Preface

The 9th Knowledge Globalization Conference was held in Boston, Massachusetts, on November 1, 2013. The Conference was hosted by Sawyer School of Business, Suffolk University, Boston. The conference was attended by scholars, members of the business community, and students from many countries.

A total of 39 papers were accepted for presentation in nine tracks covering innovation issues in the areas of environment, culture, globalization, technology, education, agriculture, leadership and management processes. Among these 38 papers were presented at the conference. The presenters included experienced researchers, young scholars and PhD students from 14 countries. The mix of people and representation of countries make our efforts worthwhile.

The quality of the papers and the level of participation were of high standards. Partha S. Ghosh, a visionary leader and a creative problem solver, renowned strategist and an innovator of Business and Economic models spoke on Global Conscience and paradigm shifts in his keynote speech. The conference also offered two plenary sessions presented by academic and business people.

This Proceedings Edition includes many of the conference papers. As such, it offers a wide window into the current global scholarship and the continuing dialogue concerning strategic thinking in the areas of social, cultural, economic and business trends and thus offers an opportunity for cross-cultural exchanges and increased global understanding. We thank the conference presenters and participants for their insightful contributions. It brought scholars from developed countries and developing countries under one roof. For example, scholars from Croatia, China, Thailand, Canada, Vietnam, USA, and Malaysia debated and discussed their papers face to face without any barriers of politics or geography. The diversity in the papers presented represents the true global and multidisciplinary nature of the conference. Papers highlighted important strategic issues in areas, such as, higher education, MOOC, big data, educational technology, ethical issues, IFRS, Balkans integration, agriculture and tourism.

We thank Dean William O’Neill for his continued support to the knowledge globalization efforts. We also thank the students, faculty and staff of Suffolk University and who contributed in many ways from the topics development to the presentation process of the conference.

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Section 1 - Papers
Globalization and ESP Education in a Tunisian Higher Education Context

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Abstract
In context of the globalization of Tunisia context, the huge potential of ICT (Information and Communication Technology) in foreign language teaching and learning has become very remarkable. This study aims to highlight the need for ICT in the educational situation of English for Specific Purposes within the Higher Institute of Commerce of Sousse, the preparatory institute for engineering studies of Monastir and the faculty of medicine of Monastir, Tunisia. In order to explore the attitudes of students in these institutions, a questionnaire was adopted. Results show a significant percentage of students who favor the use of information and communication technology in the classroom situation. In fact, most of them feel more motivated for learning English in this context. Ultimately, this study aims to improve the teaching/learning situation of English for Specific Purposes in Tunisian higher education.

Keywords: Globalization, Information communication technology, English for specific purposes, learners’ attitudes.

1. Introduction
Globalization is described as a complex process of creating worldwide networks of capital, technology, and information made possible through enhanced competition, stronger interconnection and greater interdependence. Competition has brought enormous changes in the structure of production and distribution in the global economy. Through the expansion of worldwide networks and interconnections, globalization has accelerated the interdependence among nations, groups and individuals (Castells1997 in Brunner 2001).
As a worldwide phenomenon, globalization has affected all aspects of human life. In politics, it continues to threaten the legitimacy and influence of the nation-state as it yields to international agreements, international institutions and new forms of sovereignty geared towards global governance. In economics, it has deepened and expanded global trade causing structural changes in production and distribution based on comparative competitiveness of economies. It has also exposed the global village to systematic risks associated with the integration of the world economy including, among others, environmental destruction and the spread of crisis (Brunner 2001). From a sociological perspective, through various forms of networks, globalization has established a veritable global civil society by galvanizing and linking various national non-governmental organizations on common issues of public action aimed specifically to counter the effects of globalization on various aspects of society (Brunner 2001). In the cultural sphere, the establishment of global communication industries has threatened, and to some extent weakened, national values and traditions through the emergence of multiethnic and multicultural societies towards a global culture (Brunner 2001).

2. Explosion in Information and Communications Technology

Knowledge is not only expanding exponentially, it is now easily accessible across the globe due to the rapid developments in information and communications technology (ICT). This has hastened and strengthened the linkages of universities, research institutions, scientists and other individuals in the knowledge industry.

The current global economic restructuring is made possible by the continuing rapid spread and deep integration of advanced information and communications infrastructure based on convergence of technology and telecommunications, broadcasting, computers, and content providers. The foundations of what is referred to as an information society are being laid out by the tremendous impact of these communications networks on current socio-economic relations, institutions and structures (Brunner 2001). This emerging society is characterized by a networked structure (the Internet and the world wide web), prominence of knowledge-based industries, and organizational innovations in economic, legal and social institutions towards the establishment of a learning society. Thus, integration with or exclusion from the emerging information society will become the definitive factor explaining the development process of economies in the future (Castells 1999 in Brunner 2001). In addition, the advances in
telecommunications and information technology have facilitated the delivery of educational services across national boundaries. Global education has become a reality that is transforming educational institutions in their training of human resources. In a more open trading environment, the human resource needs of economic sectors have become more similar giving rise to the harmonization of training requirements. The convergence of educational standards internationally will feed further to a greater expansion of global education.

3. The Globalization of Tunisia and the Development of the ICT Sector

One of the globalizing aspects of Tunisia is the development of the ICT sector which has been a major priority for Tunisia during the recent past, and the government has put down a number of ambitious performance objectives. In particular, the authorities have aimed to more than double the contribution of the ICT sector to GDP from 3.5 per cent in 2001 to 8 percent in 2006. Moreover, the presidential program for the period 2004 to 2009 reinforces the emphasis on ICT development by calling for the establishment of an appropriate base for a knowledge society.

Nevertheless, this development in the ICT sector did not have a direct impact on education in general and higher education in particular. One might say that needs in Tunisian general education can be defined by the sociocultural purpose of particular educational institution, area, region contexts, and the aim being the construction of critical citizenship in a globalized” world (Canagarajah 2005) Hence exploration of the attitudes of learners concerning ICT use in the educational context seems of paramount importance.

4. Methodology

4.1. Study Design

We have used a cross sectional study to describe the students’ perceptions of including Information and communication technology in the teaching/learning of English for Specific Purposes in the Tunisian higher education.

