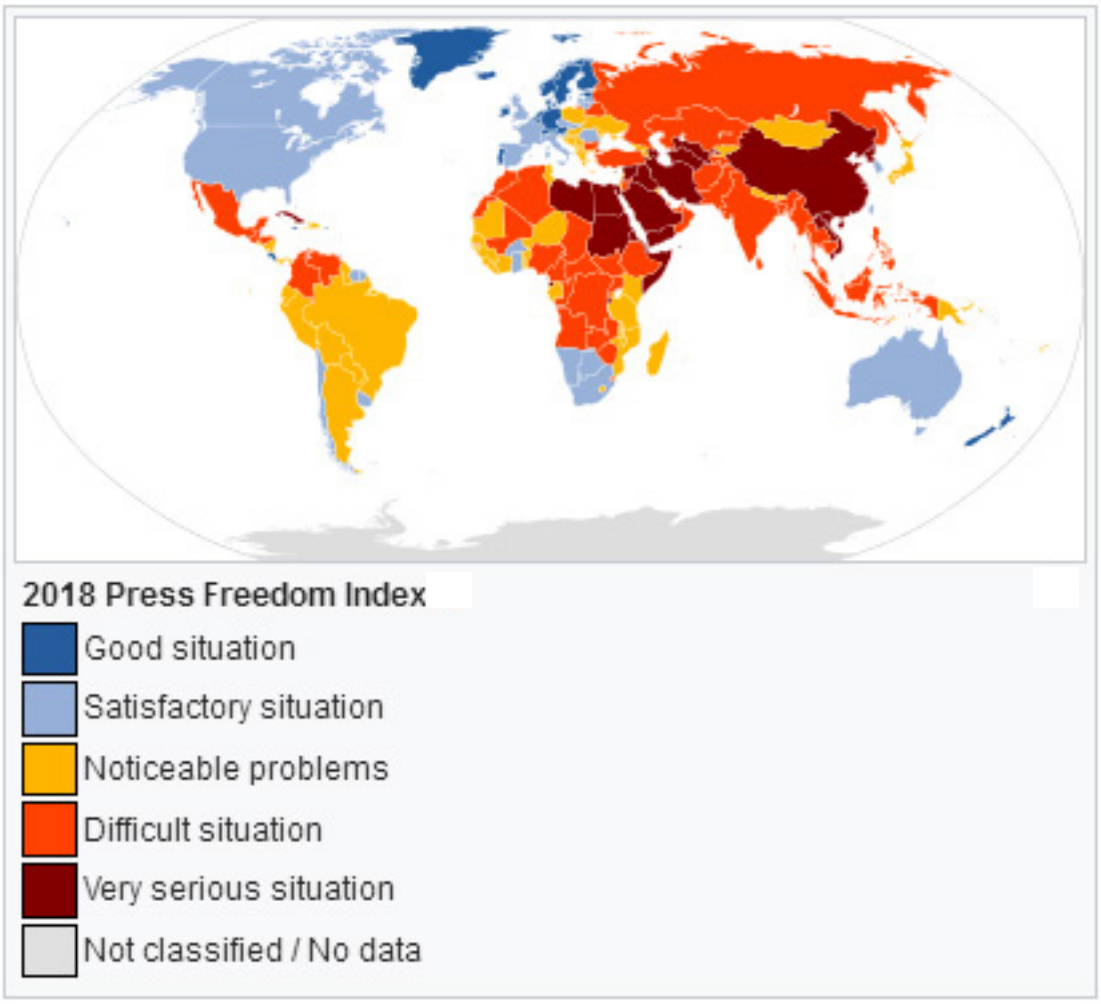
From the Editor - **Freedom of the Press**



Freedom of the press is being whittled away at the great cost of ordinary citizens of the world.

While war is always an abomination and peculiar to mankind, truth 'the first casualty in war ' is one of the few ways we can combat it by bringing a level of shame on the perpetrators. Even those who conduct crimes against humanity like to believe that they are entitled to their hatred and brutality. Truth holds up a mirror to their delusions.

Equally a free press informs increasingly disenfranchised people about what is really happening to their planet and their lives. Press freedom even has an influence on what people pay for their daily loaf of bread or bowl of rice. It is vital to maintain some checks and balances. We may feel 'something out there is dreadfully wrong' but without a few facts it is hard to pinpoint. The current batch of despots and dictators have learned to both attack the free press (labelling it as 'fake news) and disseminate fake news themselves - as sadly many people are gullible and labels can stick if people are not properly informed.

Sadly our time has seen incredibly brutal and more sophisticated attacks on civilians and the free press.

Daphne Caruana Galizia, a blogger whose investigations focused on corruption led the Panama Papers investigation into corruption in Malta, was killed in a car bomb near her home in 2017. Her car was destroyed by a powerful explosive device which blew the vehicle into several pieces and threw the debris into a nearby field. The 'overkill' (literally) was no doubt designed to inflict a level of fear into all journalists and truth speakers.

The Freedom for Media, Freedom for All Network, Center for Media Freedom and Responsibility (CMFR), National Union of Journalists of the Philippines, Philippine Press Institute (PPI), MindaNews, and Philippine Center for Investigative Journalism (PCIJ) advise that attacks and threats against the Philippine media, continue to rise under the administration of President Rodrigo R. Duterte. In the 28 months of the Duterte presidency, from July 1, 2016 to Oct. 31, 2018, they documented at least 99 cases of direct and indirect assaults against journalists and news media agencies.

US President Donald Trump has concerned thinking people with claims that the mainstream media that speaks out against his side of politics are spreading "fake news" and are "enemies of the people". Meanwhile those media moguls who are wealthy corporate giants support his attacks on the free unaligned media on behalf of capitalist interests.

Many Turkish journalists have been thrown in jail and the recent murder of Saudi commentator Jamal Khashoggi, while in Turkey, was a high profile case, the brutality of which shocked the world.

The Committee to Protect Journalists reports that 2017 set a new high for the number of journalists in prison around the world with Turkey, China and Egypt named as "the world's worst jailers" of journalists.

It is not just political reporters being attacked. In her reporting on Colombia's crime cartels Jineth Bedoya Lima's story about being kidnapped and raped espouses that gender-related threats to journalists are quite real and that they go beyond personal safety. As she was being brutally raped by her captors, Bedoya writes, one of them told her they were sending a message to the media.

Attacks on the press do not just rob journalists, they rob all citizens of their livelihoods, their dignity, honour and their justice.

The propaganda wars currently happening on this planet are as nefarious as the more open and conventional warfare against innocent people.

Truth is the only defence humanity really has.

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Customers' Intention to use Islamic Home Financing in Pakistan: An Extension of Theory of Planned Behaviour

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Abstract

The purpose of this study is to investigate the intention of Pakistani customers' to apply for Islamic mortgage by extending the theory of planned behaviour. Theory of planned behaviour (TPB) literature coupled with Islamic home financing is reviewed in order to determine the factors that may contribute to a customers' desire to participate in Islamic home financing. The findings from the review suggest that social influence, customer's attitude, their self-efficacy and religious belief are influential on their intention to apply for Islamic home financing. Primarily, this study is limited in scope as only the review of literature is conducted from previous studies and therefore future researchers may validate the proposed constructs empirically by identifying the factors that might help to fully understand customers' intention. Secondly, this work is limited in terms of applicability of consumer theories as it is drawn upon by TPB. Therefore future stud es may also utilize other related theories including but not limited to diffusion of innovation (DOI) theory, the decomposed theory of planned behaviour (DTPB), technology acceptance model (TAM) and unified theory of acceptance and use of technology (UTAUT). The focus of this study is on customers' intention towards Islamic mortgage in Pakistan. This work adds a religious belief construct and extends the TPB model. To the best of authors' knowledge, religious belief is not introduced using the TPB model in the Islamic mortgage context in Pakistan.

Key words: Pakistan, Home financing, TPB, Mortgage

Introduction

House is one of the basic need that is required by an individual in order to fulfil life activities and there are nearly a billion houses being rented throughout the globe (Shaikh, Noordin, & Alsharief, 2018). In a dual-banking economy, there are a considerable number of products tendered by the banking institutions including conventional and Islamic banks that may cater to the needs of their customers (Shaikh & Noordin., 2018). There are both interest-free and conventional banks present in Pakistan.

Pakistan's housing market is not well developed and in terms of gross domestic product (GDP) it is accounted for 1 per cent or lower (Shaikh et al., 2018). In a statement Munir Sultan of Karachi Chamber of Commerce said that "Pakistan needs project financing and financial institutions in the country are not doing enough to cater to the housing needs". He added, "There is no big difference between Islamic home financing and Conventional home financing and Islamic banks need to cater to the house financing sector with project financing as it will be beneficial for both consumers and banks". He expressed concern that "people are not much aware of Islamic home financing, so therefore there is a need to disseminate information on the basics of the subject". Regardless of such a grave condition banking institutions are playing a pivotal role in financing activities by providing mortgage facilities to their customers. In Pakistan, Islamic mortgage in particular, is offered by Islamic banks and they use Diminishing partnership product, which is based on principles of Islam. In order to cover such financing, the central bank of Pakistan along with the assistance of the World Bank and the Government of Pakistan formed a mortgage refinance company (MRC) (SBP, 2015). According to (Shaikh et al., 2018; Butt et al., 2011) interest-free or Islamic banking is not as prevalent as its conventional counterpart.

This phenomenon triggers the investigation of the determinants, which affect the participation of banks customers towards Islamic mortgage. In a similar vein, in the Pakistani context, this research identifies the factors that are responsible for customers of the bank to use Islamic mortgage. The preceding work on Islamic mortgage (e.g. Ayesha & Omar, 2011; Taib, Ramayah, & Razak, 2008; Amin, Rahim, Dzuljastri, & Hamid, 2017; Shaikh & Noordin., 2018; Hamid, Yaakub, Mujani, Sharizam, & Jusoff, 2011; Usman & Mohd, 2016; Shaikh et al., 2018; Mohammed & Mehmet, 2012; Razak & Taib, 2011) enriched the literature on predictors of intention of customer in order to use Islamic mortgage but all of these researchers were unable to extend constructs of self-efficacy and religious obligation in one model. Taking note, the authors in the current work add these factors by applying the extended model of TPB with reference to Pakistan.

Furthermore, this study significantly adds to the literature on Islamic mortgage. Managers and the practitioners of the Islamic banks will benefit from this research work. Mainly with regard to guidance for future research, this work will assist research scholars in enhancing research at infancy stage, specifically in the Pakistani Islamic mortgage market. In addition, the rest of the paper contains a section on literature review, the theory of planned behaviour and determinants of intention to use Islamic mortgage followed by a section on the development of the model.

