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## **Strategies for a Sustainable World** **Business Ethics**

Budur Alzahrani\*

### **1. Introduction**

A business activity involves diverse activities. These activities have impact on the environment in one way or another. How different companies conduct businesses have a great impact in the environment (Burns 2000). This has a great threat to the future of the business, since the raw materials are acquired from the environment. Sustainability in the business world has become an important element of every business. The sustainable global economy is an economy that the capacity of the world's natural environment can support for an indefinite time (Hart 2010). The issues of the environmental pollution have caught the interest of different governments in the world, and stricter laws are being passed on the business operations that can cause pollution. This and the realization of ability to reduce pollution and its effects to increasing profits simultaneously, has caused more and more businesses to adapt sustainability in their operations and products. The acceptances of the responsibility to the activities that cause harm to the environment, and the government regulations, have caused the companies to adopt sustainable strategies in their operations.

The sustainability starts with the way raw materials are extracted from the environment, the way the production is carried, the content of the final products to the way products are disposed (Scott, James, & George 2011). Different companies have adopted different environmental sustenance strategies, and these yield different outcomes to how well the different companies sustain the environment in their activities. The customers have become more and more environmental friendly products. The companies which are able to offer products that have little effects to the environment stand a chance to have increased sales. Over time, businesses realized the importance of environmental sustenance and this made them invest in methods that could reduce the pollution. The strategies developed independently and oriented to each business, and there lacked a standardized approach to sustenance. The paper will look at the benchmarking process toward sustenance. Further, the paper will look at the Hart's sustainability framework. The paper will also look at the various strategies employed by businesses in regard to the issue of environmental conservation. The paper will analyze these businesses using the sustenance portfolio and what make a company better in environmental sustenance. Finally, the paper will look at how businesses try to improve on the environmental sustenance strategies.

### **2. Stages of environmental strategy**

The first step in environmental strategy by businesses is the pollution prevention. Cleaning up waste after its creation constitutes the pollution control. There are diverse way which businesses use to clean up waste depending on the nature and toxicity of the waste. The waste can be biodegradable, non-biodegradable, and radioactive and other such wastes. Prevention of pollution on the other hand constitute of such efforts by the businesses that eliminate or minimize waste before it is created (Hart 2010). The other stage of environmental strategy involves the product stewardship. The stage focuses on minimization of every environmental impact in the whole product life cycle. It also looks at ways to minimize the pollution from manufacturing. During this stage, the company assesses all the effects a product have to the environment, how customers use it, and how it is disposed off. All the components of

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the product and how they react to the environment need to be established at this point. The last stage of environmental strategy involves the clean technology. The business should plan, establish and invest in an environmentally sustainable technology. A clear framework of the environmental management is necessary for any business.

The mission and vision of a company should be rethought to incorporate the aspects of environmental sustenance and conservation. The vision and mission should indicate the evolution needed in services and products, and the new competencies that will be needed to ensure the business is sustaining the environment. The new environmental policies in a business will shape how the business relates with the suppliers, the government, customers, and policymakers among others. There is a need to market and educate consumers on the new sustainable products and services. Individual consumption patterns by the consumers, world's enterprises and public policy has the largest responsibility in ensuring a sustainable environment. Shaping of the behavior of the different consumers and leading way for public policy on environmental sustenance, should be a major responsibility of the businesses.

The process of developing sustainable products and services is a huge challenge to many businesses. Hart's (1997) sustainability framework provides guidelines as to how different businesses can have an imperative sustainable development, while establishing the benefits and opportunities to a business, in adoption of sustainability (Hart 2010). The business had focused much on the social responsibility, stakeholder engagement and eco-efficiency in their environmental sustained strategies. The Hart's framework challenges the businesses to go beyond 'greening' in their strategies, and developed innovative technologies. These technologies should help resolve the two great challenges to humans which include accelerating environmental degradation and growing inequity. The identification of environmental impacts and aspects will help come up with the technologies that can help go beyond 'greening' in businesses (Watson, Boudreau, Chen & Huber 2007). A combination of the education, capacity building and strategic innovation help the businesses commit and take lead in sustainable world. The necessary roadmap need to be established in the form of strategy, that will help the business orient its, services and products to environmental sustenance. The component of the roadmap includes the clean technology, product stewardship and pollution prevention as explained above. The sustainable framework in business should allow the flexibility to allow incorporation of new trends and new stakeholders.

A sustainable value in the framework allows the businesses to approach the environment sustenance with strategies that allows win-win for the businesses. The framework should allow the creation of new businesses or branches that will serve the unmet needs of underserved and the poor (Hart 2010). When the different dimensions of the sustainable framework are taken as a portfolio, they give a potential to a business to enhance legitimacy and reputation and reducing risk and cost. The other potentials include crystallization of growth trajectory and growth path, and in acceleration of repositioning and innovation. These potentials when they are achieved by a business they increase and create value to the business shareholders. Sustainable value portfolio is a diagnostic tool that can be used by companies to determine whether their strategies have potentials of surely creating a sustainable value.

Most institutions have product stewardship and pollution prevention in their strategies in the today's business operations. Huge amount of money have been invested in bringing this elements into business strategies (Watson, Boudreau, Chen & Huber 2007). The cost savings and the efficiency that are gained by the cost savings associated with pollution prevention have been a focus of many businesses across

USA. In Europe the businesses have focused on more inclusive methodologies, extending the producer responsibility of products and active stakeholders' engagement, in the pollution prevention strategies.

Many businesses in the world have or are in the process of adopting the formal environmental management systems. This helps them identify the environmental impacts and aspects of their operations. The adoption of this system, plus the restructuring of strategies to ISO management guidelines, the company will have systems that help achieve the goals of sustenance. The business will identify the environments aspects and impacts of its activities, set goals, targets and priorities for a continued improvement in its environmental performances. The business will be needed to document its results and procedures, monitor, train and take the necessary collective actions in the environmental management.

The organization overall strategy should be developed around the sustainability strategy, which is a foundation for creating and having a sustainable enterprise. Having a coherent sustainability framework provides the direction to a business and coordinates all its activities that contribute to the overall sustainability (Hart 2010). Since many companies and businesses adopt different approach to the sustainability, the success of the framework adopted, are measured with the overall reduction in the levels of pollution. Companies are, also adopting sustainable technologies, such as the Green Information Technology and Green Information Systems in their operations. The current state of business can be assessed using a sustainable value framework. This helps establish methods to go beyond social responsibility and incremental eco-efficiency (Burns 2000). The business is also able to develop inclusive businesses serving even the underserved in society. The business is able to have a sustainable growth as part of its sustainable strategy. The different business achieves different competitive advantage, depending on the strategy they adopt. Nike and Adidas are two competitors who have adopted different sustenance environmental strategies in their operations. Each has accrued different competitive advantages as a result of the strategy adapted. These are two competitors who deal with sport wares. The companies deal with processing manufacturing and distribution of sport wares and other such products in the recreation industry. Nike and Adidas are multinational companies, who operate in a diverse range of environmental settings (Scott, James, & George 2011). They have to adopt sustenance in the way they acquire materials, the components of their products, and in the way the products are distributed.

Nike has recognized the importance of having a sustainable strategy in their operation. Any forward thinking company has to adapt different strategies to environmental sustenance. Nike has adopted and is exploring sustainable business models that fit in its different operating environments. Nike vision is based on the future availability of resources that affect the availability and cost of production, hence that of final products. Greenhouse gas emission and rising energy costs are making the businesses rethink the traditional production models. The increase in global disparity will affect the access to finances and other opportunities to workers. The increased in globalization and increased number of middle class affects the demand for products and services. The new regulations on issues of energy, environment and labor continue to affect Nike's future business operations. Nike looks to build a sustainable operations and creating value to products by decoupling profitable growth away from the limited resources.

The vision on sustainability is also the Nike's business strategy. The vision has been developed from the assessment of materiality and trends of the company. It is based on the changes that impact the value chain, the world, the consumers of the company's products and on Nike's business (Burns 2000). The Meta trends have given the most potential for value chain and in the conducts of the business. Connectivity, demographics, security, health and wellness, environment and governance are some of the

important Meta trends that Nike has identified. The trends are global in scale, continue to emerge and transcendent and they help to steer the approach and thinking towards the sustainability with Nike Inc. Having a sustainable business model is the greatest challenge to the innovation in the current business world. Fine-tuning and retrofitting are not only the factors needed in solving the problems of sustainability (Boje 2000). Nike noticed that new business models, new systems new ways of thinking and new relationships are needed in the sustenance approach. Over-whole transformation of the business is crucial in ensuring adaption of a sustainable business models.