4.2. Population

The studied population was composed of the students of the Higher Institute of Commerce of Sousse, of the preparatory institute for engineering studies of
Monastir and of the faculty of medicine of Monastir. A class of students was picked out randomly (all the classes of the institutions were numbered, a simple random picking out was done and a class was selected and included in the study).

4.3. Data collection

The data were collected using a self-administered and anonymous questionnaire for students. The questionnaire adopted in the present study depends on the particular nature of the set of themes. It was initially based on the personal criteria of age, sex as well as the socio-demographic characteristics to draw a distinction between learners. The specialty before undertaking the higher education is also used as a parameter in the questionnaire in order to determine the importance of English language. We have also collected information about the number of hours of English language learning, the time table and their influence on the learning of English, and the students’ point of view towards the teaching aids. Data about the use of information and communication technology in English classes were also collected; whether the ESP students needed technologies such as computers connected to internet, video projectors, and interactive whiteboards in learning English.

5. Results

5.1. General Characteristics

The studied population included 28 third year students at the Higher Institute of Commerce of Sousse, 33 second year students at the preparatory institute for engineering studies of Monastir and 35 third year students of the faculty of medicine of Monastir. These students were aged between 20 and 25 years. The average age of this population was 21 years. The percentage of males slightly exceeded that of females in the studied population. In fact, 44.6% of this population was males whereas 55.4% was females. These students obtained their bachelor's degree in different sections. The students who had the bachelor's degree in the specialty of mathematics represented 52.2% of the population, while the students who had a bachelor's degree in the specialty of science represented 31.5% of it. The students who had a bachelor's degree in the specialty of economics and management represented only 16.1% of the whole population.
5.2. Institutional context

The students of Commerce had a three-hour English course a week. The students of medicine and the preparatory studies of engineering had a two-hour English course a week. The majority of these English studies were done during the afternoons. These students had English averages going from 6 to 18 out of 20.

5.3. Students’ perceptions of Information and communication technology

The figures showed that 85.8% of the students of the Higher Institute of Commerce of Sousse, 90.6% of the students of the faculty of medicine of Monastir and 87.5% of students of the preparatory institute for engineering studies of Monastir stated the need to use information and communication technology during the English courses. Indeed 92.8% of the students of the Higher Institute of Commerce of Sousse, 97.5% of the students of the faculty of medicine of Monastir and 96.9% of students of the preparatory institute for engineering studies of Monastir said they needed information and communication technology during the English courses.

6. Conclusion

In the context of Tunisian globalization, the present paper is related to the exploration of the need for integrating information and communication technology in the teaching/learning of English for Specific Purposes in the Tunisian higher education through the Higher Institute of Commerce of Sousse, the preparatory institute for engineering studies of Monastir and of the faculty of medicine of Monastir. Thus, through the questionnaire, we highlighted the remarks related to the subject. After the diagnosis of the situation of teaching/learning of English for Specific Purposes, it was proved that the teaching material such as audiovisuals, new technologies and multimedia were lacking in spite of the development of the ICT sector in Tunisia during these years.

It is the public educational institutions’ responsibility to offer literacy in various media in English (Benesch 2006), which is crucial in the world today so as to enable learners to appropriate English for their clearly defined needs now and for purposes later in life. It would be thus interesting to think of improving the situation in this field in Tunisia. This improvement could be carried out by introducing information and communication technology in the teaching/learning of English for Specific Purposes.
References


Strategic Problems and Integration of the Western Balkans

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Abstract
In the days of turbulent changes and challenges in the international relations strategic thinking is a must. This applies for every region in the world and especially needed in the areas where there have been recent wars and areas that are still open for chances of instability. In contemporary European context Southeast Europe or Western Balkans are still seen as a part of unfinished issues. After the wars that ravished the former Yugoslavia, eruption of instability has been a permanent feature which has prevented development in that part of the world. This paper focuses on the existing situation in the area of Western Balkans emphasizing on the role of euro-Atlantic integration process (NATO, European Union). Two countries; Slovenia and Croatia are now fully integrated into NATO and European Union and are parts of a wide European integration process. On the other hand the majority of Western Balkans countries (Albania, Bosnia and Herzegovina; Kosovo, Macedonia, Montenegro, Serbia) have some kind of institutional ties with, both NATO and European Union, but still they are far from full-fledged membership in these organizations. The question remains how in the future the relations between space exclusivity and Europeanization are going to work. There are also many unresolved questions regarding security, political, economic, ethnic, energy supply....) in the area of Western Balkans countries. As the role of international actors such as: NATO and European union were important in stabilizing the situation, immediately after the wars in that area, one should say that NATO and European Union could contribute to bring these countries to free and democratic Europe. Integration of Western Balkans countries into NATO and EU is a two-way process. On one side it depends on the country aspiring for membership, and on the other side it depends when the organizations i.e. NATO and EU – are willing and ready to open the doors to new
members. So if we want to have a free and democratic Europe for the rest of the
Western Balkans countries it is important to continue with the reforms of their
societies and NATO and European Union should not stop with their enlargement
policy.

Key words: Western Balkans, NATO, European Union, euro Atlantic
integration, democracy, stability, prosperity, strategic thinking

Western Balkans has been introduced into the political discourse during the
European Union summit in Zagreb in 2000 for the territories of the former
Socialist Federal Republic of Yugoslavia, minus Slovenia, plus Albania, i.e.
Croatia, Bosnia and Herzegovina, the then FR Yugoslavia\(^1\), Macedonia, and
Albania. The newly adopted term is primarily a political synonym used for
identifying this group of countries that were at that time on a similar level of
internal development, judged by the state of their overall post-socialist transition
processes, level of their integration into Euro-Atlantic and European structures (or
lack of it), and by direct or indirect consequences of military and ethnic conflicts
in this region.