Literature Review

A plethora of research is taken into account with a bid to identify the factors, which are responsible for the customer's intention to use Islamic home financing. This topic is undertaken in different disciplines arguably from a different frame of reference. In a similar vein, from a consumer behaviour perspective a study by Alam, Janor, Zanariah, and Ahsan(2012) drawing upon the theory of planned behaviour investigates the effect of religiosity on the intention of the customer on the way to opt Islamic mortgage in Malaysia. Furthermore, the results present that religiosity, perceived behavioural control, subjective norms and consumer's attitude are vital determinants. Amin et al. (2013) on the same note, in an endeavour to investigate customer's receptivity towards Islamic mortgage, used a combined approach by employing diffusion of innovation theory and theory of planned behaviour. Amin, Rahman, and Razak (2014a) expand the theory of planned behaviour framework with a bid to comprehend the level of willingness one has in order to be a partner for a specific product for Islamic mortgage, namely, diminishing partnership. The findings of the study were attained by employing structural equation modelling approach. In addition, attitude turns out to be the most significant factor for consumer's willingness apart from others, namely, subjective norms and perceived behavioural control. Furthermore, widening the scope in Islamic mortgage domain, contemporary scholars Amin, Rahman, and Razak (2014b) coined the Islamic consumer behaviour theory so as to anticipate the determinants that influence consumer's acceptance of Islamic home financing. This approach adopted by the authors differs from previous studies in a way that this study used a framework that has roots from the Shariah objectives linked to satisfaction from religion. Moreover, the theory of interpersonal behaviour is lacking empirical support on theoretical grounds.

In a similar vein, consumer's attitude towards Islamic home financing is examined by adding the unexplored factors, which are Islamic debt policy, service quality effects and product choice by incorporating attitude as a mediator (Amin et al., 2017).

Shaikh and Noordin. (2018) with a view to studying differences in attitude of customers' in Pakistan and Malaysia concerning Islamic mortgage finds that there exists differences. The difference in opinion is related to price fairness, the procedure and doctrine of share in profit, and the profit computation procedure (Shaikh & Noordin, 2018).

Shaikh et al. (2018a), in the same line, identify determinants of consumer intention towards Islamic mortgage in Pakistan. The results put forth that self-efficacy is the most significant predictor along with social influence, awareness and attitude towards an intention to use home financing.

Arranging into line the findings of the past studies it is argued that these researchers add multiple factors using a conceptual framework, which is derived from different consumer theories and expounded its implication in predicting the intention of the consumer. Taking this into account, the novelty of the present research is that it proposes religious belief and self-efficacy by extending the theory of planned behaviour in the context of Pakistan.

Theory of Planned Behaviour and Determinants of Customer's Intention

Theory of Planned Behaviour

Theory of planned behaviour (TPB) is an extension of the theory of reasoned action (TRA) (Fishbein & Ajzen, 1977). Fishbein and Ajzen (1977) proposed TPB in an attempt to determine the factors that are likely in performing a particular behaviour. There are similarities in TPB and TRA in such a way that these consumer theories take into account the predictors for intention towards behaviour and real behaviour, whereas the consumer intention is anticipated by attitude and perceptions related to attitude concerning the behaviour (Glanz, Rimer, & Viswanath, 2008). In a similar vein, Fishbein and Ajzen, (1977) incorporated additional factors related to intention, which is perceived behaviour control in the TRA's original model along with the antecedents of subjective norms and attitude. Ajzen (1991) defines attitude as a behaviour that is performed by an individual favourably or unfavourably. In addition, Ajzen (1991) explains that subjective norms are related to one's insight regarding others point of view who act as prospective referents associated with the behaviour.

However, the additional construct in TPB, which is perceived behaviour control (PBC) is subject to disagreements (Kraft, Rise, Sutton, & Røysamb, 2005; Armitage & Conner, 2001). Hence, in this study, PBC is substituted with self-efficacy.

Determinants of Intention to use Islamic Home Finance

Religious Belief

The role played by the religion to influence the preference an individual has, coupled with the acts one performs is referred to as religious belief (Amin, Abdul, Stephen, and Ang., 2011). There are diverse findings presented by past researchers. To add few, Omer (1992) points out that belief deriving from the religion is the primary reason to opt for Islamic banking among Muslim consumers in the UK. From another point of view, Amin et al. (2011) notice that religious obligation has no significant association with intention of consumer towards personal financing, which is Islamic.

Self-efficacy

According to Bandura (1977), the term self-efficacy is affiliated with one's decisions that are linked to their skills and competencies to carry out particular behaviour. In a nutshell, self-efficacy related to an individual's self-confidence in performing a specific activity plays an important impact on the behaviour (Ajzen, 1991). Self-efficacy's underlying concept is basis of the action of an individual with regards to confirmation bias held by him or her (Barling and Beattie, 1983). Md Husin and Ab Rahman (2016) tested self-efficacy in the Malaysian context and reported that there is no significant influence of self-efficacy on the willingness of the consumer to apply for the Malaysian Takaful scheme. Bearing in mind, that in the domain of Islamic home financing there are limited writings on the contribution of self-efficacy in having a bearing on consumer behaviour, in the present research self-efficacy is incorporated as customer intention's predictor. Thus, it is expected that the role played by self-efficacy is significant in terms of affecting consumer behaviour in decision making.

Attitude

Attitude is an emotional feeling that is enunciated in the furtherance of a negative or positive evaluation of a substance (Ajzen, 1991). On the whole, the more favourable this tendency towards a particular behaviour, the higher is the likelihood an individual will desire to involve in that behaviour. Earlier research work, in the context of financial products devised upon Islamic principles that are drawn upon a framework based on TPB and DTPB marks a consumer's attitude lies at the core of envisaging the intention of a consumer (Md Husin & Ab Rahman, 2016; Amin et al., 2014; Shaikh & Noordin., 2018; Alam et al., 2012; Echchabi & Aziz, 2012; Amin et al., 2011; Shaikh et al., 2018a).

Social Influence

Social influence can be defined as the perceived social pressures borne by an individual that direct him to either to perform or not to perform the behaviour (Ajzen, 1991). It also assumes that how important an individual predicts regarding the commitment of certain conduct is considered by others. Social influence or social factor is employed previously by multiple researchers (e.g. Hansen, Jensen, & Solgaard, 2004; Amin et al., 2014; Olaniyi & Echchabi, 2012; Shaikh & Noordin., 2018; Amin & Chong, 2011; Gopi & Ramayah, 2007; Shaikh et al., 2018a).

Proposed Research Model and Methods used

Proposed model

The conceptual model for the current research is sourced from Ajzen's theory of planned behaviour (Ajzen, 1991). In the current research framework, TPB is extended by adding a new construct of self-efficacy (Shaikh et al., 2018). Originally, Bandura (1977), proposed the concept of self-efficacy and asserts that prospects related to the feeling of performance, motivation, as well as frustration, are likely associated with the repeated failures, and they are essential to the effect as well as behavioural reactions. The model of TPB has been previously tested in the perspective of Islamic mortgage by previous scholars, to mention a few i.e. Shaikh et al. (2018), which is the first work to substitute perceived behavioural control (PBC) with self-efficacy in context of Islamic home financing. Furthermore, this study operationalized the main constructs of TPB including customer's attitude, social influence, self-efficacy and religious belief. Amin, et al. (2014a), validates Islamicity of product, subjective norms, consumers' attitude and perceived behavioural control as factors of adoption for Islamic mortgage. Previous researchers applied Ajzen's TPB theory in order to study the consumer behaviour in the domain of Information Technology, psychology and marketing studies etc.

Likewise, it is proposed on account of the present research to redefine the subjective norm alike, (Shaikh et al., 2018; Amin et al.,2011) with social influence. By the same token, religious belief construct still remains to be established by employing TPB in the domain of Islamic home financing precisely in Pakistan's perspective. The current study focuses more on the prediction of intention, social influence. Following the study of Amin et al. (2014), this research formulates the model without taking into consideration actual behaviour. Figure 1 depicts the proposed conceptual model used in this study.

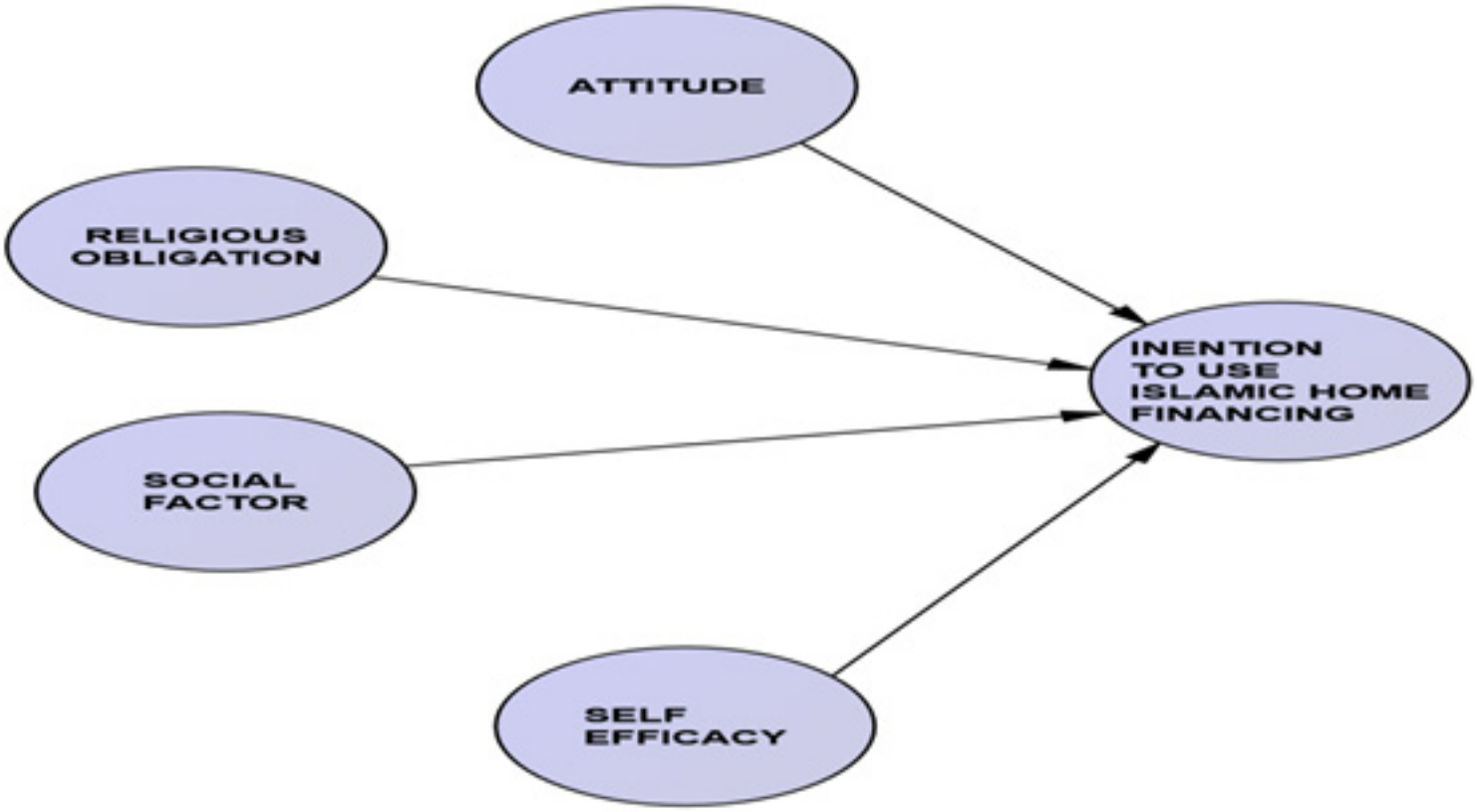
Measures of the determinants

The extension of TPB is with respect to enhance the theory's predictive competency in specific settings (Conner & Armitage, 1998). Moreover, the measures used in this research are: Social influence construct is adapted from (Gopi & Ramayah, 2007); Self-efficacy construct is adapted from(Khalil, 2005); Intention to use Islamic home financing construct is adapted from (Amin et al., 2011); Attitude construct is adopted from (Taib et al., 2008); and Religious beliefs construct is adapted from (Hall, 1977).