Innovating and incorporating value chain in the whole of value chain, help in achieving the sustenance goal. Nike has strived to ensure environmentally friendly products, recycling and safe disposal. Nike, for example, created jerseys in the 2010 World Cup, from the recycled bottles. Nike has also developed Nike Materials Sustainability Index, which helps designers come up with products which have lower environmental impacts. Nike Flyknit's manufacturing process that is innovative and is different from the fundamental process of making products, this reduce the waste in knitting the upper part of the shoe (Burns 2000). Nike also has Sustainable Business and Innovative Lab, which helps in the innovation of sustainable new manufacturing processes and materials. The innovations are focused on the social and environmental impacts to the business. The innovations is also focused on risk reductions and saving and ability to bring new innovation to scale.

Nike has sustainable pillars that are anchored within four strategic pillars. The pillars are interconnected. These pillars include creating a portfolio for sustainable materials, other pillar is Scaling and prototyping sustainable sourcing and in manufacturing models. The other pillar is driving and igniting market transformation and finally, the last pillar is creating digital services revenue. The first pillar is anchored in the whole process of value chain. The choice of material is important in defining how sustainable the products will be (Hart 2010). The other pillar is on supply chain where all brands of the company are equitable, lean, empowered and equitable. The third pillar tries to create a sustainable consumption in the future and in the current day operations. The fourth pillar is associated with extension of the apparel, equipments and athletic footwear to digital realm of coaching, training and fitness services.

Nike's sustenance strategy has followed to a great extent Hart's (1997) sustainable framework. The first process of Hart's frame work is involved with pollution prevention. Nike has done a lot in minimization of waste emissions from its current activities and operations. It acquires its raw materials from environmental sustainable sources (Burns 2000). This has reduced its operation costs and risks in the operations. Nike has been on the forefront in its strategy to incorporate products stewardship, which involves the collaboration of its stakeholders in ensuring sustenance across value chain of its products. Nike is working to changing the deep rooted supplier's and other stakeholders' behaviors, that affect sustainability. It also tries to change the way citizens, government and industry share data on the sustainability issues. The collaboration is crucial in ensuring a sustainable products and activities of the company. In the part of green technology, Nike is trying to come up with the next generation clean technologies in its manufacturing process. This has not been widely been adopted, but it has offered a great hope to the future of new sustainable technologies. The other elements of Hart's framework are the ability of a company to develop sustainable products that take care of the needs of the underserved in the society. The company has failed to provide cheap, yet sustainable products, and this remains the biggest challenge in its business strategy on sustainability (Hart 2010). Using the sustainable value portfolio, Nike's strategy is in the right cause of creating a true value chain, if it is well implemented. The only

improvement needed to a great extent is on the creation of products that take care of the underserved in society.

Adidas on the other hand, has a sustainable strategy which focuses on various organs of the company (Scott, James, & George 2011). Its strategy strives to deliver efficiency and environmental sustenance across product design, stages of production, logistics, development, own sites and IT systems. The strategy of the company, as it is that of Nike, focuses on the improvement in the value chain. It focuses on offering more sustainable products to its customers and improvement of the group's environmental footprint. Adidas focuses to use 40% better cotton by year 2015 and 100% by 2018 (Boje 2000). This is focused at improving the environmental impact in the raw materials extraction. The main focus of the Adidas sustainable strategy is on raw materials. Use of the better cotton will ensure sustainable products and sustainable process of manufacturing.

Adidas has also approached sustenance in a different way in comparison to Nike, by adopting 'Green Company' (Scott, James, & George 2011). The company sites join to create similar and shared environmental management models. They also seek the ISO 14001 certification on environmental management (Scott, James, & George 2011). The company manages all its sites according to international management system standards which allow standardized approach to management and which allows global target setting. The company also establishes milestones to environmental sustainability.

Adidas has complied with the Hart's framework to some degree in environmental sustenance. One of the important aspects is the effort to prevent pollution in its current operations. The company targets the raw materials to minimize the waste emission from its current facilities. The company's focus on the value chain sustenance, also allows the stakeholders' engagement in the whole product life cycle, and this offers sustainable products (Burns 2000). Adidas fails to provide a great initiative to the clean technologies as Nike has done. This decreases its future competitiveness, since these technologies offer the next-generation competitive edge. The final element in the Hart's framework is on the provision of products that take care of the underserved in the society. The company fails to co-create new business and products to serve this group of people. Using the sustenance value portfolio, Adidas has yet to do a lot on clean technology and provision of new products for the underserved, to truly offer sustainable value.

Nike takes the lead in the offering of sustainable framework and strategy. Its approach is more detailed and future oriented than the case of Adidas (Burns 2000). This promises a greater competitiveness of Nike in comparison to Adidas. The approach in which each company takes in environmental sustenance, determines the future marketability of its products. One interesting fact about the Adidas business strategy, which affects its sustainability strategy, is its scheme to merge with Reebok, creating a bigger and more competitive business to Nike. Adidas financial position, in comparison to Nike financial muscles, put it in a disadvantaged position to invest heavily in discovering sustainable technologies. Adidas lacks a high level of technology integration into environmental sustainability. This differentiates Nike, who has incorporated sustenance with technology, in their sustenance strategy. Nike also put effort in reducing the environmental impact of each product in its whole manufacturing and product lifecycle. It recycles the manufacturing shoe wastes, through NEAT program.

### **3. Conclusion**

The world resources have grown more and more scarce and environmental degradation has increased as the business activities increase. Sustenance in the environment is one of the core strategies to many

businesses in the world. Different companies adopt different approaches and strategies to environmental conservation. Hart's framework outlines the approach by which a company can follow to developing sustainable strategies. This involves four elements which include prevention of pollution, product stewardship, clean technology and products that serve the underserved.

Nike and Adidas are competitors in the sportswear industry. Both have adopted different approaches to the environmental conservation. Nike has a more comprehensive and a more new product oriented, while Adidas has a raw material oriented strategy. Nike has a more future oriented strategy and that which offers a promise to sustainable value in its operation as compared to Adidas. The competitiveness of businesses lies in the ability to adopt environment conservation in their strategy due to its benefits of reducing cost and increasing product value.

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## **Chinese Students' Motives in U.S. Colleges: An Exploratory Investigation**

Niall Hegarty\* and Chiang-nan Chao\*\*

***Abstract:** This study explores the motives of Chinese students in U.S. universities and colleges. Due to the rapid growth of Chinese students in the United States in the recent years, and the limited literature in this segment, this research attempts to investigate the reasons why Chinese students choose to study abroad and why the United States is their preferred destination. The student enrollment is a vital component of university life pulse in the Higher Education in the U.S., and a much needed source of financial revenue. The motivations of the Chinese students for attending college in the U.S indicate that Chinese students are seeking education with a world view and opt to break from the traditional Chinese educational system.*

*Keywords:* Chinese students study in the U.S., International Business Education, International Students

### **1. Introduction**

The number of international students worldwide rose from a mere 0.8 million in 1975 to 4.1 million in 2010, according to the International Organization for Economic Co-operation and Development (Sood, 2012). The U.S. is the leading destination for international students, and attracted 764,495 international students during the 2011-12 academic year, which is about 3.7% of the total number students enrolled in the U.S. and spent about US\$24 billion, and supporting 313,000 jobs in 2012/13. By any measure, international education makes a significant contribution to the U.S. economy. Take New York State for example, the portion of this contribution was about US \$2.8 billion, which accounts for over 10% of the national total contribution of international students. The economic impacts are not limited to the spending by these foreign students, but also their families residing in the host country (Open Doors Report, *IIE*, 2013). International students can also boost a country's higher education standards, with universities doing their best to attract the world's best and brightest in their chosen fields of specialization (Sood, 2012).

China has emerged as the leading source of international students for the U.S. universities in the recent years. The Chinese students increased by about 21% to nearly 235,597 and count for 28.7% of the total international students in the U.S. at the end of 2013 (Open Doors Report, *IIE*, 2013). Educators and administrators seek to understand this phenomenon and identify better ways to serve this market segment. This research, through an empirical setting intends to explore the motives of Chinese students who choose to study in the U.S. in order to provide insights and direction for both educators and administrators.

### **2. Review of Literature**

Education has been a high priority in China for thousands of years. On average, the country's high-net-worth individuals spend 170,000 Yuan (about US\$27,000), to educate each of their children. This was one of the highest areas of their spending. American businesses, management know-how, and capital have been flowing to China for the past 30 years, but it is education that reverses the tide. Studies show that an overwhelming majority of China's wealthiest want to send their children to foreign universities and the United States is their preferred choice. Ninety percent of the country's richest people have plans to send their children abroad to study; according to independent research by China's Industrial Bank Co. and the

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Hurun Report. Their Chinese Luxury Consumer White Paper 2012 reports that 9 out of every 10 Chinese with assets of more than 100 million yuan (US\$16 million) plan to send their children abroad, while 85% of those with at least \$1 million said they would send their children overseas for education. The affordability might be the first concern for the Chinese students who plan to study in the U.S. Besides economic wellbeing, many Chinese students decide to study abroad because they believe there is a better quality education in foreign countries (Yan, 2012; Albrecht, et al, 2012). A shrinking family size (only one child per family) has become less burdensome for sending children to international universities. Currently, more than 92% of these students have their studies funded privately, according to CGG's report (Wang, 2012). Meanwhile, many U.S. universities are facing an increasingly tough financial situation with a shortage of domestic students, a decrease in corporate support, and declines in government subsidies. In such a situation, Chinese students with money to spend may fill that financial gap (Joseph, 2012).