In early 90s of the 20th Century, immediately after disappearance of bi-polar
relations and in the midst of a search for a new structure of European and World
order, post-socialist countries of the Western Balkans have expressed their desire
to pursue political, economic and security integration within the so called
“Western way of life”. In institutional sense this also meant integration with
NATO and EU. The disintegration of Yugoslavia has slowed down the much
needed transition of countries emerging after the dissolution of the former
federation and at the same time it has determined their paths to integration into
both NATO and EU. The only exception was Slovenia which became a NATO
and EU member in 2004. Slovenia was the most advanced federal state within the
former SFR Yugoslavia, it was spared large scale war destruction, and being a
small but well organized country it managed to implement the needed reforms
quickly and successfully. The rest of the former SFR Yugoslavia was not as
successful. In territories of Croatia and Bosnia and Herzegovina the wars were
raging till 1995, and in 1999 Serbia was bombed by NATO. Presence of

\(^1\) Today these are: Srbija, Montenegro, and Kosovo.
international forces was preventing ethnic conflicts in Macedonia. Albania, which was a part of socialist world, but at the same time, was pursuing a policy of neutrality and isolationism in relation to security and economy integrations of the socialist world (Warsaw Pact and COMECON), also managed to protect its territorial integrity after the fall of the bi-polar world, albeit with much assistance from the international community (especially the USA and NATO). Therefore it is understandable why did the European Union, within a range of its regional approaches to post-socialist countries\(^2\), group these countries under the term Western Balkans and adopt a specific program for assisting them on their paths towards integration with EU. Namely, on the same EU Zagreb summit in 2000 where the term Western Balkans was launched, the Stabilization and Accession Agreement was adopted as an important mechanism for accession of these countries closer to the EU.\(^3\)

It must be noted that NATO, although not taking over the term Western Balkans in its official documents, also insisted on political stabilization of these countries – through its Partnership for Peace program – and only then on reforms of their defense systems. In analyzing the requested reforms one can see that the so called “first set” of these pre-conditions set forth by both NATO and EU are almost identical. It refers to political conditions – regional cooperation, full cooperation with the ICTY, return of refugees, strengthening the rule of law, fight against corruption, nd democratization of all aspects of society. In other words, by applying the “stick and carrot” policy, NATO and EU were trying to guide these countries to full membership in both organizations. Today, in spite of the term Western Balkan still present and used each of these countries has different level of institutional links with NATO and EU, respectively.

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\(^2\) For more on EU regional approaches to South Easter Europe see in: R. Vukadinović, L. Čehulić Vukadinović, Politika europskih integracija, Zagreb, 2011, pp. 330-35.

\(^3\) For other European post-socialist countries that were aspiring to EU membership EU had a different mechanism – Accession Agreement. Naturally, due to specific problems caused by the war and other soft challenges to security that countries of the Western Balkans needed to address, the EU primarily insisted on stabilization, and only after that on accession.
Integration of the Western Balkans

Analyzing the enlargement process of NATO and EC/EU it can be noticed that all “new democracies”, including the post-socialist ones, have first become members of NATO and only then of EC/EU. It was evident that Euro-Atlantic allies have maintained this principle for the countries of the Western Balkans as well. In reviewing their institutional bilateral connections it can be concluded that NATO made the first steps towards a particular country, and EU followed thereafter.

Croatia

Military aggression in which one third of Croatia’s territory was occupied, fight for physical liberation of the country, and Croatia’s involvement in the armed conflicts in Bosnia and Herzegovina all have stopped Croatian progress towards integration into NATO. Almost to the very end of the 20th century Croatia was, along with FR Yugoslavia and Bosnia and Herzegovina, one of the most isolated SEE countries by international community. In spite of the fact that NATO forces, as well as the EU member states and the USA, were assisting Croatian fight in various ways, due to the war that was forced upon Croatia, it was left out of any NATO institutional ties and programs designed for post-socialist countries.4

Croatia’s progress towards NATO began after democratic presidential and parliamentary elections in 2000, when Croatia, almost overnight, became a member of Partnership for Peace. Soon after this, Croatia started to participate in NATO’s Membership Action Plan. Along with Albania and Former Yugoslav Republic of Macedonia Washington included Croatia into program for adjusting to the standards of the Alliance – the so called Adriatic Charter. This all led to Croatia being recognized as a country deserving invitation to full NATO

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4 During her visit to Croatia in late May 1997, the US Secretary of State Madelaine Albright insisted on the following: Croatian support to and consistent implementation of the Dayton Agreement; return of refugees and displaced persons to Croatia; cooperation with the International Criminal Tribunal in the Hague. A year later in his article Croatia’s Roadmap to Partnership for Peace the US Ambassador to Croatia William T. Montgomery has highlighted the principal guidelines for Croatian participation in Partnership for Peace. American ambassador recommends Croatia to invest efforts in: reconciliation process; creating conditions for free return, life and work of all refugees from Croatia; consistent implementation of the Dayton Accords; democratization of the society with special accent on freedom of media, change of electoral legislation, and free and fair elections. See in: Lidija Čehulić: „Clintonova administracija i ulazak Hrvatske u Partnerstvo za mir“, Politička misao, vol. 37, no.3, 2000, p. 277.
membership during the NATO summit in Bucharest in 2008. Croatia became a NATO member in 2009 on NATO summit in Strasbourg and Cologne.\textsuperscript{5} Since then Croatia actively participates in numerous political, humanitarian, civilian and military missions conducted under the auspices of the UN or NATO.\textsuperscript{6} At the same time Croatia has established institutional ties with the EU. However public support for Croatian membership to NATO has never exceeded 55 percent.\textsuperscript{7}

With the exception of a short period of time when it was included into the EU PHARE program, until January 2001 Croatia was actually only entitled to annual trade preferences in trade with EU.\textsuperscript{8} The negotiations between the EU and Republic of Croatia on Stabilization and Accession Agreement (SAA) have officially begun at the end of the 2000 EU summit in Zagreb. By signing the SAA and the Temporary Agreement, which was to be implemented until the effectiveness of the SAA, Croatia has for the first time established formal relations with the EU. This was the most important formal step within the process of Croatian accession to EU before the official request for full membership status (in 2003) and acquiring the candidate status (in 2004). Of all the post-socialist countries, Croatia’s negotiations were the longest and the most substantive ones. This was a result of internal political situation, certain “enlargement fatigue” that was felt within some EU member states, as well as a result of positions of some neighboring countries towards Croatia’s membership in EU (Slovenia). Finally on July 1st, 2013 Croatia became the twenty-eighth member of the EU.