Discussion and Conclusion

The aim of this study was to identify the factors which affect the intention of the customer in order to apply for Islamic mortgage in Pakistan. The findings from the review suggest that social influence, customer's attitude, their self-efficacy and religious belief are influential to their intention to apply for Islamic home financing. Altogether, these factors may lead the managers and decision makers of Islamic banks in terms of guidance required by the customers by considering the self-confidence of their customers. Islamic bank may take a step forward by disseminating education related to their mortgage products so as to attract their current consumers.

Figure 1: The conceptual model



Furthermore, in developing a framework for this study, it is assumed that the customers' will have a positive attitude towards home financing offered by the Islamic banks.

On a related note, the theoretical framework proposed by extending TPB explicates a better understanding of customer's intention towards Islamic bank mortgages. Furthermore, it is also highlighted by the authors that in order to gain support from the customers Islamic banks may also need to improve their Islamic mortgage product in Pakistan.

Limitations and Future Research Directions

Primarily, this study is limited in scope as only the review of literature is conducted from previous studies and therefore future researchers may validate the proposed constructs empirically by identifying the factors that might help to fully understand customers' intention. Secondly, this work is limited in terms of applicability of consumer theories as it is drawn upon TPB. Therefore future studies may also utilize other related theories including but not limited to diffusion of innovation (DOI) theory, the decomposed theory of planned behaviour (DTPB), technology acceptance model (TAM) and unified theory of acceptance and use of technology (UTAUT). The focus of this study is on customers' intention towards Islamic mortgage in Pakistan. This work adds a religious belief construct and extends the TPB model. To the best of authors' knowledge, religious belief is not introduced using the TPB model in the Islamic mortgage context in Pakistan.

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The innovator's dilemma

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Abstract

This paper looks at the dilemma of a company founder bringing an innovative product into the marketplace.

Key words: innovation, dilemma,

Introduction

If you pay close attention to any industry driven by innovation, you'll notice a distinct pattern: A founder has a problem that no good solution exists for. They develop an innovative product or service, and they start a company to sell it to others. Soon they want to maximize profits, so they hire managers to do two things: sell more and reduce costs.

Then an employee has a radical idea for a completely different type of solution. It's not the solution customers are asking for, and it's more expensive to produce than the current one, so the manager now has a dilemma. Do they approve the new solution, betting that this is the direction of the industry, or do they kill the project to protect profits?

Well, in companies that are profit focused, the answer is simple: they kill the project. You see, the manager was hired to hit certain profit targets. If they miss their targets they lose face with upper management, their reputation is damaged, their bonuses are denied, and often they will lose their job. To prevent these unpleasantries, every decision a manager makes is tied to profits. Who they hire, who they promote, what KPIs get measured and what projects they approve. Needless to say, a disruptive solution that customers are not asking for, which costs more to produce, will almost always get cancelled.

Canning the project usually results in the employee leaving the company to spin off a startup selling the new solution. While they don't have the resources or recognition of the larger company, the solution is so innovative that customers are happy to pay a premium. Soon enough the startup now dominates the market, the original company is out of business, and the new startup turned big corporation begins to focus on maximizing profits.

Some innovative companies are different, like Apple. Their core value was, "make great products" not "make higher profits". Jobs instilled those values into the people he worked with, and in the company culture. That has allowed Apple to overcome the innovators dilemma, innovating year after year, and banking billions in the process.

In The Innovator's Dilemma, book Professor Clayton Christensen asks the question: Why do well-managed companies fail? He concludes that they often fail because the very management practices that have allowed them to become industry leaders also make it extremely difficult for them to develop the disruptive technologies that ultimately steal away their markets.

Well-managed companies are excellent at developing the sustaining technologies that improve the performance of their products in the ways that matter to their customers. This is because their management practices are biased toward:

- Listening to customers,
- Investing aggressively in technologies that give those customers what they say they want
- Seeking higher margins, and
- Targeting larger markets rather than smaller ones.

Disruptive technologies, however, are distinctly different from sustaining technologies. Disruptive technologies change the value proposition in a market. When they first appear, they almost always offer lower performance in terms of the attributes that mainstream customers care about. In computer disk drives, for example, disruptive technologies have always had less capacity than the old technologies. But disruptive technologies have other attributes that a few fringe (generally new) customers value. They are typically cheaper, smaller, simpler and frequently more convenient to use. Therefore, they open new markets. Further, because with experience and sufficient investment, the developers of disruptive technologies will always improve their products' performance, they eventually are able to take over the older markets. This is because they are able to deliver sufficient performance on the old attributes, and they add some new ones.

The Innovator's Dilemma describes both the processes through which disruptive technologies supplant older technologies and the powerful forces within well-managed companies that make them unlikely to develop those technologies themselves. Prof. Christensen offers a framework of four Principles of Disruptive Technology to explain why the management practices that are the most productive for exploiting existing technologies are anti-productive when it comes to developing disruptive ones. And, finally, he suggests ways that managers can harness these principles so that their companies can become more effective at developing for themselves the new technologies that are going to capture their markets in the future.

Principles of Disruptive Technology

#1 Companies Depend on Customers and Investors for Resources

In order to survive, companies must provide customers and investors with the products, services and profits that they require. The highest performing companies, therefore, have well-developed systems for killing ideas that their customers don't want. As a result, these companies find it very difficult to invest adequate resources in disruptive technologies -lower margin opportunities that their customers don't want - until their customers want them. and by then, it is too late.

#2 Small Markets Don't Solve the Growth Needs of Large Companies

To maintain their share prices and create internal opportunities for their employees, successful companies need to grow. It isn't necessary that they increase their growth rates, but they must maintain them. And as they get larger, they need increasing amounts of new revenue just to maintain the same growth rate. Therefore, it becomes progressively more difficult for them to enter the newer, smaller markets that are destined to become the large markets of the future. To maintain their growth rates, they must focus on large markets.

#3 Markets That Don't Exist Can't Be Analyzed

Sound market research and good planning followed by execution according to plan are the hallmarks of good management. But, companies whose investment processes demand quantification of market size and financial returns before they can enter a market get paralyzed when faced with disruptive technologies because they demand data on markets that don't yet exist.

#4 Technology Supply May Not Equal Market Demand

Although disruptive technologies can initially be used only in small markets, they eventually become competitive in mainstream markets. This is because the pace of technological progress often exceeds the rate of improvement that mainstream customers want or can absorb. As a result, the products that are currently in the mainstream eventually will overshoot the performance that mainstream markets demand, while the disruptive technologies that underperform relative to customer expectations in the mainstream market today, may become directly competitive tomorrow. Once two or more products are offering adequate performance, customers will find other criteria for choosing. These criteria tend to move toward reliability, convenience and price, all of which are areas in which the newer technologies often have advantages.

A big mistake that managers make in dealing with new technologies is that they try to fight or overcome the Principles of Disruptive Technology. Applying the traditional management practices that lead to success with sustaining technologies always leads to failure with disruptive technologies, says Prof. Christensen. The more productive route, which often leads to success, he says, is to understand the natural laws that apply to disruptive technologies and to use them to create new markets and new products. Only by recognizing the dynamics of how disruptive technologies develop, can managers respond effectively to the opportunities that they present. Specifically he advises managers faced with disruptive technologies to:

1. Give responsibility for disruptive technologies to organizations whose customers need them so that resources will flow to them.

2. Set up a separate organization small enough to get excited by small gains.

3. Plan for failure. Don't bet all your resources on being right the first time. Think of your initial efforts at commercializing a disruptive technology as learning opportunities. Make revisions as you gather data.

4. Don't count on breakthroughs. Move ahead early and find the market for the current attributes of the technology. You will find it outside the current mainstream market. You will also find that the attributes that make disruptive technologies unattractive to mainstream markets are the attributes on which the new markets will be built.

The Innovator's Dilemma and the Future of Silicon Valley

Silicon Valley, the center of the high-tech industry, has become the biggest industrial cluster in the U.S., followed by the banking industry on Wall Street, the automobile industry in Detroit, and the entertainment cluster in Hollywood. As a successful model, Silicon Valley faces competitors and imitators from all over the U.S., from Washington, DC to Seattle, Washington, from Austin, Texas to Boston, Massachusetts. Can the Valley keep its leading position in the future?

More than anywhere else, the economy in Silicon Valley is driven by continuous innovations. Firms in the Valley compete fiercely by introducing innovations rather than cutting prices. It has been recognized that Silicon Valley has the ability to reinvent itself over time. This ability is not only an important determinant in the Valley's past success but also the key to whether it will remain a big success in the future.

Professor Christensen (1997) at Harvard B-school wrote a national bestseller that popularized his concept of "innovator's dilemma." The book investigates why successful big companies are often defeated by new comers and lose their market dominance. While it is clear that the author is addressing managers in successful companies, regional economists can learn a lot from his insightful analysis.

Following Christensen (1997), we emphasize the distinction between sustaining innovations and disruptive innovations in this article. Disruptive innovations refer to those big technological or organizational breakthroughs that revolutionize the business in a big market or the whole industry. A region reluctant to accommodate disruptive innovations is more likely to lag behind in Schumpeterian competition (competition by innovation). We further argue that big successful firms face the "innovator's dilemma": their success in the existing market tends to prevent them from implementing or adopting disruptive innovations. Startup firms targeting a niche or an emerging market are most likely to adopt and promote disruptive innovations. We believe that Silicon Valley was able to reinvent itself in the past mainly because it provided a relatively favourable environment for the formation of new firms. Likewise, the future of Silicon Valley will be determined by its birth rate of new firms. The higher rate at which the Valley generates new firms, the more likely it will catch the next wave and reinvent itself around the next big thing. Policy implications of this argument are presented at the end.

The Innovator's Dilemma

Christensen (1997) writes about the failure of companies to stay atop their industries when they confront certain types of market and technological changes. As the author emphasizes, "[the book is] not about the failure of simply any company, but of good companies - the kinds that many managers have admired and tried to emulate, the companies known for their abilities to innovate and execute." His conclusion is that successful companies often fail because of the very management practices that have allowed them to become industry leaders. Those practices make it extremely difficult for them to develop or adopt the disruptive technologies that ultimately steal away their markets. It is a dilemma because companies fail for the same reason they succeeded. This is, in spirit, similar to Schumpeter's famous thesis that capitalism will fail because of its success. While there has not been any concrete case to prove Schumpeter's theory, numerous failures of great companies have exemplified Christensen's dilemma.

Take the computer industry as an example. IBM once dominated the mainframe market but lagged behind for years in the minicomputer market, although the latter is technologically simpler than mainframes. Digital Equipment Corporation (DEC) pioneered in the minicomputer market, closely followed by Data General, Hewlett-Packard, Nixdorf, Prime and Wang. However, each of those missed the emergence of the desktop personal computer market. In this case, it was another new comer, Apple Computers, that took the lead. When Apple brought its portable PC to the market, however, it was already six years behind Compaq. Similarly, the workstation market was created by some other rookie players at the time, namely, Apollo, Silicon Graphics and Sun.