The benefits of studying abroad are felt both by individuals and entire nations. For this reason educators and administrators are interested in the motives and reasons that encourage Chinese students study in the U.S. The growth in Chinese students may also reflect a confluence of factors. First, more Chinese citizens are completing college and thus eligible to apply to grad school. Second, many U.S. schools are recruiting more aggressively overseas, marketing their programs to a wider talent pool. Word of mouth then fuels the trend. Once some students attend a program, they recommend it to friends back home. Many schools have set up their gateway offices in China, i.e. Columbia University and Ohio State University. The latter saw the applications from China to the university's Fisher College of Business jump 30% between the 2010 and 2011 academic years. Meanwhile, new specialized master's programs appeal to students, particularly those from China, eager to delve deeper into a single subject and gain a credential to compete with the growing population of educated young adults, without taking much time out of the workforce. Perhaps the most incredible figure is that some 90% of China's mega-rich want their children to study in the US, according to one recent study, not to speak of the top leaders' children, including President Xi, whose daughter studies at Harvard University. (Korn, 2012; Ark, et al 2008; Casiano, 2011; Foadi, 2006; Lee, 2012; and Fischer, 2012).

When looking into the Chinese applicants' backgrounds, many universities find some outstanding characteristics the Chinese applicants possess. First, many of them are China's best students who are probably aware that if they attend universities in China, they may not be able to go to the best universities in the world. For example, the recent QS ranking listed just 7 universities out of the top 100 that were situated within China and Hong Kong. Another recently published list from the Times of London has just 3 in the top 100. Even the best universities have been hit by scandals. Second, their parents are rich, and it may make more sense to aim for a U.S. colleges, rather than letting their children go through the highly competitive transition from high school to preferred universities in China where the road from secondary to post-secondary education involves the dreaded hurdle of the strenuous national university entrance examinations. Unlike U.S. institutions that value candidates who present themselves as unique, their Chinese counterparts want students who excel on entrance exams that require years of rote learning and possess a strong grasp of math and science. Some critics say China's state-run education system — promoted as the hallmark of Communist meritocracy — are being overrun by bribery and cronyism. Such corruption has broadened the gulf between the privileged and non-privileged classes (Levin, 2012). Third, these young individuals are ambitious and many want to go to Ivy League schools, a symbol for those parents who raise their children successfully. Fourth, they desire to learn more about critical thinking, and

very importantly, they want to be exposed to things aside from just test taking. (Mellman & Hilburn, 2012; Henze & Zhu, 2012; Taylor, 2012; and Zhang, 2012).

### **3. Methodology**

With the focal questions in mind, this research focused on Chinese students' motives for studying in the U.S. A survey was developed to investigate the issues related to the subject of this study, Chinese students' motives to leave their home country and study in the U.S. The following variables are developed from literature reviews.

### **4. Variable Selection**

The following variables serve as motives that affect Chinese students in their decision making for studying abroad from the literature review.

1. *Gain a new perspective on my own country.*
2. *Can attend a better school overseas, but not able to attend the schools I want due to Gaokao.*
3. *It is easy to be admitted by a foreign school.*
4. *It is also costly if I study in my home country.*
5. *My friends have gone abroad, so I would.*
6. *I want to be away from my country.*
7. *I must study abroad because my parents' wish.*
8. *There are more fields of studies offered by foreign schools.*
9. *Political easiness in programs abroad.*
10. *Better living conditions, housing, eating, and environmental, i.e. clean air, etc.*
11. *The educational system is better overseas.*

### **5. Hypothesis, test of hypothesis, and sampling**

The hypotheses for this research are to find if there are any significant differences in the Chinese students' motives for choosing to study in the U.S.

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|----------------|--|
| H <sub>1</sub> | There is no significant difference for Chinese students to gain a new perspective between China and the U.S.   |
| H <sub>2</sub> | There is no significant difference for Chinese students to attend a better school either in China or in the U.S.   |
| H <sub>3</sub> | There is no significant difference for Chinese students to be admitted by a foreign school either in China or in the U.S.                                    |
| H <sub>4</sub> | There is no significant difference for Chinese students to attend schools either in China or in the U.S. as far as cost is concerned.                        |
| H <sub>5</sub> | There is no significant difference for Chinese students to attend school either in China or in the U.S. because their friends have gone.                     |
| H <sub>6</sub> | There is no significant difference for Chinese students to attend school either in China or in the U.S. as there is no difference between the two countries. |
| H <sub>7</sub> | There is no significant difference for Chinese students for where their parents wish them to study.  |
| H <sub>8</sub> | There is no significant difference for Chinese students to find more fields of studies either in China or in the U.S.  |

- H<sub>9</sub> There is no significant difference for Chinese students to find political easiness in programs either in China or in the U.S.
- H<sub>10</sub> There is no significant difference for Chinese students living conditions, housing, eating, and environmental, i.e. Clean air, etc. either in China or in the U.S.
- H<sub>11</sub> There is no significant difference for Chinese students between the educational systems in China and the U.S.

Alternatively, there are significant differences in each of these hypotheses.

Due to the nature of this empirical study, the questionnaires were distributed to Chinese students in a large university campus in the Northeast of the United States for a convenient sampling. The respondents were asked to evaluate the selected variables in a five point Likert scale, with 5=most important, 4=important, 3=neutral, 2=not important, and 1=least important.

One sample Student's *t*-test. A *t*-test is any statistical hypothesis test in which the test statistic follows a Student's *t* distribution if the null hypothesis is supported. It is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data, the test statistic (under certain conditions) follows a Student's *t* distribution. (Hamburg, 1977; Conover, 1980; Davis and Cosenza, 1985; SPSS<sup>X</sup>, 2002; Wikipedia, 2012). Five percent of *the t*-tests *one* tailed probability level was selected to signify the differences between preferences.

## 6. Main Findings

Over 200 respondents were surveyed at a college campus in the eastern U.S., with 87 completed responded for analyses, representing 43.5 percent of the total surveyed. Table 1 presents the general background information of the respondents. Table 1 presents the test results of One-Sample *t*-Test, with means, *t* values, degrees of freedom, and significance of the tests.

**Table 1. One-Sample *t*-Test Results, test value=3**

	Mean	<i>t</i>	df	Sig.
<b>1. Gain a new perspective on my own country.</b>	<b>3.36</b>	<b>2.33</b>	<b>83</b>	<b>0.02</b>
2. Can attend a better school overseas, but not able to attend the schools I want due to Gaokao.	2.94	-0.38	79	0.71
<b>3. It is easy to be admitted by a foreign school.</b>	<b>2.54</b>	<b>-3.44</b>	<b>83</b>	<b>0.00</b>
<b>4. It is also costly if I study in my home country.</b>	<b>2.46</b>	<b>-3.91</b>	<b>83</b>	<b>0.00</b>
<b>5. My friends have gone abroad, so I would.</b>	<b>2.33</b>	<b>-4.48</b>	<b>83</b>	<b>0.00</b>
<b>6. I want to be away from my country.</b>	<b>2.38</b>	<b>-4.12</b>	<b>83</b>	<b>0.00</b>
<b>7. I must study abroad because my parents' wish.</b>	<b>2.23</b>	<b>-5.65</b>	<b>83</b>	<b>0.00</b>
8. There are more fields of studies offered by foreign schools.	2.81	-1.24	83	0.22
<b>9. Political easiness in programs abroad.</b>	<b>2.48</b>	<b>-3.77</b>	<b>82</b>	<b>0.00</b>
<b>10. Better living conditions, housing, eating, and environmental, i.e. clean air, etc.</b>	<b>2.64</b>	<b>-2.51</b>	<b>83</b>	<b>0.01</b>
11. The educational system is better overseas.	3.07	0.45	83	0.66

## **7. Conclusions and Recommendations**

The test results of One-Sample *t*-Test reject eight null hypotheses: *Gain a new perspective on my own country, It is easy to be admitted by a foreign school, It is also costly if I study in my home country, My friends have gone abroad, so I would, I want to be away from my country, I must study abroad because my parents' wish, Political easiness in programs abroad, Better living conditions, housing, eating, and environmental, i.e. clean air, etc.* In other words, these eight variables present that they are either more important or less important in Chinese students' motivations to come to the U.S. In One variable- *Gain a new perspective on my own country*, the respondents indicate that it is significantly more important as a motive. This would suggest that researchers should focus on this motive, and further explore the issues related to it.

The test results of One-Sample *t*-Test accept three null hypotheses: *Can attend a better school overseas, but not able to attend the schools I want due to Gaokao; There are more fields of studies offered by foreign schools; The educational system is better overseas.* In other words, the acceptances of these hypotheses recommend that the Chinese students do not view these issues differently.