\textbf{Bosnia and Herzegovina}

The country that suffered the longest and bloodiest war after the break-up of former Yugoslavia can be grateful to NATO and US administration under President Clinton for stopping the armed conflict. But the very same international

\textsuperscript{5} The Head of Defense Policy Office within Croatian Ministry of Defense at the time, Mr. Pjer Šimunović, stated after the final operational meeting at which Croatian officers presented to their NATO colleagues the Report on achieved progress in adopting NATO standards by Croatian armed forces that „Croatia is entering NATO as one of the countries with highest readiness for membership ever“. Vjesnik, 18 and 19 October 2008.


\textsuperscript{7} For more on public opinion in regards to NATO membership see in: Zlatko Gareljić: „Croatia and NATO“, in L. Čehulić (ed.): Yearbook Šipan 2006, Zagreb, 2007, pp. 115-24.

\textsuperscript{8} Between 1992 and 2001 the Council of Ministers was determining the content of trade preferences for Croatia at the beginning of each calendar year.
community has also forced a protectorate status upon Bosnia and Herzegovina and a political system that very few of the citizens of this country supports – the Dayton Agreement. Regardless of all advantages or disadvantages of its functioning in accordance with the Dayton model, integration of this country into European and Euro-Atlantic space is more of a symbolic character than expression of will of its citizen or realistic possibilities.

Bosnia and Herzegovina was accepted to Partnership for Peace program in 2006. It was also conditionally offered participation in the Action Plan for NATO membership in 2010. However, the underlying issue of military property remains unsolved. Soldiers from Bosnia and Herzegovina participate in peace missions and other joint activities of the Alliance. On the other hand EU has, through Stabilization and Accession Agreement (2008), initiated reforms in Bosnia and Herzegovina but due to poor functioning of the Bosnia and Herzegovina as a unique state, little has been achieved on accession to EU.

Emergence of a “state within the state” – the Republic of Srpska – in combination with deeply rooted national divisions prevents this country from further accession to Euro-Atlantic integrations. Formal progress achieved on the path towards NATO membership is not equally well accepted in two entities, while recent Progress Report issued by the EU reveals that there is not much progress in functioning of the state. Lack of readiness by the local players to invest joint efforts on solving the existing daily hardships and lack of unanimous joint interest for membership in NATO and EU represent sufficient reasons for international community to be dissatisfied with the present situation. Global crisis and numerous problems throughout the world and in Europe are additionally decreasing the level of interest of both Europe and international community for Bosnia and Herzegovina. In turn, this has resulted in a situation where almost any development within the country has been left to political inertia.

**Serbia**

Similar to the situation in Bosnia and Herzegovina, Serbia is both institutionally and psychologically still far away from NATO and European Union. Differing from Bosnia and Herzegovina where NATO was crucial in stopping the bloody war, Serbia is still views NATO as an enemy that has attacked Serbian sovereignty in 1999 (action in Kosovo followed by NATO air strikes on
strategically significant targets in Belgrade and Novi Sad). By applying the “stick and carrot” policy NATO and EU are trying to get closer to Belgrade and are awarding every, even the slightest democratic progress in the country. Serbia was admitted to Partnership for Peace (Riga, 2006), but it was clear that without the democratization of the whole Serbian society and formation of a stable pro-Western government, there will be no further integration of Serbia into NATO. In the post-Cold War times Serbia was defeated in all wars it led (Croatia, Bosnia and Herzegovina, Kosovo), and its territory has shrunk with the secession of Montenegro and Kosovo. But still, Serbia has not experienced internal social catharsis and is constantly facing dangerous remains from the recent past in various segments of its social development. Within such context all positive reforms and transformations of the military forces have been offset by internal political instability and weaknesses of the society. Thesis offered by some segments of Serbian political elites that Serbia may enter the EU without NATO membership, and comparisons with neutral status of Austria or Switzerland are not very realistic.

However, in spite of this stalling in institutional relations with NATO, the European Union is continuing with the “stick and carrot” strategy. Serbia has the Stabilization and Accession Agreement, and as a reward for Serbian willingness to talk with Prishtina after the incidents on Serbian-Kosovo border, it even received a candidate status.

The so called Independence Declaration of 2009 was intended to point to Serbian desire to separate the Euro-Atlantic process and to stay outside of NATO - i.e. to remain neutral – while still aspiring for EU membership. Although the Declaration was primarily a declaratory response to court judgment on Kosovo, it was obvious that Tadić’s administration did not wish to alienate itself from Europe.

However following the presidential elections and the rise of the new coalition with president Nikolić to power, statements that Serbia will “never abandon its Southern province” and that “choice between Kosovo and Europe” is not an option are gaining on strength and frequency in Serbia. Due to its unwillingness to make a positive step towards opening negotiations with Kosovo, Serbia will probably not receive a date for opening negotiations with the EU during this year. At the same time readiness to implement the agreements reached with Kosovo
during the previous administration will not be enough since Serbia was already rewarded for that by receiving the EU candidate status.

**Montenegro**

Besides Kosovo, Montenegro was the last country of the former SFR Yugoslavia to gain its independence in 2006, and has immediately made a solid start in implementing reforms needed for accession to NATO and EU. During the so-called Community of Serbia and Montenegro defense and security issues were under the realm of the joint state, with its independence Montenegro had to start from the scratch in these areas. Ranging from legal regulation to establishment of operational security forces, everything that was done in this small country on these issues was done in accordance with NATO standards and principles.  

NATO recognized this and admitted Montenegro into Partnership for Peace immediately after the independence (2006). This was a clear advantage for Montenegrin armed forces, as well as for the whole society. Later Montenegro fell as collateral victim of NATO politics when due to conflicts in Georgia it was not admitted to Membership Action Plan. Montenegro had to wait until 2009 to enter this program. Again, as a collateral victim of NATO’s internal crisis it was not admitted to NATO membership during the Chicago summit and now must wait for the fourth wave of NATO enlargement. If it continues with the successful reforms and activities within the existing NATO programs there is no reason for Montenegro not to become the next NATO member from the Western Balkans region as soon as the Alliance decides on the new enlargement.

Montenegro’s path towards the EU was similarly successful. After signing the Stabilization and Accession Agreement (2007) Montenegro has bravely requested EU membership. The fact that it was given the candidate status, as well as the date for beginning the negotiations, additionally encourages political elites, as well as citizens of the country, to persist on Euro-Atlantic and European path. 

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9 For more on development of security and defense systems in Montenegro, see Mehmedin Tahirović, „Montenegro and Partnership for Peace“, Međunarodne studije, vol. 8, no. 2, 2008, p. 53-70.