A similar story is found in the hard-disk-drive industry, the example that Christensen has referred to again and again (Christensen, 1997). In that industry, "no single disk-drive manufacturer has been able to dominate the industry for more than

a few years. A series of companies have entered the business and risen to prominence, only to be toppled by newcomers who pursued technologies that at first did not meet the needs of mainstream customers. As a result, not one of the independent disk-drive companies that existed in 1976 survives today." (Bower and Christensen, 1995)

Why do disruptive technologies cause great firms to fail? Christensen (1997) argues that great companies are managed in the way that makes them excellent at developing or adopting sustaining innovations and hence succeed. However, the same set of practices make them miss disruptive innovations and hence fail.

1. Successful firms listen to their customers and invest aggressively in technologies that give those customers what they say they want. This helps those firms to attain their market dominance. However, at the same time, this practice prevents them from getting the right information about disruptive innovations. A firm's current customers will naturally demand a product that performs better than the one they are buying. A disruptive technology usually represents a very different product that does not provide better performance but only add more dimensions to the existing product. For example, laptop notebooks are not as powerful as desktop PCs; a 3.5-inch disk drive does not have more capacity than a 5.25-inch disk drive. For this reason, firms trying hard to serve their current customers fail to see the importance of disruptive innovations.

2. Successful firms seek high margins and target at large markets rather than small ones. However, disruptive innovations usually fit into a niche market or a market that does not exist at all for the time being. Moreover, disruptive innovations, although they have a bright future, usually bring little or no profit in the short term. When Steve Jobs and Steve Wozniak brought forward their Apple I to the market in 1976, only 200 units were sold to hobbyists and few people took it seriously. They were lucky enough not to lose money, not to mention collecting big profits. Inevitably, a giant like IBM with an annual profit of millions would and should ignore it at the early stage until the potential of PC was fully recognized. In fact, IBM's stand-alone PC division later did successfully grab a substantial piece of the pie in the emerging PC market, which is rather an exception in the world of Innovator's dilemma. It is worth noting that many great firms missed disruptive innovations not because they did not have the technology, but because they were too eager to seek something big. Seagate Technology once had a great success in the disk drive industry, and revenue grew to more than $700 million dollars in six years since its inception. It was the pioneer and a big player in the 5-inch hard-disk-drive market. Seagate had developed their own 3.5-inch disk drive but had chosen to put it on the shelf, because it could not bring the big profit they expected from a new product. In the end, Seagate became only a minor supplier of 3.5-inch disk drive when that market boomed.

Christensen may have been indulging himself too much in the paradoxical observation that great firms fail for the reasons they succeeded. He neglects some inherent problems with big firms that may be crucial in accounting for their failures to catch disruptive innovations.

These include:

3. Disruptive innovations usually bring a new product that will compete with the current well-marketed product, or a new organization that will turn the existing corporate structure upside down. Over the past two decades, perhaps there has been no high-tech firm as successful as Microsoft. It is common knowledge that Microsoft's recent success is built around its dominant operating system Windows. Is Microsoft an innovative firm? Sure, it is. But all their innovations are sustaining in the sense that they enhance Microsoft's Windows and its software based on it. Any platform-independent technology such as Internet protocols and Java software protocols will be disruptive to Microsoft. If Microsoft develops those technologies, it is committing suicide and choosing to be reborn. It is Microsoft's right rather than wrong decisions to show little enthusiasm for the Internet at its early stage and to fight against Sun Microsystems for its Java. Microsoft's huge market share prohibits itself from developing disruptive technologies and competing with itself. Its destiny is to be dethroned by other firms with disruptive innovations.

The telecommunication industry tells a long story about AT&T's hostility to disruptive innovations. No one has doubted that AT&T, in its early years, was doing a great job of improving the efficiency and effectiveness of the Bell system, which transfers voice communication over long distances through copper lines. Research on radar during World War II made breakthroughs in microwave transmission. To AT&T's Bell system, the microwave technology is a radical and more efficient alternative that employs tall towers with antennas to relay microwave messages. Although AT&T was working on its own microwave system, it took its time in spreading the technology over the mass market. At the same time, AT&T lobbied Federal Communications Commission (FCC) to keep other microwave innovators out of the transmission market. It took a newcomer Microwave Communications, Inc. (better known as MCI now) a long fight against AT&T to finally get FCC's authorization to provide long distance service in 1971. Yet history repeated itself when there came the cellular phone. The birth of the cell phone technology traces back to AT&T's Bell Labs, but AT&T again failed to make the cellular business. It was Seattle's Craig McCaw who created America's first nationwide commercial wireless network. Ironically, AT&T bought McCaw's network in 1993, which became today's AT&T Wireless (Norton, 2001).

Another example is that Barnes & Noble failed to pioneer in on-line books and music retailing. Again, it is a "right" decision, because if Barnes & Noble had opened that market, it would be competing with its own physical stores. Nowadays both Barnes & Noble and Borders have their own on-line store, which is only a defensive measure against Amazon.com. One feature of the high-tech industry is that the first mover usually enjoys a big advantage over followers. Barnes & Noble has spent a lot of money advertising its own on-line bookstore, but is still trailing Amazon from far behind.

4. Another reason that great firms often missed disruptive innovations is that it is often too risky to pursue those innovations. The triumph of disruptive innovations usually hinges on an emerging market. It is easy to recognize an emerging

market ex post, but not ex ante. In the late 1970s, who could anticipate the prevalence of personal computers today? A disruptive innovation, never tested on the market, has a much higher chance of ending up as a failed project. Even legendary venture capitalists in Silicon Valley have to live with the cruel reality that one in every three of their investments produces a total write-off. Few established firms are willing to face dead programs so frequently. So they choose to avoid such projects. For this reason, new startups are most suitable for experimenting disruptive innovations, because they are usually backed by venture capitals or banks, institutions that have better ways to neutralize risks. Think about it, the successes of Netscape and Yahoo had covered how much loss incurred by hundreds of dead startups in Silicon Valley?

Conclusion

Following Schumpeter, we perceive the economy, especially the high-tech industry, as an evolutionary process driven by innovations and entrepreneurship. In light of the "innovator's dilemma," we recognize that successful big firms are excellent at developing and adopting sustaining innovations, but are likely to ignore disruptive innovations. Moreover, disruptive innovations are extremely important to a specialized regional economy because those innovations bring radical and fundamental changes to an industry. We argue that the success of Silicon Valley in the past is achieved by its generations of startups that have not missed any wave of disruptive innovations. We also believe that the future of Silicon Valley hinges on its birth rate of startups and hence suggest policies in favor of the formation of new firms.

It is particularly worth noting that disruptive innovations are hard to identify ex ante. Professor Christensen and his partner launched a mutual fund in 2000. Based on Christensen's theory, they select stocks of companies that are considered as disruptive. The fund, which was called the "Disruptive Growth Fund," was closed before its first birthday with 64% of its value lost. It is a vivid example that nobody but the market decides which technology is able to cause disruption. Nobody can pick winners. If a regional economy such as Silicon Valley wants to win the game on the market, it has to have more players; that is, to encourage the creation of new firms.

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Proposing Decomposed Theory of Planned behaviour into Islamic mortgage: Consumers intention and acceptance

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Abstract

This study investigates the factors that are responsible for a consumer's intention to use Islamic mortgage. Furthermore, this research has proposed the decomposed theory of planned behaviour (DTPB). DTPB's literature along with that related to Islamic mortgage acceptance is revisited so as to find out the factors that are pivotal for consumers' involvement with Islamic mortgage. Furthermore, it is revealed that acceptance for opting for an Islamic mortgage is measured not only by the attitude, perceived behavioural control, subjective norm and pricing but as well by peers, perceived relative advantage, self-efficacy and perceived compatibility. The current research proposed DTPB and it can be used as a guide of reference by research scholars, policymakers and Islamic bank decision makers.

Key words: DTPB, Pakistan, Islamic mortgage, Housing

Introduction

Housing need is vital among all human necessities. It is not possible for most people to acquire a house as to own a property is a long-standing obligation and therefore it is usually not possible for an individual to acquire property by making a one-off payment and purchase requires a mortgage and such an individual who is in search of an inexpensive mortgage (Taib, Ramayah, & Razak, 2008). For an individual who intends to opt for an interest-free housing mortgage, they may seek those products, which are permitted or allowed under Islamic principles (Shahwan, Mohammad, & Rahman, 2013).

Islamic or interest-free mortgages are mainly of two types, which are debt-base and equity-based (Shaikh, Noordin & Alsharief, 2018). One of the main debt-based contracts for housing, which is widely accepted in Malaysia is bay' bi'thaman ajil, (BBA) (Shaikh & Noordin, 2018).

In spite of the acceptance of debt-based mortgage there exists criticism on the permissibility of such mortgage as it is argued to be surrounded by the uncertainty that results in imposing a burden that may lead the consumer to default (Razak, Mohammed, & Tarique, 2015). Following the repercussions and uncertainty arising from debt-based mortgages gives rise to the more fair and consumer-friendly product, which is a diminishing partnership (DP) equity-based mortgage (Usmani, 2002).

On the same note, taking into consideration DP home financing as a better substitute to BBA, equity-based product turns out to resolve the problems associated with the debt-based mortgage (Shaikh et al., 2018).

Moreover, debt-based products are also criticized for converging the conventional loans, where banks try to secure the debt by transferring the risk to consumer (Azhar Rosly & Afandi Abu Bakar, 2003). In the Malaysian context, debt-based mortgage product like BBA is more popular and offered by most of the Islamic banks (Shahwan et al., 2013).

This study compares and contrasts acceptance for DP home financing. Considering the observation of Amin, Rahman, & Razak (2016) consumers most likely may not opt for interest-free but interest-based conventional mortgage because the latter financing source allows a lower rate of interest and a short-term to pay back, which is an ideal situation for an individual. Consequently, it is therefore significant to conduct research for determining the factors that are responsible for consumer acceptance for interest-free home financing products.

Consumers Acceptance towards Islamic Bank

Consumers' acceptance for conventional banks is higher in contrast to interest-free bank despite the fact that as a banking industry it is now more developed than it was decades ago (Thambiah, Eze, & Ismail, 2011; Ahmad & Haron, 2002).

Moreover, the study of paramount importance, reveals that participants consider that products, which are interest-free are not promoted in a way as desired (Ahmad & Haron, 2002). In a similar vein, it was claimed by Haque, Tarofder, Rahman, & Raquib (2009), that most participants of their study had little knowledge of the products and services of Islamic banking.

Amoako-Gyampah (2007), in this pursuit maintains that no intention to use technology may affect its adoption by halting the implementation of a system or a product effectively. In other words, it is predicted that for a certain product or service to be acknowledged it should be meditated by a system user.

Additionally, without interest for a new system among the users or future users, a product itself may not lead the institutions to completely gain the reward from the system (Davis & Venkatesh, 1996). That being said, for products and services of Islamic bank to become accepted may hinge on the enthusiasm of consumers to embrace it.

Framework for customers' acceptance towards Islamic mortgage

For the purpose of this study, theoretical framework is drawn upon Taylor and Todd's (1995b) decomposed theory of planned behaviour (DTPB). Figure 1 shows original DTPB with all the exogenous and endogenous variables. According to Shih & Fang (2004) the use of DTPB has been applied mainly in the Information and Communication Technology (ICT) domain.