Future empirical studies would better serve the advancement of knowledge in this area by increasing the sample size across numerous colleges, and broadening the scope by examining any differences in motivation in terms of major, public versus private colleges, and geographic location within the U.S. A further recommendation would be to look at any major differences between undergraduate and graduate Chinese students as well as differences between graduate Chinese who completed bachelor degrees in the U.S. and those who didn't. A further investigation on the motivations of these students' parents is needed.

The growing number of the Chinese students in the U.S. has raised some challenging questions for both educators and administrators. In the future, researchers will need to know more about: what are the expectations of these Chinese students when they land in the U.S.? Are their expectations met during their studies or after their studies? If their expectations are not met, what educators in the U.S. schools need to do? A demographic of this size cannot be ignored and needs to be understood.

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## **Role of Corporate Image, Perceived Risk and Trust on the Usage Frequency of Smartphones in Emerging Markets**

Harmeem Soch\*, Kuljit Kaur\*\*, Amrinder Gill\*\*\* and Harnek Gill\*\*\*\*

***Abstract:** This research paper examines the role of corporate image, perceived risk and trust on the usage frequency of smartphones in emerging markets. Based on data collected from 500 customers categorized as frequent users and infrequent users using cell phones, a conceptual model is proposed and empirically tested using structural equation modeling. Exploratory factor analysis was conducted to refine the scale measuring corporate image, perceived risk and usage frequency. Confirmatory factor analysis was conducted to test the hypothesis. It was found that corporate image and trust have a direct impact on usage frequency of smartphones. This finding is consistent for both frequent and infrequent users. Perceived risk was found to negatively impact the usage of smartphones for infrequent users whereas it had no effect on usage of frequent users. This study makes both academic and practitioner contributions and concludes by drawing implications, presenting limitations and offering directions for future research.*

*Keywords:* Corporate Image, Perceived Risk, Trust, Usage Frequency, Smartphones

### **1. Introduction**

Use of smartphones among consumers in India is growing at very fast rate. Popularity of smartphones is increasing day by day. In earlier days mobile phones were used only for communication. But now mobile phones have equipped with new features and comforts. Every day new models of smartphones are coming and replacing the older ones. So it is very necessary to know for mobile marketers how consumers will adopt new smartphones? What are the factors that will influence the consumers' intention to use new smartphones? Past studies have shown the impact of many factors on adoption of smartphones (Park and Chen, 2007; Suki, Norazah Mohd. 2013; Hsiao. Kuo-Lun, 2013). But still more research is needed to study various factors that influence adoption of smartphones among consumers in India. Technology Acceptance Model (TAM) by Davis (1989) is popularly used to explain the adoption of products/technology. TAM is a well-known and powerful model for predicting technology acceptance (Venkatesh and Davis, 2000). Technology Acceptance Model is based on two theories that are, Theory of Reasoned Action (TRA; Ajzen and Fishbein, 1980) and Theory of Planned Behavior (TPB; Ajzen, 1985). According to Theory of Reasoned Action (TRA) there are only two constructs attitude and normative pressure/subjective norm that influence customers' intention to use technology, which lead to actual use of technology. Theory of Planned Behaviour (TPB) is an extension of the theory of reasoned action, and includes one more construct that is 'perceived behavioural control', which originates from the efficacy theory (SET) that also influence customers' intention to use technology.

In TAM five variables are studied those are, perceived usefulness (PU), perceived ease of use (PEOU), attitude toward use, intention to use and actual use of technology. Davis (1989) defined perceived usefulness as "the degree to which a person believes that using a particular technology will increase his or her job performance" and perceived ease of use as "the degree to which a person believes that using a particular system would be free of efforts". There are more than 700 citations of the original paper of Davis on TAM (Bagozzi, 2007). Researchers have studied the impact of many other constructs like

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perceived enjoyment, perceived risk, subjective norm, fun, hedonic and utilitarian motivations etc. on attitude toward use of technology and intention to use technology (Tong, 2010; Kesharwani and Bisht, 2012; Childers, Carr, Peck and Carson, 2001; Chtourou and Souiden, 2010; Nysveen, Pederson and Thorbjornsen, 2005; Yang, 2010 ; Yang and Lee, 2010). The impact of these constructs on adoption of technology is found to be very significant. This study investigates how Trust, Corporate Image and Perceived Risk influence the adoption of smartphones for both frequent and infrequent users of mobile phones and proposes a model.

## **2. Literature Review**

Perceived risk negatively influences the intention to use technology (Maditinos, Chatzoudes and sarigiannidis, 2013; Tong, 2010; Kesharwani and Bisht, 2011). Perceived risk also negatively affects perceived ease of use and intention to use technology (Lorenzo-Romero, Constantinides and Alarcon-del-Amo, 2011). Lesser is the perceived risk consumers perceive technology to be more useful. Trust negatively and significantly affects perceived risk toward using technology (Kesharwani and Bisht, 2011). More is the trust on technology results into less perceived risk toward using technology. Trust positively and significantly influence perceived usefulness, perceived ease of use and attitude toward using technology (Lorenzo-Romero, Constantinides and Alarcon-del-Amo, 2011). Trust beliefs also positively influence intention to use technology (Nicolaou and McKnight, 2006).

Corporate image exerts positive and significant influence on consumer trust (Flavián, Guinalfú and Torres, 2005; Lin and Lu, 2010). Also corporate image negatively affects perceived risk toward using technology (Kanibir and Nart, 2009). More is the positive corporate image lesser is the perceived risk to use technology and more is the trust on technology. The combined effect of perceived risk, trust and corporate image on adoption of technology is not studied yet. This paper examines how these three factors that is, perceived risk, trust and corporate image collectively influence adoption of smartphones by consumers. Usage frequency of cell-phones is studied as moderator in this study.

## **3. Research Methodology**

To examine the proposed study, technology adoption model (TAM) was incorporated. It is hypothesized that antecedents to TAM include corporate image and perceived risk which trust. Perceived risk directly affects intention to use a product. Therefore,

**H1: Perceived risk has a direct and negative effect on intention to use a product.**

Corporate image affects the trust one has with the products it produces and also on the perceived risk. Better the corporate reputation and image of the organization, higher will be the trust one has with that company.

**H2: Corporate image has a direct and positive impact on trust.**

Corporate reputation affects perceived risk as well. Better the reputation of a company, lower will its perceived risk be. Companies that have a higher corporate image tend to put fears of people at rest and therefore the perceived risk they feel before the adoption of a product tends to be lower.

**H3: Corporate image has a direct and negative influence on perceived risk.**

Data from 500 respondents was collected using a pre-defined well-structured questionnaire. Scale items were refined using item analysis. Exploratory factor analysis followed by confirmatory factor analysis was conducted to prove the hypothesis. Structural equation modeling was used for analysis and CFA was conducted on data.

#### **4. Main Findings**

All three hypotheses were proved and results show that establishing trust and positive corporate image can reduce perceived risk toward using smartphones. With regard to the question how trust and perceived risk can influence the process of adoption, it was concluded that trust affects positively and directly the attitude towards smartphones; likewise it affects positively the perceived usefulness, and perceived ease of use. However, perceived risk influences negatively the intention to use them. Another conclusion of the study is that the ease of use has a negative influence on perceived risk, i.e. when perceived ease of use is greater, perceived risk will be lower.

#### **5. Conclusions**

The research has far ranging effect on the academic literature as well as managerial decision making. It will help the marketers to understand the factors other than attitude, perceived usefulness and perceived ease of use that can also directly or indirectly influence consumers' usage behaviour. Marketers should try to enhance the corporate image, feel of trust, ease of use, perceived usefulness of smartphones and should try to decrease the perceived risk to use smartphones so that consumers build positive attitude toward using smartphones. Mobile marketers should apply efforts to maintain the positive attitudes of consumers towards smartphones. Trust influence perceived ease of use, perceived usefulness and attitude, so it indicates that marketers should maintain user trust by ensuring them that smartphones are according to their expectations.

Limitation is that this study is limited to only one country. To generalize the results this study should repeat in other countries also. The impact of cultural difference across the countries on smartphone adoption can also be studied. In future study sample should also expand to include frequent users, infrequent users and non-users of mobile phones. This would help the mobile marketers to identify different factors that also affect usage or non-usage of decisions of various groups. Future research should also study impact of some other factors like services offered in smartphones, self-efficacy, perceived enjoyment and gender difference on adoption of smartphones.