10 On reforms undertaken in Montenegro on this path, see in: Gordana Đurović (ed.) „Crna Gora u XXI stoljeću – u eri kompetitivnosti: integracija u evropske i evroatlantske strukture“, Montenegro Academy of Sciences and Arts, vol. 73, no. 4, Podgorica 2010.
Institutional accession of Montenegro to NATO and EU gives favorable winds to political elites who were, because of that, able to solve some dilemmas of their own, as well as dilemmas expressed by the public opinion in Montenegro. Namely, every time a slow-down in this path towards the West is being sensed Montenegro calls upon its traditional connections with Russia. Some radical advocates of this Russian-Montenegro ties attempt even to substitute European path with closer relations with Russia. Montenegro may be taken as an example by all remaining Western Balkans countries, as well as any other country aspiring to NATO and EU membership, as a positive example of modern, globally interlinked international community. Since NATO and EU have well established relations with Russia, membership in these organizations does not have to mean automatic break-up of connections and relations with Russia.

**Kosovo**

Kosovo, as an independent state, is the project of the United States of America. Although United States is the most powerful member of the Alliance, to Kosovo’s regret this fact did not help in all members recognizing Kosovo’s independence. In the post-Cold War times Kosovo lies within NATO’s sphere of interest not only because of the first out-of-area action conducted there in 1999, but also due to extended presence of large contingent of NATO forces in that country. However, in Brussels potential membership of Kosovo is not being officially mentioned for the time being, for it is waiting for all members of the Alliance to recognize the newly independent state. The same may be said for the relation between the EU and Kosovo. As long as all member states do not recognize Kosovo as a sovereign state EU may not even consider strengthening institutional relations with that country. Still, there are ways in which NATO and EU members are cooperating with Kosovo, not to mention the fact that EU, NATO and UN forces are physically present in Kosovo. Based on this it might be said that Kosovo is in a rather specific situation, because it is simultaneously a subject, and an object of contemporary international relations.

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**Albania**

The post-Cold War Albanian desire to join NATO was a proof of newly elected government that it will put an end to long lasting Albanian policy of isolationism and its specific type of neutralism. Situation in the region (not only the armed conflicts in the territories of the former Yugoslavia, but also continuing crisis over ethnic, religious and territorial issues in the neighborhood) has contributed to the fact that public opinion in Albania was constantly expressing the highest level of support to integration of their country to the Alliance. Even in times of stabilization in the South Eastern Europe and objective hardships that Albanian population was suffering during the transition and painful internal reforms, this support did not fall below eighty percent.

Albania was among the first countries that joined NATO cooperation programs, such as North Atlantic Cooperation Council, Partnership for Peace, Membership Action Plan, within which it was developing various political, military and civil activities with the member states. Signing of the Adriatic Charter was in a way American recognition and reward for Albanian loyalty and cooperation with NATO, while call to join the Alliance together with Croatia, extended on NATO summit in Bucharest in 2008, was the icing on a cake of all Albanian efforts. For Albanian government this was certainly a reward, but also an obligation to start addressing Albanian internal problems (mostly connected to soft security challenges such as drug trafficking, crime, corruption) with more firmness and commitment. European Union insists on the very same criteria. Albania has signed the Stabilization and Association Agreement (in 2006) but mostly due to insufficient reforms towards democracy and rule of law it did not achieve a stronger institutional integration with European Union.

**Macedonia**

Macedonia was not exposed to brutal armed conflicts after the breakup of former Yugoslavia. However, in its post-socialist development it was not exempt from internal ethnic conflicts (including the use of armed forces) caused by dissatisfaction of Albanian population with its status in the new state. Religious and territorial problems gradually followed ethnic ones. The Ohrid Agreement has
legally regulated status of unsatisfied national minorities but its implementation was facing numerous problems. Military presence of international community is a reality for some time now. Internal instabilities can easily spread over Macedonian borders in combination with Greek–Macedonian dispute over the name of the new state (among other) resulted in a strong orientation of Skopje towards the West, inclusive of NATO and its strongest member, the USA. Similar to Albania, Macedonia was also intensifying its cooperation and partnerships through all existing NATO programs available to post-socialist countries. Together with Albania and Croatia, it has been contributing to international peace through activities within the Adriatic Charter. Level of public support to NATO membership in those times was never below sixty percent, while in times of intensified internal crisis it was rising up to eighty percent. Membership in the Alliance was primarily seen as a guarantee for lasting internal peace, stability and prosperity of the country. Thus the fact that Macedonia was not invited to join NATO with other two members of Adriatic Charter in 2008 resulted with deep disappointment in Skopje. Even more so due to the fact that the first hints of such negative outcome started only at the eve of the Bucharest summit and during the summit itself. Greece as full member of the Alliance has used the fact that Alliance decides with unanimous vote and by voting against has effectively blocked Macedonian membership. NATO leadership has expressed regret over such development and reinstated that NATO doors remain open for all potential members that fulfill the criteria. However, there will be no additional screening for Macedonia. Namely, Macedonia has met all the criteria and it will be admitted to membership as soon as it solves its bilateral disputes over the name with Greece. But the situation has significantly changed since these optimistic and comforting statements at the Bucharest summit.

In spite of Macedonian active cooperation with NATO within the Partnership for Peace and Membership Action Plan, disappointment after the Bucharest summit has resulted in slow down of implementation of necessary reforms in Macedonia. At the same time its accession to European Union is also in a stalemate. After signing the Stabilization and Accession Agreement (2001) and acquiring the status of candidate country (2005) Skopje was warned that Macedonia is tired of waiting for the date to begin negotiations. In the meantime the Ohrid Agreement has not
yielded expected results as ethnic differences are growing stronger. In the long run this status quo that NATO and EU has maintained towards this country can’t be good, neither for Macedonia, nor for Western Balkans. It will be very difficult for Macedonia to resist internal pressures without external assistance.

**Conclusion**

Western Balkans is no longer a “black pit” of the Old Continent. This is a region where “unstable stability” still prevails, but challenges to security are no longer primarily military ones. They have been replaced by a wide array of the so called soft-security challenges (ethnic, religious, national, border issues, energy supply, drugs, prostitution and human trafficking, other types of crimes, ecological issues, economic stagnation, terrorism, etc.). In early 1990s when post-bipolar structures of the international community started to emerge Western Balkans primarily turned to the West. Today, after twenty years of transition, conditions for easier penetration of other players into this area have been created. Russia and Turkey are increasingly important partners on which countries of the Western Balkans may count, along with the West.