In the authors' opinion to choose between the theories of behaviour, DTPB is considered after drawing upon a comparison between the models of theory of reasoned action (TRA), theory of planned behaviour (TPB), and DTPB. TPB and DTPB share a similarity in a way that both the theories have been derived from TRA. DTPB is the first choice because TPB failed to explain how an individual belief in performing a particular behaviour leads to engaging in such behaviour (Taylor & Todd, 1995). Further, DTPB as mentioned earlier, is a combination of a variety of theories such as TPB, diffusion of innovation (DOI) theory, and technology acceptance model (TAM) (Davis, Bagozzi, & Warshaw, 1989; Rogers & Shoemaker, 1983; Taylor & Todd, 1995b).

Moreover, DTPB is more useful in circumstances where much in-depth knowledge is involved. It is also preferable when considering the strongest predictive power and explaining the relationship between the unobserved endogenous and unobserved exogenous variables (Taylor & Todd, 1995).

Thus, adapting DTPB will be appropriate in predicting the customer's acceptance of the Islamic mortgage. The research framework evidently illustrates that behavioural intention towards Islamic mortgage acceptance is dependent on the attitude of an individual, subjective norm and perceived behavioural control in using the product. We adapted the two latent variables related to an individual's attitude, namely perceived relative advantage and perceived compatibility, whereas excluded perceived ease of use as the nature of this study is different than that of IT as adapted in the context of a study on using DTPB (Maizaitulaidawati & Asmak, 2013).

Therefore, it seems inappropriate to use all the original constructs of DTPB put forward by (Taylor & Todd, 1995a). In a similar vein, the subjective norm is decomposed to "superior influence" and "peers influence". To the authors understanding, peer influence seems to be more suitable in the context of Islamic home financing than superior influence, which might work well in an organizational setting (Maizaitulaidawati & Asmak, 2013).

Thus, the subjective norm is decomposed to peers influence in the context of this study besides perceived behavioural control that has been originally broken down to three latent constructs, namely, resources facilitating conditions, technology facilitating conditions and self-efficacy.

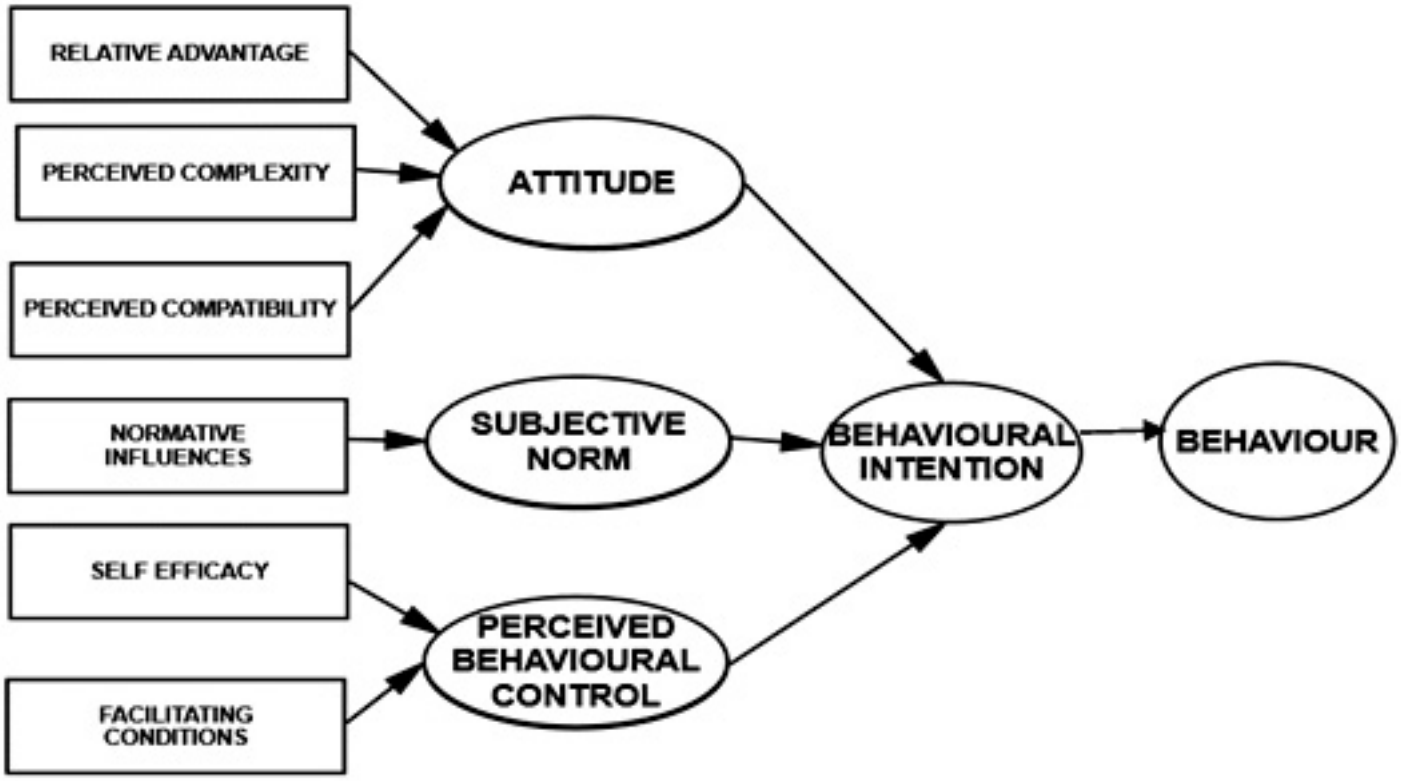
As mentioned earlier, this study modified and excluded a few original constructs due to incompatibility with the scope of the study. Therefore, alike Maizaitulaidawati and Asmak (2013), facilitating condition was not suitable for current study.

Moreover, this study's emphasis is more towards validating self-efficacy in the context of Islamic mortgage as it was not tested by earlier researchers. Therefore, perceived behavioural control is only decomposed to self-efficacy for the aforementioned reason.

Implications of the study

In terms of theoretical implication, this work contributes to theoretical framework development. Further, the proposed framework can be applied in consumer behaviour studies which are carried out to determine the acceptance of an individual for Islamic mortgage.

Figure: 1 Original Framework of DTPB without Modification



Source: (Ajzen, 1991; Taylor & Todd, 1995b)

Furthermore, this study adds to a new relationship between pricing and Islamic mortgage acceptance. From the theoretical standpoint, this research introduces new factors that enrich the literature of Islamic mortgage. The research framework is based on DTPB, which is a pioneering effort to use the aforesaid theory in the context of Islamic mortgage acceptance by customers.

From the author's standpoint, integrated DTPB is considered rich theory among individual model based on previous theories, namely, TRA, DOI, and TPB. Last but not least there is a dearth of studies on Islamic mortgage, thus the model of DTPB may give a better understanding of its acceptance. Therefore, there is a further need for future research in order to validate the factors that may turn out to be strong or weak in terms of significance.

The conceptual framework introduced in this study is produced to pave the way for those who are involved in the industry of home financing which complied with Islamic principles. Needless to say, in a climate of fierce competition between conventional and Islamic banks, it is imperative for the latter to pick up the gauntlet and market its products in such a way that attracts as many customers as possible. To this end, the currently proposed model provides Islamic bank managers with a well-established theoretical tool at the hub of which is the stakeholders' potential behaviour towards Islamic mortgage. Examining the effects of such factors as perceived compatibility, perceived relative advantage, peer influence and self-efficacy, borrowed from DTPB, will provide a window on how to strike the balance between consumers' level of certainty about the services and the probable action they are going to take accordingly.

Conclusion

This study provides a model for Islamic mortgage acceptance and adds pricing construct in DTPB. By so doing, this study becomes among one of the few works to propose DTPB in Islamic mortgage context.

Earlier works were lacking in applying DTPB for predicting consumer acceptance of Islamic home finance. On the same note, DTPB has potential to inclusively provide a full picture of all the determinants related to predicting customer's acceptance in the context of Islamic banking products.

Given the fact that studies in the past contribute to consumer acceptance towards Islamic mortgage, this study identifies other factors that may be deemed relevant to Islamic mortgage acceptance. Despite the origination of DTPB as stated by Maizaitulaidawati and Asmak (2013), DTPB can still be adapted for the financial services and products acceptance.

Lastly, there is a dearth of literature on Islamic mortgage and this study is an endeavour to fill the gap and give a reliable account of the upcoming research. This study as mentioned previously excluded a few of the original variables of DTPB, which were not considered suitable in the current context of the study and more towards IT. Albeit this study has limited implications but it still manages to share a substantial amount of contribution to the literature in having a better understanding of Islamic mortgage acceptance.

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Smart Architecture in an Age of Climate Change and Mass Global Inequity

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Abstract

Housing in the pre industrial ages made use of local resources, such as stone, reeds, bamboo, timber, mud and even ice, along with human ingenuity, to come up with the best possible solutions to shelter from the prevailing climatic and geographical conditions. Our forefathers' abilities to develop innovative solutions is evidenced by the architectural marvels that still exist around the world today, particularly in the Middle East, the cradle of all human civilisation. No doubt the ages also saw many failures that did not stand the test of time and the changing planetary conditions, such as fires, floods and ice ages. Some of the successful designs exist to this day however, and are a testament to ingenuity, and skilled design and construction.

Heating or cooling of these pre fossil fuel houses required inspiration and initiative and local natural resources; this is also evidenced in the design of the great public buildings that have tended to stand longer than domestic housing.

Whether many people of these times were also homeless has not come down to us through the history books but certainly there were nomadic tribes eking out their living by following the seasons as well as disempowered people who were often enslaved as a by-product of war and who did much of the necessary domestic and 'commercial' work. These people however were likely housed in quarters that at least ensured their survival and fitness to work.

This paper explores what architectural lessons can be learned from the past to help free us from our mass dependence on planet-destroying fossil fuels for domestic heating and cooling as well as the issue of mass homelessness in an era when a family home has become a status symbol of the rich and is too often outside the financial means of most.

Further we espouse that proper design of homes can harvest renewable energy in sufficient quantities to feed back into the grid or to power extraneous human uses such as for powering electric cars and lighting and heating public and community facilities.

Key words: Smart architecture, climate change, fossil fuel, clean energy, homelessness, equity.

Introduction

Smart architecture should be adapted to time and place and provide domestic needs such as light, shelter from the extremes of temperature, a place of sanctuary and security and ideally should also have an element of aesthetic design to make habitation comfortable and pleasant. This should all be achievable through the design itself and incur no further construction costs and, ideally, minimal reliance on non-renewable energy.

Humankind began in Africa and over the centuries has spread out to occupy nearly all parts of the world, with Antarctica the only continent with no permanent human habitation. Until the Industrial Revolution (in the period from about 1760 in Europe and the US, to sometime between 1820 and 1840 in the rest of the world) examples of early housing, particularly in the Middle East region which saw the development of society and gathering of people and dwellings into our earliest towns and cities, by necessity, had to provide and meet all needs from the local environment. Due to seasons, latitude and topography however the local environment ranged and ranges from extreme cold to extreme heat, sometimes in the same location, and other geographically specific factors such as earthquakes, floods and wildfire which require smart design considerations.

Much work has been done previously on the lessons to be learned from Middle East, particularly from ancient buildings in modern day Iran, Jordan and Turkey, which provide excellent examples of classical smart design. (1,2,3,4)

Other global building material examples include ice in the Arctic, mud brick, (adobe, cob, Kahgel) in the Mediterranean regions and wood in Europe, Australasia, and North America.