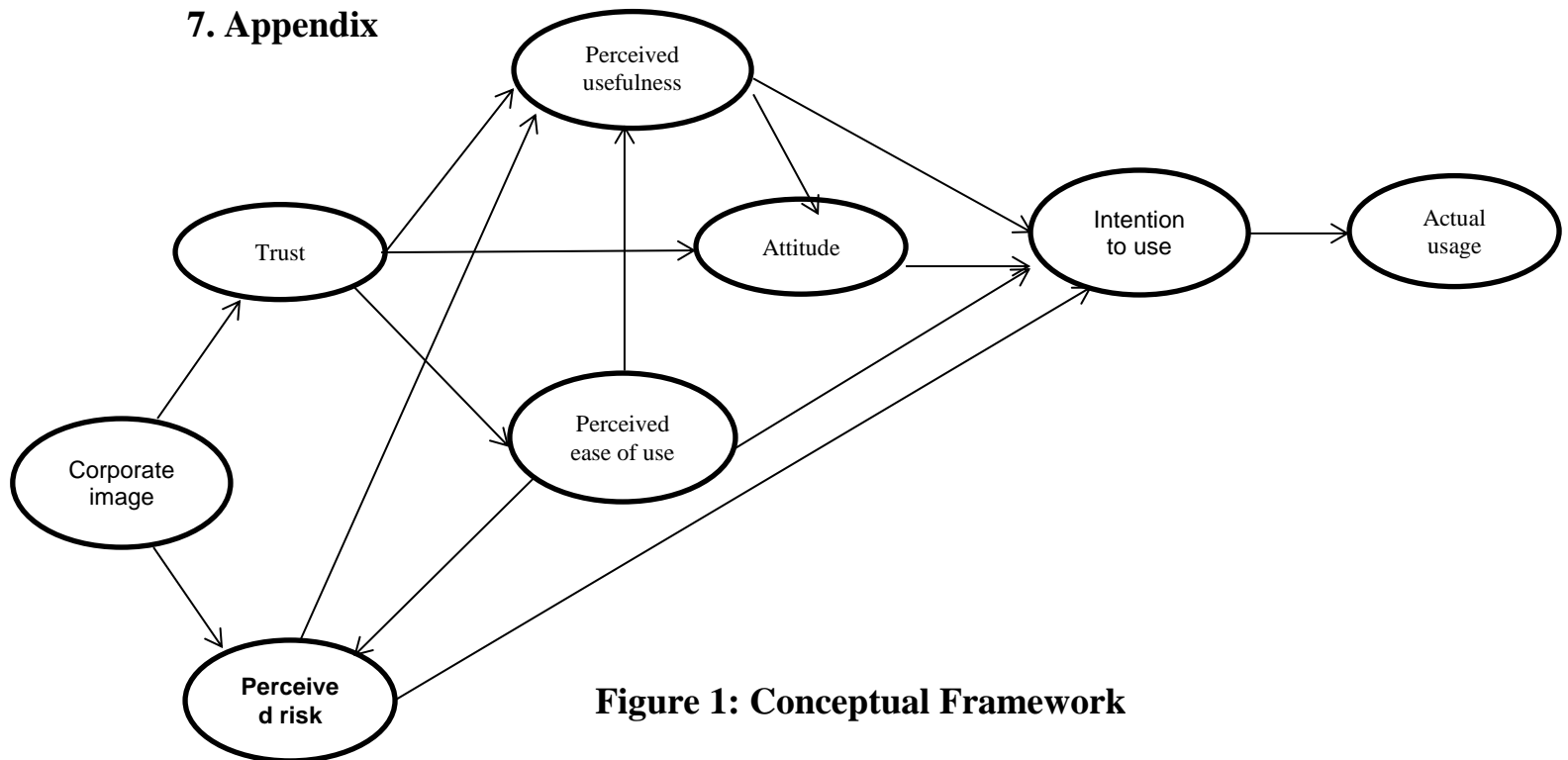
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## 7. Appendix



**Figure 1: Conceptual Framework**

## Customer Relationship Management – Scale Development and Validation

Harmeem Soch\*

***Abstract:** Companies want to build and maintain a good track of Customer Relationship Management (CRM). Although much has been written about the concept over the years, there has been little consensus on the assessment of CRM. Adequate tools and techniques are required to quantify and assess the domain of this construct. Till date, there has been no such study that develops a scale for this purpose. This paper captures the domain of CRM in fourteen broad constructs. Data on 117 manufacturing companies in India was obtained. Item analysis is used to assess the reliability of the scale and factor analysis is used to establish its construct validity.*

*Keywords:* CRM Scale, Reliability, Validity

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## **Copyright and Privacy Issues on UGC Based Marketing**

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***Abstract:** The User Generated Content (UGC) provides exciting new contents for the marketing companies to place it in their websites, produce and reproduce it for marketing activities. The companies are allowing users to upload comments, texts, photos and videos, etc., to encourage traffic and ultimately attract revenue to the company. Inevitably it means that there are certain legal hitches that the companies need to be cognisant as the companies with “deep pockets” are targeted first in any legal suit for violation of legal rights. The possible legal right violation in UGC could be copyright violation, defamation, posting or hosting objectionable contents and privacy violations. This paper analyses the copyright and privacy violations that the UGC providers and users should be aware of when they use the content for marketing.*

*Keywords:* User generate contents (UGC), Copyright, Privacy

### **1. Introduction**

The UGC refers to media content created or produced by general public rather than paid professionals and it is usually distributed through Internet (Daugherty, T., Eastin, S.M. & Bright, L, 2008). The content is basically created by web surfers who use blogs, videos, creative applications, photo sharing, etc. The UGC is defined by OECD as contents that are available to public, contain certain amount of creativity which are created by public not by professionals. The UGC is being utilised in all marketing related activities including marketing intelligence, promotions, public relations, product and customer management and marketing communications (Rafiee,V.& Sarabdeen, J, 2013 and Castronovo, C. and Huang, L. 2012). Since there is a reliance and trust on user generated contents by the other users in social media, user generated contents create positive image about the business brands (Constatinides E. A., M. & Romero, C. 2010). Thus companies sponsor content creators to promote the brand, products or services or engage with the customers so that they could to some extent control negative image of corporate brand and promote positive marketing (Godin, S.1999). The UGC plays a vital role in establishing effective engagement marketing too. Engagement marketing involves two way interactions between the businesses and consumers. Though engagement marketing costly for the business as they have to manage customer interaction, co-creation and blogging, it is imperative to have a good strategy for managing engagement marketing. (Jalilvand, M.R. & Samiei, N. 2012). Viral, buzz or word-of-mouth marketing (WOMM) is another feature of UGC. In WOMM, the marketers attract the consumer-to-consumer communications in their favour (Kozinets, R., Valck, K., Wojnicki, A. & Wilner, S. 2010, Felick, F.& Price. L., 1987). The reviews by the users and influencers are very important product related user generated contents that may be used by the businesses for their marketing campaigns. This article looks at the two major legal violations that could be brought about by the user generated contents. It analyses copyright violation issues and privacy issues. It draws upon the laws in UK, USA and United Arab Emirates to see the different legal requirements for the companies to know to avoid legal consequences.

### **2. Methodology**

The paper looks at the copyright and privacy violations involve in the usages of UGC by comparing the legislative and regulatory frame work of USA, UK and United Arab Emirates. The study analyses the literature, laws and regulation using content analysis. Relevant cases are also examined to see the application of law to practical issues.

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Followings are the laws and regulation that have been analysed in this research.

**UK Laws:** Copyright, Design and Patent Act 1988 (CDPA), The European Union Directive on Data Protection, Privacy and Electronic Communications Directive 2002

**US Laws:** Digital Millennium Copyright Act 1998, Children's Online Privacy Protection Act (COPPA, 2000), Deleting Online Predators Act 2006 and Self—Regulatory Program for Online Behavioural Advertising

**UAE Laws:** UAE Federal Law No. (7) of 2002 Pertaining to Copyrights and Neighbouring Rights (the Copyright Law), Federal Constitution of UAE, Penal Code, Dubai Electronic Transactions and Commerce Law (No.2 of 2002) and Data Protection Law 2007.

### **3. Main Findings**

#### **Copyright Issues**

When users create contents, the content could be of theirs or the copyright work of others. In both instances there are legal concerns. The UGC might have music, films, materials, artistic works and sound recordings. If the contents belong to the owner, it is imperative for the companies to get the consent to use them as part of their terms and conditions or to get express assignment of rights of the materials from the users to the company. There are also companies that get them agreed to royalty-free perpetual transfer of ownership to the company so that any other use of these materials for future marketing purposes will be done without legal liabilities.

As users can only transfer the copyright that belong to them, if the copyright belongs to third party then the permission is to be sought from the original owners. In USA the Copyright Act, in section 204(a) requires such a transfer to be in writing and signed. If the owner is just granting non-exclusive licence to the content, then the law does not specify any specific format to follow. Non-compliance of getting consent will make the company breach certain exclusive rights granted by the law to the owners of copyrighted work. The exclusive rights that may be breached are:

1. *The reproduction right- as per sections 19 -21 of the UK Copyright, Design and Patent Act 1988 (CDPA) the reproduction rights will be infringed if the company, copies, stored and reproduces the contents online or offline marketing materials.*
2. The Communication to the Public right- this right, in section 21 of CDPA will be breached when the company displaces and makes the materials available to the public that could be accessed at a time and place.