The open door policy or enlargement remains as official policy of both NATO and EU, but there will be no new admissions to NATO and EU membership for quite some time. In comparing enlargement policy of the two organizations with their other internal policies it can be said that enlargement was the most successful NATO’s policy since the dissolution of the bi-polarism, while EU in total had to face more challenges than benefits from this process. So the accession of Croatia to European Union was the last round of enlargement to the Western Balkans this decade.

Western Balkans is the only part of Europe where NATO and EU still have their forces present as guarantors of peace and stability (Bosnia and Herzegovina, Kosovo). This also represents a sort of security that both organizations will remain present in the region. But it must be said that from the point of Euro-Atlantism, and especially if viewed globally, Western Balkans is no longer a region holding top positions of the world politics due to its problems and unsolved issues. Stabilization and integration of this region will continue gradually, with insistence on stronger engagement of local players.
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Knowledge Creation Practices of SMEs in Agricultural Industry of Phetchabun, Thailand

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Abstract

The objectives of this study are 1) to study the knowledge creation processes of the SMEs (Small and Medium Enterprises) in agricultural industry of Phetchabun province, Thailand, 2) to analyze the relationship of knowledge creation practices of SMEs in agricultural industry of Phetchabun with their income, and 3) to propose the recommendations on the strategic knowledge creation practices for SMEs of agricultural industry in this area. SMEs play significant role in Thailand economy both in term of employment and production. To move toward an economic integration called ASEAN Economic Community (AEC) vision, Thai government authorities realized the weakness, especially in marketing knowledge, of these enterprises, and offered helps such as market mapping and databases with related services. However, firms in this industry, as indicated by this research, still need specific and appropriate system and techniques for knowledge management processes, especially on the knowledge creation. Using quantitative and qualitative research methods based mainly on Nonaka & Takeuchi’s SECI model (Socialization-Externalization-Combination-Internalization), this research results indicated that 1) the knowledge creating procedures of the SMEs in this industry are basically product oriented (concentrating on product quality), 2) main knowledge creation practices are combination, and both socialization and internalization practices were mostly done at individual level through formal and informal social and political networks, and 3) the economic value such as income earned by an organization could be used to identify key knowledge creation practices of SMEs in this industry.
Keywords: Knowledge Creation Practices, SMEs, Agricultural Industry, ASEAN Economic Community (AEC), Phetchabun

Introduction

SMEs (Small and Medium Enterprises) in Thailand (firms with fixed assets more than 50 million and 20 or more employees) share a significant portion of employment and production in Thailand. In 2006, SMEs business account for 99.5 percent of all business in Thailand. Its major products consist of service, trade and maintenance, and industrial products, with the share of 30, 41.1 and 28.2 percent respectively. They employed 76.7% of all workers in Thailand, mostly in production sector (45.3%). Share of their export is about 30 percent, and almost all (around 99.6 percent) of Thai entrepreneurs are working in SMEs.

Problems of SMEs in Thailand generally are not in production but in the lack of marketing knowledge. The responsible government authorities have emphasized in their promotion plan that SMEs in Thailand should increase their marketing channels, develop products that respond to market needs and as the same time link domestic markets to international markets (Office of SMEs Promotion, 2012: 20-29). Even with the help by the government covering wide range of knowledge to SMEs, knowledge still has to be adjusted to fit different type of business operations. Moreover, after the crisis in Thailand in 1997, the U.S. Crisis in 2008 and the recent crisis in Europe, SMEs in Thailand faced several fluctuation of market and reduction trend of demand. To maintain and expand existing markets, they need not only high capacity in the use of labor, capital and technology but also right knowledge at individual and organizational level of production, management and marketing. The knowledge of marketing especially is needed because in competitive environment main objective of business is obviously required to make their customer satisfy, and maintain present and upcoming orders. Under present circumstances it is very difficult to do so.

Generally, most of business organizations are aware of how important knowledge is in their daily business life. It could help them learn from the past, understand customer’s needs, reduce cost, improve working efficiency and make leader become a thought leader (Handzic, 2006). But the holistic and untouchable nature of knowledge management makes it difficult to apply in real life and to attain...
concrete and successful results (Mittelmann, 2013: 1). Normally, important conditions of successful knowledge management are: to make the existing knowledge be ready to use; the right knowledge should be known; all knowledge should be transformed into organizational knowledge, and the knowledge creation methods to obtain new knowledge should also be known. In other words, firms have to know how to utilize knowledge at operation level by not emphasizing on the use of knowledge management tools but its using skills (Probst, 2000: 8). To achieve complex objective and at the same time to make knowledge management practical for everyday use, an organization must have knowledge management processes (including knowledge creation) that suits to limitations, culture and other conditions of the organization.

Knowledge inside an organization can be created by an individual or a group. At individual level, high innovation is really needed in uncertain environment. However, in normal situation what an organization need is knowledge that is capable of solving the problems at hand. Successful knowledge management programs should be able to manage problems that could affect management power and organizational culture. All this require solid measurement of knowledge management practices.

This research pays attention to knowledge creation practices and the possible link to economic value such as income of the firms. Knowledge creation of SMEs in the northern area of Thailand is the interest of this study. Specifically, the objectives of this research are: 1) to study the knowledge creation process of the SMEs (Small and Medium Enterprises) in agricultural industry in Phetchabun province of Thailand, 2) to analyze the relationship of SMEs’ knowledge creation practices in this industry with their income, and 3) to propose the recommendations on their strategic knowledge creation practices. In the article, we first present knowledge management and knowledge creation model and then explain how knowledge creation practices could possibly link to economic value. Next, research methodology including the population, sample and research framework will be concisely explained. Finally, results, conclusion and further research recommendations are at the end of the article.
Operating Definitions

**Economic value** is the value a firm or organization earned from selling its product in the market,

**Agricultural industry** is industry that produces agricultural related products,

**Knowledge creation** is formation of new ideas through interactions between explicit and tacit knowledge in individual human minds.