Our time of climate change, extreme climate 'events' and "natural disasters" requires a new focus on how we can live comfortably without the proliferation of use of the fossil fuels which caused the current problems in the first place, and this, combined with a time of mass inequity and obscene levels of homelessness globally forces us to look both at our positive past achievements and towards the future.

Looking to the past

Architecture of ancient times, by necessity, used natural principles in regards to light, space, temperature, orientation, defence and aesthetics. (1,2,3,4). The Middle East particularly, is the region where humans started to gather together in larger numbers because communal living provided many advantages and at the same time eliminated many problems. It also provided larger communal workforces to build permanent domestic housing and public buildings along with communal amenities such as water storages, drainage systems and defence systems such as city walls.

Specifically construction in the Middle East saw the birth of many architectural designs that provided natural solutions to cater to the comfort and needs of domestic housing which are still used to this day. The courtyard or atrium houses of Islamic cities, the terraced dwellings of Afghanistan (5), shaft dwellings of Tunisia (5), each utilize differing connections between interior and exterior spaces together with variable relationships to the natural ground plane. The covered alleyways (Sabat) provided cool flows of air between abodes as did the positioning of the house or community among green spaces provide natural flow of air. Some houses were carved from the rocks or mountains themselves and others coned in shape (beehive houses) to cool them by expelling the heated rising air.

Sabat (covered walkway) in Yazd, Iran

"Beehive" houses in Syria

Iran's ancient ice houses which could keep ice frozen in deep cellars throughout the year

Kandovan Village near Tabriz in Iran

Wind catchers (Badgir) to provide a constant flow of fresh air and dispel heat were used extensively in the warmer parts of the Middle East. Cellars and subterranean rooms provided cool spaces for human relief and to preserve food and even ice in such early Iranian dwellings.

Courtyards in the Middle East and the Mediterranean regions of Europe, particularly Italy and France, provided a cool place for relaxation and for kitchen gardens and also provided pockets of cool air for a natural flow into adjacent dwellings. Ancient solutions and housing design managed to combine these property aspirations at least for the free classes.

Wind catcher, Yazd, Iran

Italian courtyard gardens have not changed over the centuries

Of course, people across the wider world were also developing their own solutions based on local conditions with the ice houses (igloos) of the Eskimos perhaps the most surprising and ingenious. Igloos had an internal temperature of 16 degrees centigrade by body heat alone while outside temperatures were as low as -45 degrees Centigrade (6). Now in Alaska people shiver in modern houses burning gallons of oil.

Other global building material examples include wood in Europe, Australasia, and North America which was a renewable resource before the great forests of the planet were decimated.

Walled cities in the Middle East and Castles in ancient Europe provided defence not just for the occupants in times of war and siege but often housed the entire local community and animals were raised, and crops grown, within their great walls. They were also located on hill tops to provide a commanding view on all sides and with lookout towers for defence purposes. Where this topography was not available water-filled moats were dug around them to slow down and disadvantage any invading forces.

Castle in Bam, Kerman province, Iran

Bamburgh Castle in the United Kingdom

Castle moat and drawbridge

Castles, of course, also provided the privileged classes with protection.

Homelessness and Inequity

In 2015, 150 million people worldwide were homeless and 1.6 billion people around the world lived in "inadequate shelter" (OECD 2015). This coupled with mass poverty, millions of refugees and the increasing trend of rural populations moving to large cities to seek work has seen housing increasingly become a 'luxury item' due to its high cost, and has thus created a major global problem. In far too many places in the world people literally have nowhere to go. We therefore need to acknowledge that everyone alive has the right to live somewhere and thus we need provide affordable housing, with a small footprint. Currently luxury housing takes up far more space than anyone requires, with multiple bathrooms and bedrooms and luxury items such as large gardens, pools, media rooms, gyms, spa pools and saunas.

While some countries are stipulating 'affordable housing options' in all new developments the simple fact is they are few and not readily affordable by those with the greatest needs. In the US, the "richest country in the world" roughly 1.1 million students, 114,659, (7) more than one in 10, were identified as homeless in the 2017-18 school year, according to data compiled and published by the New York State Technical and Education Assistance Center for Homeless Students. Oct 15, 2018. The number of Americans living in their cars surged 46 percent in 2017-2018 (CBS News, July 2018). This level of homelessness affects all aspects of people's lives and compounds their problems putting such people on an ever spiralling descent into destitution. This scenario is reflected in all countries of the world and is exacerbated by wars, dictatorships and natural disasters. An unprecedented 68.5 million people around the world were forcibly displaced at the end of 2017 (UNHCR).

Smart design in 2019 therefore also needs to address refugees, asylum seekers, mass homelessness and itinerant populations and the need for low rental subsidised or hire purchase accommodation that preferably also harvests its own renewable energy.

Some Islamic countries assist the poor to purchase houses via Islamic Finance and some nations build rent subsidised high rise accommodation but this is often a 'cheap solution' of poor design and with questionable safety standards.

Of course homelessness and poverty have always been related to a government's 'national priorities' – and thus is sway to national political ineptitude or injustice.

The problem is global and intensified by the fact that even in developing nations where humans may have once been able to erect a temporary dwelling and eke out their existence on common land, this land is now owned by the rich few and is being developed for non-housing purposes.

Today's architectural design too often ignores these needs and design of modern housing is and is centered around attracting as high a price as possible from the purchaser. House design too often tends to be what is coveted by the masses, and is personified as "McMansions" (a pun comparison with cheap and poor quality 'fast food'), which are energy inefficient (yet full of electrical 'time-saving goods') over lit, have a huge footprint and often built for a 2-4 person household, with multiple bedrooms, bathrooms and toilets, media rooms, spas and saunas, gyms,and so on.

Facing north or south to capture heat and light is currently less important than 'street appeal' which caters to human vanity only. Even the term, 'street appeal', places less emphasis on the actual dwelling and its design and more on price and vanity.

Applying past architectural techniques to modern living

Wind catchers to provide a constant flow of fresh air and dispel heat were used extensively in the warmer parts of the Middle East and modern forms are used today in places such as the northern states of Australia and the southern states of America, though the traditional wind catchers of the Middle East have been replaced with rooftop propeller fans that turn with the air flow and expel the warm air that has risen during the day. They are a common mechanical system globally and can reduce the need for cooling houses by fossil fuel generated Air conditioners.

Indeed the invention of air conditioners has caused the loss of many of these cheap and efficient designs. The wish to provide endless products for manufacturers to sell to home buyers has led to the loss of many cost free devices and these so called convenient modern alternatives, cost far more in the long run for the individual house owner and society as a whole.

Australia, a relatively new country of European settlers was in a position to adopt the best of earlier design that existed in the Middle East and Europe and early on decided on traditional approaches to domestic heating and cooling with good ventilation, roof top fans, shady verandas and proximity to green spaces. The original inhabitants of Australia, the aborigines, could arguably be regarded as the first environmentally friendly house designers as they created no permanent dwellings and put no scars on the landscape. Rather they were prepared to put up with some natural discomfort in their lifestyle which may be a good lesson in itself for all of us. Being at a consistent temperature for maximum comfort day and night is not necessarily healthy in itself and weakens the human body.

Climate Change and Global Warming

Additional to everyday domestic and seasonal concerns, global warming, and with it rising sea levels, extreme events and degradation of the environment all give rise to new problems and the need for new solutions. Major loss of the world's forests are increasing temperatures and causing a shortage of timber as rainforests are cut down for cattle grazing and palm oil plantations, both with their negative influences on human health. Clean water resources are being depleted or putrefied. Most major cities of the world will go (partially) under water on sea rise predictions making housing 'footprints' more relevant - i.e. more people will need to be squeezed into smaller areas.

The obvious disparity in affordability and non-affordability aside there are many more climate change factors to be considered. Loss of space and cost of footprint in cities (requiring high rise dwellings), putting housing estates on land desperately needed for agriculture, building in inappropriate areas such as seaside locations help litter the seas with plastics and poisons, as does the building on spaces that are becoming less safe for living, like flood plains. Climate change is contributing to desertification, more wildfires (California, Greece, Portugal, Australia) and floods (Iran, Turkey, SE Asia, European Countries, Australia). Housing loan providers and home insurers are now factoring climate change costs into insurance coverage, refusing lending, and more customers are defaulting on loan repayments and land and properties going into the coffers of the lending banks. The entire system is leading to the rich owning more of the land surface of the planet and the poor becoming increasingly homeless.

Effects of Hurricane Sandy in New York City in 2012, saw the sea invade the streets and suburbs. The New York Stock Exchange closed for two consecutive days. Major floods in Thailand have seen one third of the country under water. In 2019 floods in Australia killed 500,000 cows and caused the Flinders River normally several meters across to swell to 60 kilometres wide and could be seen from Space. Australia's regular floods have seen areas of land the size of France under water in Cyclone seasons.

Satellite image of flooded Flinders River, Queensland, Australia 2019

Jakarta in Indonesia, Bangkok in Thailand, and European cities and countries have seen massive floods in the past 10 years as has the United Kingdom. Many of the world's capital cities (often located on natural harbours), will go partially or completely under the sea.

Ethical issues

.In this overcrowded world the majority of people suffer injustice on many levels but homelessness is one of the more obvious and most basic needs not being met. Stone age man was arguably much better off than most humans in our modern times. Denial of climate change is yet another injustice and a cruel hoax on those who will suffer the consequences of it, by those who hope to gain personally from the disaster they have created. When did we collectively decide it was okay for huge number of humans to live on the streets with no facilities at all while 1% of human have multiple abodes, and personal golf courses?

Housing safety is an issue as well. Humans need a safe place to sleep at night under cover of the elements; a place to keep clean and a place to cook and eat. It seems that in the push to design mansions for the upper classes on productive and fertile scenic lands the basic needs of all are callously overlooked. Arguably, if every human just aspired to their immediate housing needs there would be enough money and land for all humans to be adequately housed.

A small and practical house can still be aesthetically pleasing without clever design, by the use of shape (angle), and effective lighting. Indeed a house that makes the best use of natural light, shade, and orientation provides the optimum aesthetic approach to housing. The new "Small Houses" manage to provide all human needs into a cravan size abode by clever design. Rooms and facilities and even stairs can be folded away when not needed.\

Fortunately some civil authorities are preparing Planning processes and quality codes for eco -houses and communities and architects are rising to the challenge.

An Eco-house is an environmentally low-impact home designed and built using materials and technology that reduces its carbon and actual footprint and lowers its energy needs.

Features depend on the locality and climate and could include some or all of the following:

- Higher than normal levels of thermal insulation
- Better than normal air tightness
- Good levels of daylight
- Passive solar orientation — glazing oriented for light and heat
- Thermal mass to absorb that solar heat
- Orientation — to reduce or provide heat loss depending on the hemisphere and the geographical locations.
- Mechanical ventilation with heat recovery (MVHR) system
- Heating from renewable resources (such as wind, solar, heat pump or biomass)
- Photovoltaic panels, small wind turbine or electricity from a 'green' supplier
- Natural materials — avoidance of PVCu and other plastics
- Rainwater harvesting
- Grey water collection and cleaning
- Composting toilet
- Glass that has two or three layers with a vacuum in between to prevent heat loss in cold areas; (double or triple-glazed windows) and windows with good ventilation for hot areas
- Solar panels or wind turbines
- Geothermal heating and growing plants on the roof to regulate temperature, absorb noise and to produce oxygen
- A vegetable patch outside the house for some food (8)

Energy Loss

Calculations on domestic home design energy loss indicate as much as 70% of all the energy used in the UK when all the factors are taken into account. This energy is mainly for heating and lighting and therefore the aim is to design houses that are well insulated and make the best use of natural light. (8)

Insulation

Increasing the amount of thermal insulation is the main component of preventing energy loss. This includes draft exclusion, glazing, and wall and roof insulation.