The UGC service providers may also face liability for facilitating violation of copyright when they allow others to download infringing materials. Since the main purpose of providing facilities for creating UGC is to circulate and attract others into the content. To benefit from the UGC express consent is needed or the company must state very clearly in their website that the permission of copyright owners must be obtained to download or other related purposes.

Under the USA Copyright Act, along with reproduction right and the right to public display, the right to create derivative works, the right to distribution to public and the right of public performance could also be violated. The right to create derivative works will be infringed if the UGC sites take the materials, video and audio and modify them. Though the modifications may enhance the original posting by mixing the sequences, adding characters or humour, using the original posts to make derivatives works will constitute a violation of exclusive right granted to copyright owners. The other right that will be violated

is the right to distribution to public. The distribution of contents to other users electronically or as promotional materials will be considered violation of this right. Similarly, the right to public performance will be infringed if the company allows the streaming of files, video or audio.

Under the UK and USA legislation, the UGC service providers that include company who attract consumers to contribute in creating UGC could also be held liable for contributory or vicarious liability. Contributory liability will occur when the service provider knowingly induces, causes or materially contributed to the infringement (*Gershwin Publishing Corp v Columbia Artists Management Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971)). Vicarious liability could occur if the provider failed to supervise the content providers and the provider has an obvious and direct financial interest. By considering the above mentioned conditions the US Supreme Court in *MGM v. Grokster* (545 US 913 (2005)) decided that the service provider is liable for copyright infringement, as it promoted the company as illegal file sharing platform and gained financially from the users' illegal activities. However, the UGC providers could rely on some statutory defences. In UK if the provider is merely hosting the services, the user is not acting under the authority of the provider and the UGC provider does not have actual knowledge of the illegal activities of the issuer, the provider can claim protection under section 19 of the CDPA. However, it is also necessary that it must act promptly to remove access to illegal materials if it receives any complaints about copyright infringement. In US, the UGC provider could claim protection under section 512 of Digital Millennium Copyright Act 1998. Under this section, the provider is required to meet the following criteria to benefit from this provision: 1. inform the users of the copyright infringement notice, 2. remove or lock repeated violator, 3. appoint a personnel to receive compliance and 4. promptly removing the infringing materials. It is to be noted that this defence is only available if the UGC provider is not acting as publisher or has no influence over the selection and presentation of content. However section 512 will not be beneficial if the UGC provider or the user of UGC contents acted as publisher.

The available defences under both countries' laws show that the UGC provider could be only protected if the provider is acting as a mere distributor like newspapers rather than publisher. In order for the UGC providers to claim benefit from the available defences, they should not have:

1. actual or apparent knowledge of infringement,
2. induced or facilitate the infringing contents, and
3. used those contents for marketing and promotional activities.

Generally, the defence may not be available if the UGC is used for marketing purposes. The only way for them to avoid liability is to get consent from the copyright owners for the content use and it is also necessary for the companies to monitor UGC so that they can remove the illegal or infringing contents immediately when they receive notice of infringement.

The UAE Federal Law no. (7) of 2002 pertaining to Copyrights and Neighbouring Rights (the Copyright Law) protects various works that could come within expression of idea. Article 7 of the law grants financial or economic rights that include the right to grant licences for exploitation of work through reproduction, electronic storage, downloading, public performance, communication and modification. Article 18 specifies about financial rights of producers of phonogram or any other sound recording which include the right to use in any manner and the right to disseminate. Article 17 provides the right for performers. The rights of the copyright owners can be transferred to a third party and that transfer must be in writing. Articles 22, 23 and 24 discuss on fair use of copyright materials. The law provide limited exemptions for personal and non-commercial use of copyright material. It also allows the use of copyrighted materials for religious, vocational training and educational purposes. The exemptions made it clear that any commercial use of copyright materials are not acceptable and it will be punishable by law.

It is to be noted that the UGC service providers may not be able to claim any protection as there is no special consideration given under the existing law for the service providers.

### **Privacy Violation**

Private information is usually included in the user generated contents. Use of private information that is available in UGC can possibly violate privacy rights of concerned parties. Privacy is considered as necessary for the development of varied and meaningful interpersonal relationships (Fried, C. 1970) or the value that control others access on personal data (Gavison, R. 1980). Privacy preserves the individual's will to retain the right to determine when, how, and to what extent information is communicated to others. As privacy is considered part of human personality, providing protection of privacy, individual's independence, dignity and integrity can be protected and reserved (Bloustein, E. 1964). The privacy can be violated by businesses when they collect personal information, preferences and buying behaviours of users through UGC and use them in targeting users with promotional activities. The huge amount of private information generated by users is being used by companies to build consumer databases. Building a consumer database could be the best strategy to serve the customers best. Nonetheless, the business should take note of privacy concerns in building databases and using the private information (Kaplan, A.M. & Haenlein, M. 2009 and Westin, A. 1968)

The European Union Directive on Data Protection which was incorporated in all the member countries including the UK and adopted by many trading partner countries has important implication for the protection of personal data of EU consumers. This directive could be extended to cover personal data available as UGC. Personal data under the Directive includes any information or opinion of a living person who is identified or identifiable as personal data that includes opinion about others. The businesses who intend to collect, store or use consumer information need to follow principles set out by the Directive. As per the Directive, the personal data must be processed fairly and lawfully. To meet this criterion, the companies who are planning to use the data must collect them directly from the data user and the data user must have consented to the collection of data. The collection of data from UGC without the express consent will be considered as violation of this principle.

The Directive also states that collection of data must be for specified, explicit and legitimate purposes. The personal data of consumers can be processed or used for the purpose for which the data were collected. However, any excessive collection of data for future use is considered violation of this principle. This issue is confirmed by the UK's Data Protection Tribunal in *Runnymed Community Charge Registration Officer v. Data Protection Registrar* where it was held that information relating to certain individuals should not be excessive. Collection and processing of sensitive data requires "explicit consent" from the data subject. The EU Directive states that sensitive data would include racial or ethnic origin, political opinion, religious believe, (and) philosophical or ethnical persuasion, and sexual life (Eugere, C. & George, H. 2000). When private information in UGC is used to personalise product or service offering according to the target segmentation, inevitably the company will be using more specific information including the sensitive information. In such use, it is necessary for the company to get "explicit consent" of the data subject. In addition, the data collector or businesses are required to destroy the data once the purpose of collecting the information ceases. The Directive also requires the personal data shall also be accurate and kept up to date. Thus keeping and using any out-dated, misleading, and incorrect information should be considered as a violation. Thus appropriate measures should be taken to make the data accurate and updated. In addition, appropriate technical and organizational measures are to be taken against unauthorized or unlawful processing of personal data and against accidental loss or destruction of, or damage to personal data (article 17).

Besides European Union Directive on Data Protection, EU Privacy and Electronic Communications

Directive 2002 also protects data privacy. Article 13(1) of EU Privacy and Electronic Communications Directive permits direct marketing to consented consumers. Thus any marketing communication to existing customers must be solicited. When consumers gave consent to receive marketing communication in relation to a particular product or service, any marketing communication in future must be in association of the product that he bought from the company. Capturing consumer interest, purchase behaviour, consumer sensibility and lifestyle using UGC and subsequent promotion may not be legally appropriate as the users or consumers do not give the consent to receive any information or the consent given is only for receiving information about a particular product. The law also mandate businesses to provide the consumers with the opportunity of opt-out at any time though they have given consent earlier.

In United Arab Emirates Article 31 of the Federal Constitution protects secrecy of communication and the information of individual. Any collection, use and storage of personal information from UGC against their knowledge and approval could be considered as criminal actions since it violates article 31 of the Federal Constitution. The Penal Code in section 378 also protects privacy by stating that disclosure or use of any information or picture or view of a person's private life is a crime. In addition, section 379 protects information that was received in confidence. Applying the above mentioned provisions, private information that are available in UGC are not allowed to be stored, used or disclosed without the consent of the person who imparted them. The Federal Constitution and the Penal Code clearly guarantee protection of personal data. In addition to the Federal Constitution and the Penal code, Dubai, the commercial state of UAE passed Dubai Electronic Transactions and Commerce Law (No.2 of 2002) and Data Protection Law (DIFC Law No.1 of 2007) to regulate data privacy. Any unauthorised use or disclosure of personal information is penalised under Dubai Electronic Transactions and Commerce Law (No.2 of 2002). The provisions of Data Protection Law follow the 1995 EU directive and it required consent to access personal information. It also provides to data subject various rights like right to deny collection of data and right to correct the data collected. The laws in UAE on data protection provide criminal and civil sanctions against the violation of private information. As the private information available in UGC generally belong to the users, express consent to the collection, storage and use of the personal data must be obtained to avoid liability.