**Tacit knowledge** is unwritten, unspoken, and hidden vast storehouse of knowledge held by practically every normal human being, based on his or her emotions, experiences, insights, intuition, observations and internalized information. Tacit knowledge is integral to the entirety of a person's consciousness, is acquired largely through association with other people, and requires joint or shared activities to be imparted from one to another ([http://www.businessdictionary.com](http://www.businessdictionary.com), accessed on August 3, 2013)

**Explicit knowledge** is articulated knowledge, expressed and recorded as words, numbers, codes, mathematical and scientific formulae, and musical notations. Explicit knowledge is easy to communicate, store, and distribute and is the knowledge found in books, on the web, and other visual and oral means. ([http://www.businessdictionary.com](http://www.businessdictionary.com), accessed on August 3, 2013)
Knowledge Management Model

Knowledge management processes

Knowledge management consists of many processes as shown in figure 1 below.

Knowledge management processes at the beginning involve the acquisition of knowledge both from inside and outside organization. After bringing it inside the organization, the processes will be carried to the point that the right knowledge can be utilized.

Figure 1 above presents all knowledge management processes; start from the acquisition of knowledge from both domestic and international sources. Identifying process is first implemented to get related knowledge, and keep it in storage so that knowledge could be shared and distributed inside; some knowledge will be utilized afterward. Knowledge creating process could occur before, after and during the operation. This research emphasizes only knowledge creating part of the knowledge management process and how it could possibly link to the economic gain of the firm in a specific industry and area.
Knowledge Management Model of the SME

In general, the knowledge processes of the firm in SME consist of the same processes as in the larger firm. The different lines are flat and flexible in organization structure. This means that their working processes are also different; for example, it possess low degree of standardization and formalization, people dominated, simple and flexible decision making process and also product-oriented. As a result, knowledge management processes of these enterprises are also unique. Knowledge sharing, basic activity of knowledge creation, in this industry has characteristics including, having mainly tacit knowledge (deep and broad common knowledge) instead of explicit, working in informal mode, having limited impact of information technology and most activities directly involving owner and manager. (Thai Hai Hang Nguyen, 2011).

Knowledge Creation Model

Knowledge management is experience originated from the process of learning from the work place of individual or organization during a period of time in order to achieve organization objectives. Knowledge creating process is a crucial part of knowledge management process. And main intention of this research is to study this type of process of SMEs in the northern area of Thailand, a place that have distinctive social, economic and political characteristics. Since knowledge management is naturally complex, to seek out one of it process need an appropriate framework. SECI model (Nonaka & Takeuchi, 1995) seems to be useful to look at interaction of persons and things inside an organization that simultaneously represent both communication and knowledge activities. SECI stands for Socialization, Externalization, Combination and Internalization. These are activities among two main categories of knowledge, tacit knowledge and explicit knowledge.

Knowledge is a thought framework collected from experience, ability, skill, rule as well as information needed for decision making. Most of knowledge originate from meeting of individuals such as training and informal conversation. In knowledge management, all interactions include experience and new information coming from both other individuals and organizations (Mittelmann, 2013: 3). The
methods of creation and the use of knowledge depend on individual or group of individuals and the context behind.

As defined in the model, Tacit knowledge is the knowledge inside each individual, coming from experience, learning or talents which is very difficult to be communicated through the use of numbers, formula and text but it can be developed and shared with other through a form of human interaction. Explicit knowledge, instead, expresses causation of things that can be gathered and transformed into various forms such as books, manuals, documents and other type of accessible reports.

All dynamic relationships among two type of knowledge above are hard to understand how it works. But SECI model, to some extent, help us explore useful knowledge creation activities that should be done specifically for an organization. The relationships among these two broad type of knowledge, if it is done rightly, could be in harmony and is continuously adjusted by itself. In other words, knowledge creation mechanism will go on within the working culture of organization and be flexible enough to adjust if it is necessary.
Figure 2 SECI Model (Socialization, Externalization, Combination, Internalization)


The model in figure 1 above can be explained as follows:

Socialization (tacit-tacit relationship) is the association of individuals in an environment. It is the exchange of tacit knowledge like direct experience which is very difficult to be transferred by other forms and methods. The result of this activity is a new form of tacit knowledge (Lopez-Nicolas and others 2010, 523)(see the upper left of figure 1)
Externalization (tacit-explicit relationship) are activities to make tacit knowledge become clearer or to turn it into explicit knowledge. The purpose is to transmit it to other people in the organization under an environment. An example result is working operation manual (see the upper right of figure 1).

Combination (explicit-explicit relationship) is the combination of explicit knowledge put together to make a knowledge base system. It is the same as acquiring all information and use it to create new knowledge (see lower right of figure 1)

Internalization (explicit-tacit relationship) is learning and development of tacit knowledge of each individual within a group and an environment, and turn explicit knowledge into tacit knowledge by making it concrete and become part of value and belief of organization.

All relationship are in the same box which means they are together as one. The dynamic relationship is shown by spiral line in the middle of the box. It is possible that sequence of knowledge creation could switch back and forth depending on situations and context.

Knowledge Creation and Economic Value of SMEs in Phetchabun

In knowledge creation processes, new knowledge will be acquired, transferred and shared. Useful knowledge will consequently be produced and embedded in the output of the firm. Effective knowledge creating processes could be measured by the amount of knowledge gained from those processes by using various methods such as Intellectual Capital Index, Balance Scorecard and Success Factors. But cost of collecting and measuring is high because it must represent abstract variables like qualitative perspective, strategy and operation, and concrete variables like training evaluation and capability balance sheet. Therefore, the use of statistical link among knowledge creation processes and the outcome of the firm could be useful and practical.
Methodology

Population and sample
This research uses both quantitative and qualitative research by using questionnaires and in-depth interviews of 11 SMEs entrepreneur in Phetchabun, a province in the north of Thailand. Firms in the sample are small and medium size firms of agricultural industry.

Data collection procedures and analysis
We first interviewed experts and entrepreneurs to set up scope and structure of questions in the questionnaire to obtain quantitative data from the areas, and interviews 11 firms from all districts of Phetchabun. Data from the questionnaire were used to analyze the relationship of income and knowledge creation practices. Data from the interviewing part consists of text and image files about the production processes and firms’ knowledge creation practices. All data were together used to summarize information and knowledge from the field. An analysis for each group was done to generalize what we found.