Passive solar gain

In the northern hemisphere, a south facing site will be a much better location than a north facing site (and the opposite in the southern hemisphere) because of access to sunlight and protection from the cold northerly wind. This of course also varies according to location and climate.

It's not always possible but there will usually be an opportunity to take advantage of the passive solar gain by having more glazing on either the front or the back of the building. Planting trees and creating wind breaks on appropriate sides of the site can enhance the solar gain effect.

Active solar gain, solar panels and domestic contribution to power grids.

High performance windows are used to draw in as much light and warmth as possible. Sunlight then floods into the house and any heat generated is retained by a highly insulated building shell, draught proof windows and doors and thermal mass within the building (8).

Orientation towards the sun also means that active solar systems can be fitted, both solar water heating panels and electricity generating solar panels on the roofs, further adding to the free heat and electricity gained from the sun.

Living gain

Living in a house also generates heat. Active human beings can produce as much heat as a one bar electric fire. (8) Heat from cooking, washing, hot water systems and lights contribute to how an eco-house can gain heat from natural innate sources.

Heat recovery ventilation

These systems extract the warm, moist air from bathrooms and kitchens and take the heat out of the stale, damp air before venting it outside. The heat recovery system transfers this collected heat to fresh air coming into the building and distributes it to where it is needed. An added benefit is that filters can be fitted on the air intake to provide a barrier to pollen or other irritants (8).

Living heat loss

With the passive and active solar gains, insulation, and a draft proofed building shell and heat recovery system, eco-houses can require zero heat. Such houses, even those built in the United Kingdom , properly oriented, can require no additional heat, even in winter. An eco-house can incorporate design to have heating systems that can react quickly and efficiently to any changes in room temperature as well as providing a heat boost to the water temperature down-stream of the solar panels (8).

Sustainable building materials

One of the wider issues of energy efficiency is the embodied energy within the construction materials.

Timber

Wood is a primary building material for eco-housing. This is because trees grow using energy from the sun, they don't pollute, they produce oxygen, absorb CO2, they provide a wild life habitat, they can be replanted, they can be sourced locally, the timber can easily be put to some other use after a building is demolished (8).

Lime

Lime has been used as a building material for thousands of years and although energy and CO2 are used in its production it gently returns back to limestone in time, taking in CO2 in the process (8).

R***eclaimed materials***

Use of reclaimed materials is ideal, particularly wood, bricks, slates and roof tiles, to make use of the embodied energy within these materials. (8)

Gardens and green spaces

Rooftop living areas and rooftop gardens provide insulation and cool paces as retreats and sources of cool air flows. Gardens or courtyard walls can also grow vegetables and herbs for those with minimal outdoor space and those without access to the ground.

Living with the seasons

For domestic dwellings in localities that experience great annual variation in temperature using the insulation principles is the best way to deal with changing seasons, i.e. keeping the heat in, or keeping the heat out.

Other design features

Load bearing internal walls can be minimised to allow rearrangements of the interior spaces, and the building technology be such that local trades can carry out alterations and easy maintenance using earth friendly, materials and processes. (8)

Health

Health benefits of an eco-house, apart from the obvious risk of planetary destruction due to human induced climate change, are a healthy living environment and planet. The heat recovery system can eliminate dampness and the moulds. Air intake filters prevent dust coming in with the incoming fresh air and internal vacuum cleaner system can extracts dust from the house.

For the health of the householder, and the planet, an eco-house should be built with materials that are free, wherever possible, from toxins or harmful products of the petro-chemical industry.

On a wider view of health effects, modern day farmers are becoming stressed and depressed from facing endless natural disasters brought about by events caused by climate change, that kill their livestock, create droughts and reduce the income from once viable farms.

Health benefits from smart design

- Reduce inside pollution through proper ventilation

- Provide heat/warmth that provides continuous natural heating and maintains air ventilation rather than capturing warm air that is continually recycled (carbon monoxide build up)

- Avoid or reduce pestilence (screening to keep out dangerous insects such as mosquitos) and vermin (rats, mice, cockroaches)

- Non toxic materials and environments

- Provide cool in hot locations and hot seasons

Pollution

Air pollution is a global problem exacerbated by populations moving to major cities. The world's two bigegsty polluters are China and the US. Various forms of pollution have increased as China has industrialised, which has caused widespread and serious environmental and health problems. High levels of air pollution in China's cities cause 350,000-400,000 premature deaths per year.

Forty-three percent of Americans live in places where they're breathing unsafe air, according to American Lung Association (9). An increasing number of Americans live in places with unhealthy levels of smog or particulate air pollution – both of which are being made worse by climate change, according to a new report. (9)As temperatures rise, wildfires are becoming worse and spewing smoke across the west of America. More smog, or ozone, is forming on warmer days.

For the three hottest years on record, 2015 through 2017, about 141 million people lived in US counties that saw unhealthy levels of particle pollution, either in a single 24-hour period or over a year, or unhealthy levels of smog. (9)

In Paris and London summer heat related deaths have been due to poor building design.

In 2003, more than 70,000 people across Europe died in a sweltering heatwave that spanned much of the summer. Many of the apartments were built for times when the climate was cooler and had no proper ventilation. In many such abodes windows could not be opened. (10)

France was among the worst-affected countries, with 15,000 deaths in August alone. In the UK, the summer saw more than 2,000 heat-related fatalities.

The World Economic Forum on the Middle East and North Africa report on the consequences of climate change across the Middle East, and extends from widespread floods in Turkey and Iran in 2019 and increased daily temperatures make outside living impossible during the day in the Gulf countries. Rising sea levels are putting many coastal cities at risk. In Alexandria, on the Mediterranean coast of Egypt, as sea levels rise, the city of five million people is sinking. The Nile Delta, on which Alexandria stands, is shrinking. Construction of the Aswan High Dam and the extraction of water upstream has reduced the Nile's flow, decreasing the amount of silt the river deposits. And without silt to replenish delta soils, the whole area is vanishing (11).

Global warming causes particular problems for the Middle East region. Huge dust storms that sometimes used to plague the Gulf countries are becoming more frequent and more widespread. They extend to Eastern Iraq and Western Iran as well as Kuwait and northern Saudi Arabia. As well as heart and lung problems in people they have a negative impact on economies and close down airports.

The World Bank declared in 2016 that the MENA region is among the most vulnerable places on earth to rising sea levels (12).

Aesthetics

A heartening quality of humanity, is the love of art, design and architecture which entails shape, decoration and the play of light and angle. The need for 'smart architecture' to solve problems of use of fossil fuels (non renewable energy) will actually provide better aesthetic design (light and shade, orientation) than the high rise boxes heated and cooled artificially that provide mass housing currently.

Location

Proper climate defence as regards location not only looks at seasonal variation but long cycles of variation. Nature and Climate caused disasters and cyclical events include cyclones, floods, wild fires, and earthquakes which can occur over series of years.

Floods

In Queensland Australia in cycles ranging from 3 to 15 years much of the state (e.g. an area of land the size of France), can be under flood waters. This is happening more frequently, indeed often annually, as climate change takes its hold.

The earlier floods led to the design of "The Queenslander" a house which was built on stilts with the house on the first floor allowing it to stand clear of flood waters. In normal non-flooding seasons the house was also cooled by the under house air flow. Wide verandas that stretched around the entire house also kept living quarters in shade throughout the day and provided a natural breeze. A central hallway, opening at both ends of the house is a feature of most Australian houses in hotter areas.

A "Queenslander" in normal season

A "Queenslander" during flood season – the house itself sits high above the flood waters

In southern states of Australia, Greece and California climate change has already arrived causing summer wildfires destroying homes and livelihoods. Australia has seen an endless cycle of fire and building regulations and requirements have seen necessary major changes in building design and safety.

Earthquakes

Earthquakes in Kobe in Japan (1995) and Bam in Iran (2003) saw the destruction of homes and mass civilian deaths. Japan has now brought in Earthquake Resistant Structures. These are now the most common structures for detached houses in Japan. All buildings built after 1981 must conform to the New Anti-seismic Structure Standard requiring buildings to have an earthquake resistance structure.

The earthquake in Bam, Iran in 2003 was caused by a rare geological feature, a concealed fault line that was invisible on the surface.

The Fukushima earthquake caused a tidal wave which displaced 50,000 households after radioactive material leaked into the air, soil and sea after a 15-metre tsunami disabled the power supply and cooling of three Fukushima Daiichi reactors, in March 2011.

China, Russia, Japan, South East Asia, Australia and North and South America are on the Pacific Ring of Fire therefore earthquakes are an ongoing concern for all of those countries, as well as Iran, Kashmir, Pakistan, India, Nepal which are on the tectonic plate pushing up the Himalayas.

Floods due to global warming have also seen an increase in land slips and mud slides due to heavier rainfall in shorter periods of time and while damage from large slips cannot be dealt with through smart design, small localised land slips is also a consideration in building design and location of dwellings. Reforestation on slopes that were once protected by forests is an obvious remedy.

Human influence

Population growth and population density and the trend to move towards cities, means decentralisation must become a focus, as it has in various countries in the past, not just to reduce the need for ever increasing infrastructure but for safe, healthy living environments. The issue of population growth on an already overcrowded planet is an issue in itself. It may be time that we all address just what are we doing here on this planet and what are we trying to achieve, other than the wish to stay alive in our own life-spans. We have the intellect to look further and consider the responsibilities of our guardianship of planet earth.

The main bases of smart architecture should entail domestic housing sufficient to provide basic human needs (cultural and social justice) and economic and environmental sustainability. How can these aims be achieved?

Houses generating their own energy

There are so many local renewable energy options and architects and designers, being local resources themselves, should base their designs on the locality and the best use of sustainable energy to power the dwellings.

While solar power is not an option for all parts of the world Australian uptake of rooftop solar panels provides an excellent feasibility study. Due to high usage, Australian houses with solar rooftop panels are not only generating all domestic energy requirements but are putting surplus back into the grid and being paid for it. This domestic generation of energy can then be used to power other domestic needs such as electric cars, home businesses, farms and street lighting.

The theoretical economic implications of this are that the in-built generation of energy can be put toward cheaper, energy-neutral housing via government subsidies and fully subsidised housing for the homeless. The economic advantages on the domestic and national scale are enormous and populations with proper homes and addresses can create a wealth source for countries that take care of their poor and dispossessed.

Collecting, Cleaning and recycling water

In the past, houses that were not adjacent to clean water sources, collected their own from rain on rooftops and other runoff areas. This rainwater collection disappeared in cities but is now making a necessary comeback in some places. In 2018 Cape Town, South Africa entirely ran out of water and many global cities now have to ration daily water usage due to short supplies. This is due to increasing scarcity of clean water resources at the same time as increases in population.

Modern architects are now factoring water usage into their designs for commercial and domestic buildings. Commercial buildings can recycle grey water for toilet flushing or provide small wetlands within the building footprint to clean water waste and return it to the system. These same wetland areas provide attractive green spaces and reduce heat. Recycled water provides substantial cost saving for the owners as well as energy saving for the community.