### **Privacy of Children's Data in UGC**

The UGC could be also used by the marketers to target marketing activities among children. As children do not worry about privacy violation, they do not read privacy policies and provide more information in UGC than adults (Barnes, B. S., 2006). Laws have been passed to protect the children who are vulnerable to give more private information. Even if the general privacy law can be applied to protect children's privacy, there are specific laws that have been adopted to ensure adequate protection of children's privacy. In 1989, United Nations General Assembly passed a resolution on the Rights of the Child. The resolution requires the governments to respect and ensure the rights of children, including the right to the protection of their privacy. Though the EU counties have better laws on data protection, the EU is also trying to strengthen the children's privacy by passing additional resolution and educating the children. The Data Privacy Commissioner recommends the business to adopt good practices in relation to data protection (Sarabdeen, J. & Maria, 2009). USA in comparison with its EU counterparts provides less comprehensive laws on privacy with the exception on protection of privacy of children. The Children's Online Privacy Protection Act (COPPA, 2000) requires the Federal Trade Commission to enact rules governing the online collection of personal information of children under 13 (Barnes, 2006). It is required on businesses to take reasonable effort to ensure that one of the child's parents must be informed about data collection and consents must be obtained before processing personal information of children. It also requires the companies to publish their privacy policies and practices of collecting information from

children under 13 years. Pennsylvania drafted another law called Deleting Online Predators Act in 2006. Facebook and selected marketers were suit in 2008 for allowing external websites to Facebook for target advertising of Facebook users (Lane v. Facebook. Inc., Case No. 5:08-CV-0385-RS, ND Cal. Aug. 12 2008).

#### **4. Conclusion**

The companies are using UGC for building public relation by contributing to consumer sentiment, it is also being used to create and disseminate advertising. There are companies that improve the existing products or innovate new products based on the UGC and use UGC for so many other marketing purposes. The UGC is considered as important for business to learn about the users, their lifestyle and buying behaviours. However, the unfair use of the information in UGC is controlled by the legislation so that there will be a balance between the personal interest and commercial or public interest to use the information in UGC. The copyright laws in UK, USA and UAE protect the right of the copyright owners. The UGC service providers or the companies using the copyright materials for marketing purposes need to get permission for such use. The UAE law did not differentiate a primary infringer from secondary infringers. All those who are violating the copyright laws could be held liable. The privacy protection Laws in UK and UAE is comprehensive which requires consent or “opt-in” system from the data subject to use information available in UGC. However, USA follows “opt-out” system in privacy issues. However, in protecting children privacy, it also passed strict law where parental consent is made compulsory for collection of children’s personal data including data from UGC.

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## **Linkages among Stock Indices, Industrial Production and Inflation of South Asian and South East Asian Countries**

Mukesh Chaudhry\*, Walayet Khan\*\*, and Robert J. Boldin\*\*\*

***Abstract:** Developing countries that are in close proximity to each other tend to have closer economic linkages as there are less barriers to Foreign Direct Investments (FDI) due to regional cooperation and bilateral trade agreements. Hence, it is expected that these economies will be closely bound together in the long-run. The results clearly support this as both inflation and stock indices are strongly integrated across South Asian and South East Asian Countries. It is also evident that the dominant country is China for linking inflation across these economies. The industrial production and inflation for each country is very closely linked in the long-run.*

*Keywords: industrial production, inflation, cointegration, stock prices*

### **1. Introduction**

A number of studies have examined the relationship between financial markets and macroeconomic variables. For instance, Chen, Roll, and Ross (1989) suggest that equity returns are endogenous to economic variables because these economic factors affect the pricing of goods and services which in turn influence dividends either positively or negatively. Since stock prices are the present value of expected future dividends discounted at an appropriate interest rate, the economic factors are indirectly incorporated in these prices. The discount rate on the other hand, can change due to the level of unanticipated changes in interest rates and the risk premium. The level of real changes in consumption or spending will influence the production of goods and services. Its pricing, in turn, can affect the unanticipated changes in risk premium.

Economic linkages are important from the perspective of portfolio managers and investors who are active in emerging markets. These linkages should help in identifying profitable investment opportunities. Since there is increased interest regarding investment in South Asian and South East Asian emerging markets, this analysis should be useful from the view-point of how changes in industrial production and inflation play a role in the equity prices of these economies. Thus, the focus of this research is to dynamically examine the linkages and interdependence between the real variables and the stock markets of South Asian and South East Asian countries.

### **2. Background**

Cash flows of companies change with fluctuating interest rates and levels of anticipated and unanticipated inflation. These changes should affect stock prices indirectly. Several studies have shown that stock returns are negatively related to changes in expected inflation (Ratanapakorn and Sharma (2007), Solnik (1983), Gultekin (1983), and Fama (1981)). Likewise, the amount of industrial production should also directly or indirectly, through the cash flows, affect equity prices of companies. As suggested by Erdem et. al, (2005), the level of economic activity that is proxied by industrial production should have a positive effect on equity prices as higher production should lead to larger expected future cash flows. Similar conclusions were reached by Fama (1990), and Geske and Roll (1983). In a study by Ammer and Mei (1996), they examined co-movements of financial and real economic variables using a new model which enabled them to capture the level of both real and financial integration across different countries.

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Rodriguez-Claire (1996) and Alfaro and Rodriguez-Clare (2004), used another approach to suggest why developing economies of countries that are in close proximity of each other tend to have closer linkages. They point out that there are less barriers to Foreign Direct Investments (FDI) for these economies due to regional cooperation and bilateral trade agreements. Another measure as an indicator of linkage used by them includes the ratio of the value of inputs bought domestically, the total workers hired by the multinational firms, and the fact that foreign firms through FDI provide additional competition to the local firms thus improving their productivity.

### 3. Data

Numerous sources were used to obtain data for the seven Asian economies studied in this paper. The study covered the period from 2001 to 2010 and included data from Bloomberg, the National Bureau of Statistics, Indian Ministry of Planning and Reporting, Malaysian Department of Statistics, Bangladesh Bank, and Federal Reserve Board of Cleveland.

### 4. Model

It is well known that financial and economic variables are non-stationary (see for example, Laopodis (2006)). By taking the first difference of the prices, however, stationarity of the time series is assured. But by differencing the time series, one may not be able to discern the long-term relationship between real and financial variables. With the recent advances in econometric techniques, however, it is possible to identify the long-term relationship between stock prices, inflation, and industrial production using cointegration, bivariate and multivariate vector error correction (VECM) models. Thus, the model shown below facilitated the objective of this study.

Stock prices can be written as the discounted value of future dividends:

$$P_0 = \frac{E(d)}{i} \quad (1)$$

Where  $P_0$  is the Present Value (PV) of the stocks,  $d$  is the future dividends payment stream and  $i$  is the discount rate. Hence, return in a given period can be shown by differentiating equation (1) as follows:

$$\frac{dP_0}{P_0} = \frac{d(E(d))}{E(d)} - \frac{d(i)}{i} \quad (2)$$

The discount rate would change as a function of unanticipated and anticipated changes in interest rates and changes in the term structure of interest rates across different maturities. As shown in equation (2) the cash flows would change positively with higher expected future dividends and inversely with the increase in discount rate. Another factor that will affect equity prices is the level of risk premium which is also impacted by the change in consumption.

It is evident from the above that both real and nominal changes in cash flows would change equity prices. For example, the real change in cash flows will occur when industrial production changes. If  $IP(t)$  is the monthly rate of industrial production, then

$$\Delta P(t) = \log_e IP(t) - \log_e IP(t-1) \quad (3)$$

The nominal changes in the stock prices can be shown to be impacted by the changes in the unanticipated inflation as follows:

$$UCPI(t) = CPI(t) - E(CPI(t)) \quad (4)$$

Where  $CPI(t)$  is the realized inflation and  $E(CPI(t))$  is the expected level of inflation.

Using cointegration models the relationship among stock prices, industrial production and inflation is shown as follows:

$$\Delta P_{i,t} = \alpha_1 + \gamma_1 \varepsilon_{t-1} + \sum_{i=1}^{n1} \beta_{1,i} \Delta P_{i,t} + \sum_{i=1}^{n2} \beta_{2,i} \Delta IP_{i,t} + \sum_{i=1}^{n3} \beta_{3,i} \Delta CPI_{i,t} + \varepsilon_{1t} \quad (5)$$

$$\Delta IP_{i,t} = \alpha_2 + \gamma_2 \varepsilon_{t-1} + \sum_{i=1}^{m_1} \delta_{1,i} \Delta P_{i,t} + \sum_{i=1}^{m_2} \delta_{2,i} \Delta IP_{i,t} + \sum_{i=1}^{m_3} \delta_{3,i} \Delta CPI_{i,t} + \varepsilon_{2t} \quad (6)$$

$$\Delta CPI_{i,t} = \alpha_3 + \gamma_3 \varepsilon_{t-1} + \sum_{i=1}^{j_1} \theta_{1,i} \Delta P_{i,t} + \sum_{i=1}^{j_2} \theta_{2,i} \Delta IP_{i,t} + \sum_{i=1}^{j_3} \theta_{3,i} \Delta CPI_{i,t} + \varepsilon_{3t} \quad (7)$$

Here,  $\gamma$ 's capture short – term relationships and  $\beta, \delta, and \theta$  reflect the long-term relationships between stock prices ( $P_0$ ), industrial production (IP), and inflation (CPI), respectively. For examination of causality among  $P_0$ , IP, and CPI, the bivariate Granger causality tests can be used to determine the direction of causation that exists between the three variables.

### 5. Results of Empirical tests

To remove the autocorrelations in the time series, the appropriate lag length was found using Akaike Information criteria (AIC) and Schwartz criteria. The lag length is selected by minimizing AIC over different choices for lag length. Using Augmented Dickey Fuller (ADF) unit root test, as expected most of the time series are stationary. Industrial Production (IP), however, is stationary except for India. The results are shown in Table 1. Consumer Price Index (CPI) and Stock Market Indices ( $P_0$ ) are non-stationary for all the South Asian and South East Asian countries in the sample. Hence, there is a need to apply cointegration methodologies to the data.

**Table 1. Augmented Dickey Fuller Test for unit roots in the South and South East Asian countries for industrial production (IP), inflation (CPI), and stock market indices ( $P_0$ )**

Country	IP	CPI	$P_0$
China	-12.54 <sup>***</sup>	-1.66	-1.86
India	-0.75	5.34	-0.14
Indonesia	-10.58 <sup>***</sup>	0.19	0.54
Malaysia	-2.90 <sup>**</sup>	-0.10	0.01
Pakistan	-3.43 <sup>**</sup>	1.22	-1.14
Sri Lanka	-4.54 <sup>***</sup>	0.73	2.54
Bangladesh	-9.43 <sup>***</sup>	1.21	4.57

Critical values are taken from MacKinnon (1991). \*,\*\*,\*\*\* implies significance at 10%, 5%, and 1% levels respectively.

#### Johansen's Cointegration test for a system of IP, CPI, and $P_0$ for Each Country

Results for a system of IP, CPI,  $P_0$  for South Asian and South East Asian countries using Johansen's cointegration method are presented in Table 2. The tests using Trace statistic are reported in the table along with the critical 'p' values. These are basically likelihood ratio tests, where null hypothesis is  $L_{T+1} = L_{T+2} = \dots = L_p = 0$ , indicating that the system has  $p-r$  unit roots, where  $r$  is the number of cointegrating vectors. Also, Table 2 shows that for the three variables namely, IP, CPI, and  $P_0$ , the countries of China, India, Indonesia, Malaysia, Sri Lanka, and Bangladesh, are strongly cointegrated with one cointegrating

vector. The only exception, however, is Pakistan where results indicate no cointegration. Stock indices do not have a long-term relationship with industrial production and inflation for Pakistan.

**Table 2. Long-run cointegrating relationship between stock prices, industrial production, and inflation indices for each South Asian and South-East Asian country**

Country	r=	Eigen Value	Trace Statistic	Critical Value (5%)	Probability
China	0	0.285	50.80 <sup>***</sup>	29.80	0.00
	1	0.065	12.61	15.49	0.13
	2	0.042	3.55	3.84	0.09
India	0	0.317	63.04 <sup>***</sup>	29.80	0.00
	1	0.136	19.51 <sup>***</sup>	15.49	0.01
	2	0.025	2.89	4.13	0.11
Indonesia	0	0.326	56.79 <sup>***</sup>	29.80	0.00
	1	0.087	11.85	15.49	0.16
	2	0.012	1.39	3.84	0.24
Malaysia	0	0.185	34.38 <sup>***</sup>	29.80	0.01
	1	0.087	12.61	15.49	0.21
	2	0.006	3.55	3.84	0.42
Pakistan	0	0.133	23.40	29.80	0.23
	1	0.060	7.11	15.49	0.56
	2	0.000	0.00	3.84	0.99
Sri Lanka	0	0.257	38.85 <sup>***</sup>	29.80	0.00
	1	0.037	5.97	15.49	0.70
	2	0.014	1.65	3.84	0.20
Bangladesh	0	0.520	90.43 <sup>***</sup>	29.80	0.00
	1	0.057	6.79	15.49	0.60
	2	0.001	0.05	3.84	0.83

\*,\*\*,\*\*\* implies significance at 10%, 5%, and 1% levels respectively.

In Table 3, the cross linkages between the stock indices of South Asian and South East Asian countries are provided. Using the results from Trace statistic, the results indicate that both stock indices and inflation are strongly cointegrated among these countries. Also, at least two cointegrating vectors indicate that there is more than one economic factor that binds these economies together. The domination of China seems quite obvious as other countries in our sample import various goods from China. If inflation accelerates in China, it is likely to impact the stock market and inflation of other countries in the sample. Industrial production for cross linkages were not tested as this variable is stationary.

**Table 3. Linkages in the long-run between the stock indices and inflation of Asian and South-East Asian countries**

Country	r=	Eigen Value	Trace Statistic	Critical Value (5%)	Probability
Stock Indices	0	0.347	145.42***	125.61	0.00
	1	0.260	96.84**	95.76	0.04
	2	0.196	62.54	69.82	0.17
	3	0.150	37.60	47.86	0.32
	4	0.098	19.04	29.80	0.49
	5	0.052	7.22	15.49	0.55
	6	0.009	1.12	3.84	0.29
Inflation	0	0.401	167.43***	125.61	0.00
	1	0.341	109.07***	95.76	0.00
	2	0.187	61.46	69.82	0.19
	3	0.134	37.82	47.86	0.31
	4	0.097	21.47	29.80	0.33
	5	0.073	9.84	15.49	0.29
	6	0.010	1.15	3.84	0.28

\*, \*\*, \*\*\* implies significance at 10%, 5%, and 1% levels respectively.

Table 4 provides the results of testing the cointegrating equations to determine the sensitivity of China versus other countries in the sample.

**Table 4: Cointegrating equations across the stock indices and inflation of South and South East Asians countries with China as the dependent variable**

Country	Coefficient	t-Statistic	Probability
<u>Stock Indices</u>			
India	0.233	0.71	0.48
Indonesia	0.983	1.12	0.27
Malaysia	5.131	3.76***	0.00
Pakistan	-0.170	-3.38***	0.00
Sri Lanka	-0.690	-3.94***	0.00
Bangladesh	-0.260	-1.45	0.15
<u>Inflation</u>			
India	-0.165	-3.52***	0.00
Indonesia	-0.317	-4.34***	0.00
Malaysia	-0.134	-0.47	0.64
Pakistan	-0.497	-8.28***	0.00
Sri Lanka	0.329	5.49***	0.00
Bangladesh	0.602	6.42***	0.00

\*, \*\*, \*\*\* implies significance at 10%, 5%, and 1% levels respectively.

From this table it is evident that the stock indices of Malaysia, Pakistan, and Sri Lanka are significantly related to China. There is a direct relationship between Malaysia and China, whereas there is an inverse relationship between China, Pakistan, and Sri Lanka. The exceptions are India, Indonesia, and Bangladesh which are unrelated to China. On the other hand, for inflation, China is strongly related to India, Indonesia, Pakistan, Sri Lanka, and Bangladesh. There is a direct relationship between inflation of China, Sri Lanka, and Bangladesh and an inverse relationship between China, India, and Indonesia. The inflation of China and Malaysia is insignificant.

## 6. Conclusions

Developing economies of countries that are in close proximity of each other tend to have closer linkages as there are less barriers to Foreign Direct Investments (FDI) for these economies due to regional cooperation and bilateral trade agreements. Therefore, it is expected that these economies will be closely bound together in the long-run. The research results clearly support this notion as both inflation and stock indices are strongly integrated across these economies. It is also evident that the dominant country is China for linking inflation across these economies. The results for stock markets, however, are mixed as some of the larger economies such as India and Indonesia do not display a closer linkage with China over the long-run. The industrial production and inflation for each country is very closely linked in the long-run for almost all South Asian and South East Asian countries.

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## Growth Forecasts for Saudi's Travel and Tourism Industry: A Comparative Analysis

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***Abstract:** Sustainable development of the tourism industry in any destination is essentially about the achievement of set macro-economic and social objectives in a planned, orderly and controlled manner and within the framework of environmental and socio-cultural carrying capacities. Central to this process is the determination of the rate of growth and overall size of the tourism industry and its management. This paper sets out the three required growth scenarios for the 20-year period of the Sustainable Tourism Development Plan (STDP). They are based on an evaluation of the growth potential achievable within each of the main origin markets. These tourism growth scenarios (TGS) provide the basis for setting targets of tourist traffic numbers, and for determining the demand for accommodation, other facilities, and the associated investment levels by the tourism industry.*

*Keywords:* Tourism, growth, scenarios, demand.

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