Public housing to overcome homelessness

The main cause of homelessness and poverty is government inactivity. This is also poor economics as homelessness and poverty deplete a country's productivity. Currently where it is available and affordable little thought for safety and aesthetics has gone into the design of public housing. The Grenfell Towers fire in London in 2017 provides a lesson in poor design with flammable exterior cladding providing insulation – likely cost effective in the construction phase but stupid, indeed negligent, when it comes to occupant safety and longterm viability of the dwelling itself.

The role of Town Planning Boards and Government Departments

Over the twentieth century building design and construction in advanced nations became increasingly regulated and in the 1990s, after the Rio Earth Summit, ESD (Ecologically Sustainable Development) was added onto other planning and design requirements.

The proportion of total energy use attributable to buildings generally ranges from 10 - 15% in undeveloped countries to more than 40% in the developed countries. In the UK, building use currently accounts for 46% of total energy consumption and it has been calculated that this energy could be almost

halved if the existing building stock were adequately insulated (3,4). This is a lesson in itself. The developed world is using energy wasting devices that are easily done without in developing nations.

In Iran statistics show that buildings account for about 39% of total energy consumption so once energy efficient design is now being replaced with energy wasteful design (3,4).

According to a report in "The 2nd conference of Fuel Conservation in Buildings" in Tehran (2003), the amount of energy consumed in buildings in Iran is equal to 30% of its annual oil income (equivalent to US$15 Billion in 2005), with 50% of this being wasted (3,4).

Experiences in several countries have shown that heat-related deaths are largely preventable through appropriate planning, communication and prevention, mainly via heat prevention plans (13). For long-term prevention of urban heat islands, a range of measures could be implemented in identified areas. Protective measures rely on accurate knowledge of surface properties and physical processes that generate urban heat islands so urban heat monitoring and air quality by relevant authorities , such as the Environment Protection Agency (EPA) in Australia needs to be implemented. Cities are always hotter than adjacent landscapes due to decrease in evaporation, anthropogenic heat emission, and heat retention within buildings and absorbed by road surfaces. Research in the Paris region showed a strong negative correlation between summer afternoon temperatures and vegetation index and a 0.2°C decrease per unit of vegetation index during the heat wave (13). Evapo-transpiration from vegetation in green spaces decreases temperature. Shadowed surfaces can be cooler by 11–25°C compared with those exposed to sun (13).

Roofs covered with selected white paints or highly reflective materials (cool roofs) reduce heat in the buildings below. During a heat wave, such properties enable these roofs to cool off by 28–33°C [14].

Tree planting in open green spaces and green roofs and 'plant walls' reduce pollution and temperature. Cool pavements, created using new technologies, are also being tested in some cities; for example, light-coloured porous concrete allows water infiltration, enhances water evaporation, and partly reflects solar radiation. (14).

In regard to the link between indoor and outdoor temperature, a study conducted in Montreal in 2005 on 75 apartments showed linear relations between outdoor air, surface temperature, and indoor temperature. Indoor temperature was highest in big buildings, which should obviously be the initial target for preventive measures (13).

The human element in adaptation to a changed climate

Society in developed nations seems to have lost or forgotten basic practices to keep both themselves and their dwellings cool. The expectation that there is a machine to do everything at the touch of a button requires an element of re-education, especially if these expectations are destroying life on the planet.

The historic willingness to modify behaviour and alter expectations has diminished with the wide spread introduction of air-conditioning and artificial heating and with it the knowledge of ways to deal with weather extremes is being lost. Even existing knowledge is becoming out of date due to prolonged periods of hot weather. Nguyen et al (2010) investigated the likelihood of increased hot days and hot spells for different locations in Australia and found that the longer the hot spell the more cooling required. A 3-bedroom house required 32% more cooling energy during a 4-day hot spell than for 4 individual hot days (15).

Building Codes are currently based on historical weather and climate data and need to be reviewed and updated. Most Building Codes deal with new buildings and it is existing buildings that pose the greatest problem as they are not required to keep abreast of modern building requirements and legislation. New Building Codes that require planet friendly techniques and materials must be instituted for new and old properties.

Governments need to both accept the science of climate change and to provide budgets to institute preventive measures as well as measures to ameliorate the results of climate change and global warming on their national populations. Assistance to do so should be given to those in great need.

Countries must move urgently to the use of renewable energy. For those countries whose economy currently relies on the sale and use of non-renewable dirty energy it would be wise for them to invest in the sciences of renewable energy and maintain and improve their economies and trade that way.

Population Aging and the vulnerability of the elderly during heat waves must be considered.

Little research on the changes in disease spread and disease patterns due to climate change seems to have been considered.

It is also predicted that the proportion of lone person households or nuclear family households will continue to grow in most countries. In Melbourne Australia for example, one or two occupants per dwelling will account for 90% of all new households by 2030.

Design of all domestic appliances should be reviewed and replaced with power efficient and clean technology.

Many of these measures listed above will generate growth and improve and stimulate economies and the health of humans and their environment. Populations already suffer due to the crippling cost of energy needs. We are currently dealing with the legacies of practices born centuries ago and we must look at the future with fresh eyes and take responsibility for our footsteps on planet earth. It is within the scope of humans to do so and will hopefully lead to a fresh approach to our collective humanity and put an end to the outdated political and industrial ideas that have brought the earth to its knees.

Ethics

Why do we currently have such energy inefficient modern housing? Sadly much of the inefficiency in building construction comes down to short term economic and political influences. The petroleum companies, huge electricity companies, building magnates and consortiums lobby governments for short term financial gain. The political classes, particularly in a time of mass extinction, looming mass starvation and collapse of entire planetary ecosystems should be looking past such immediate expediency and budgetary considerations to long term gain. Worse, too many of today's politicians tend to be born of the classes doing the damage in the first place.

Immediate major effort in tackling Climate Change is required as it will not only affect domestic housing and homelessness it will also create mass starvation as the seas become acidic and food sources die; the land will suffer desertification, clean drinking water and water for agriculture will dry up in some places and cause massive floods in others.

Building design will not provide all the answers but as it is very much tied to how humans live and work on this planet and thus a major focus on the issue can reap many rewards and set an example. In looking at these issues the re-design of domestic housing and urban streetscapes can also benefit the other major problems on homelessness and inequity. In a way such 'smart architecture' could solve many of the world's problems. Construction of new affordable housing that can feed energy back into the grid can finance the cost of building it in the first place.

A combination of building design that incorporates any renewable energy generated by sun, wind , hydro, waves, thermal masses, geothermal activity can theoretically be achieved in most places on the planet and where there is an oversupply savings and reduction in use of fossil fuels can be made in a secondary fashion and in this way the home can provide the full family domestic power needs.

Forests need to be protected to supply timber and to clean the air and to reduce carbon dioxide harm to the planet and humans, so until forests are restored we need to look to recyclable non- polluting construction materials.

With clever design it is possible to run an entire country on renewable energy generated by smart architecture and smart engineering, and in doing so, new aesthetics of clean and clever design and technology are born.

We also need national priorities to change. Poverty and homelessness are always an outcome of governmental policy that has a lack of focus on the welfare of the people. People who are a country's most valuable resource must be respected at the very heart of each human activity and system.

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I am a woman

By: Ebtisam Elghblawi

I am a woman

A woman of colour, courage and life

A woman of inspiration, wisdom and achievements

A woman of fears, fights and struggles

A woman of liberty and freedom

A woman of reliability and independence

A champion of the voiceless

A woman of my word which is my bond

Not all women are just merely for love and affairs

Not all women are for fantasy

Not all women are just for physical attraction and allure

I have a mind and soul to cherish

I have my own weakness and fears

I have my own insecurities

I have my own strengths, wishes, desires and needs

Unleash the true potential

I am a woman of all nations

I am simply a free soul spirit in deep need for peace and tranquility

Don't put blame on me

Don't take me for granted

Thrive beyond the hurdles

Unlock the limitations

Explore the horizon

Elevate other women to navigate the complex world system

We either sink or swim

Rise up like a shining star

Never look back

Every day brings its own challenges and expectations

Use your life experience as an inspiration for others

Leave behind those who refuse to acknowledge your worth

If you ever feel humiliated, and less than worthy, just walk away

Don't stay stuck behind just because of other people's perceptions

You are in charge of your own destiny, thus own it

Success is always the result of sacrifices, endless one

Everything we pass through in life is a learning process and opportunity and we must not waste that just because we failed,

We keep trying so we become more knowledgeable and experienced

Plan nonstop until successfully completed, and mission accomplished

Excel deeply to obtain the wishful results

Don't plan the future, relying on others sometimes to hold your hands and plan for us

Speak up, speak often

You can't change facts unless you recognize facts

Never, never give up on your dreams

Embrace women colleagues and support initiatives and empower

Celebrate women's achievements and accomplishments

I am a hard working, fully committed, desire for excellence and perfection and a woman of my word, working around the clock

Learn from failure a lesson and move on to success and never look back

Express your beliefs in your words, deeds, actions, and habits

No one can impose a belief on you, unless you choose to accept and adopt it

The world is in dire need of well-behaved good men, good husbands, and good fathers

No one is responsible to blame but you

Utterance and utterance

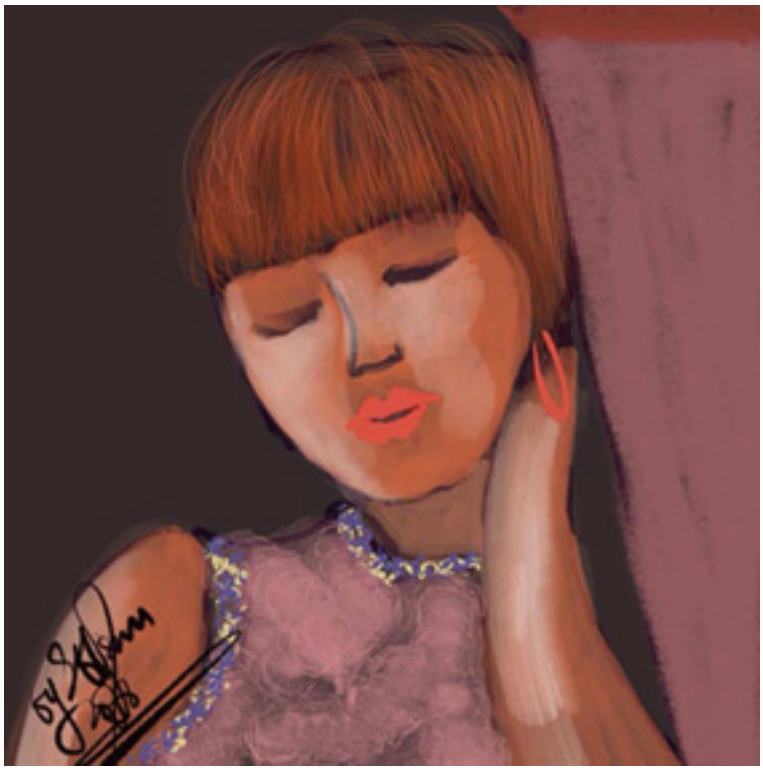
Beautifully and wonderfully, and fearfully made

We are bound to reap, what we sow

We believe in peace, yet war is sown

We are original and a masterpiece

Let's be a symbol of love, peace, and hope to mankind



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