Research Framework
Framework of the questions was drawn from the model portrayed previously, especially in figure 3 above. There are 4 core factors of productions which are capital, labor, knowledge and other factors (i.e. Management, technology and regulations). Knowledge factors are their experience in setting up business, conducting day-to-day operation and facing coming problems. The figure also shows that to get an effective knowledge factor, knowledge creation process should be implemented and knowledge strategies should also be set up. The research will explore specifically marketing knowledge creating processes of SMEs of Phetchabun area and try to understand its link to income so that right strategies can be found and later implemented.
Figure 3 Research Framework

Results and Analysis

Basic results

From our observation, SMEs in Phetchabun can be separated into 5 groups using knowledge management processes:

(1) High technology group. Firms in this group normally use their main production engine imported from other countries. However, some adjusted those machines by their engineers and mechanists. Types of industries in this group are medical instruments and supplies, and biotech products.
(2) Labor intensive group. This group usually uses old but unique machines that must be operated by semiskilled workers. Firms included in our interviews produce sugar and other agricultural products.

(3) Innovative group. Firms in this group develop their products and service using unique in-house technology.

(4) Market leader group. Firms in this category utilize traditional technology and skills learned from experience to dominate a segment of the market. Products of firms in this industry include various products made from silk.

(5) Local wisdom group. The size of firms in this category is small. They normally develop their products from family wisdom and idea created from long experience in the same business. The products in this group include products made from tamarind.

Information we gain from the interview concerning knowledge and its sources can be concluded in the table below.
Table 1: Core Knowledge and Sources of Knowledge

<table>
<thead>
<tr>
<th>Group</th>
<th>Knowledge creators</th>
<th>Sources of knowledge</th>
<th>Core tacit knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>High technology</td>
<td>Owner or CEO, Engineer</td>
<td>Experience, Network, Close friends, Academic background, Knowledge from machine producers, Suppliers, Advisors</td>
<td>Production processes from foreign countries, Human resource management, Machine maintenance</td>
</tr>
<tr>
<td>Labour intensive</td>
<td>Owner</td>
<td>Long working experience, Customers, Seminar, International study visit, Consultant companies</td>
<td>Products using labor intensive techniques</td>
</tr>
<tr>
<td>Innovative</td>
<td>Owner</td>
<td>Experience, Problem solving, Seminar, Academic training, Study tour, Internet, Advisors, Staffs, Networks, R&amp;D</td>
<td>Electric and mechanic products</td>
</tr>
<tr>
<td>Market leader</td>
<td>Owner</td>
<td>Working experience, Production processes, Customer behavior, Academic training, Government support training, Study visit, Internet, Local wisdom</td>
<td>How to produce agricultural and other products</td>
</tr>
<tr>
<td>Local wisdom</td>
<td>Owner, Government advisors</td>
<td>Local wisdom, Experience, Road show, Customer contact, Self-study and learning</td>
<td>Secret production techniques</td>
</tr>
</tbody>
</table>

Table 1 shows that regularly source of knowledge of SMEs comes from the owner’s experience: customers, training and internet. However, in the case of larger firms professionals may be hired experts to take some responsibilities, and in the case of smaller firms, help on knowledge could come from government advisors. Tacit knowledge in SMEs case indicates clearly that it’s on products and related production processes.

On explicit knowledge, the results can be concluded in table 2 below.
Table 2: Explicit Knowledge, Knowledge Structure and Utilization

<table>
<thead>
<tr>
<th>Group</th>
<th>Explicit knowledge</th>
<th>Knowledge utilization and structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>High technology</td>
<td>Accounting system, Organizational MIS, Quality assurance system, ISO manual, Machine structure, Working procedure</td>
<td>Quality assurance system, Machine structure, Machine related information, Daily check</td>
</tr>
<tr>
<td>Labour intensive</td>
<td>Production data, Accounting and personal data, Problems and working records and procedures</td>
<td>Reducing waste, honesty, Keep long time customers, Treating employees as family members</td>
</tr>
<tr>
<td>Innovative</td>
<td>Standard (by law), ISO 9000, Efficiency index, On-line database, Web, Accounting</td>
<td>Honesty, Patience, Diligence, Network, ISO, Insufficient number of labor</td>
</tr>
<tr>
<td>Market leader</td>
<td>Accounting records, Statistical records, Document system, Production methods</td>
<td>Research, Quality product, Honesty, Special production techniques, Morality, Flexibility</td>
</tr>
<tr>
<td>Local wisdom</td>
<td>Accounting records, Office documents, Organizational history</td>
<td>Strategic plan, Serving customer needs</td>
</tr>
</tbody>
</table>

Knowledge structure or knowledge composition shows how knowledge inside a firm was organized and exchanged to create new knowledge. From this table, there are some signs that indicate that smaller firm, such as firms in “local wisdom” group, information and knowledge of customers has increasing role in their decision process.

Characteristics of Knowledge Management of SMEs in Phetchabun

From the analysis of knowledge management behavior of selected enterprises in Phetchabun, Thailand, we reach the conclusion that:

Most of the medium size companies that survived the recent economic crisis in Thailand know their production process very well (at least better than their competitors). They are also eager to learn and almost all of them pay attention to details on products and customer needs.

Sources of knowledge are from many places. The most important, sources include customer tests and product itself such as ways to improve the quality of product. Collecting explicit knowledge in the form of accounting record of the firms is normal in large, medium and small firm. However, it has not been used directly, especially in the case of small firm.
Competition encourages firms to appreciate the important of knowledge. The role of explicit knowledge is lesser in an environment where working procedures are flexible due to firm size. Firms with larger size tend to have high level staffs to handle guideline, suggestion and order from top executive. At this level, knowledge transfer will normally been achieved by knowledge exchange, a two-way communication method.

For larger firm, the implementation of quality control (product, health and environment) has been required by law. So they are familiar with tedious works of collecting working procedures information. Some have been able to take advantage of this situation to build knowledge and share among their workers. For example, firms may record problems and solutions, and ask staffs to share with their coworkers periodically.

In a smaller company, firm behavior reflects habit of the owners. They play the most important role in the organization. For example, owner or top leaders like to continuously improve product and staffs have to respond accordingly. For small size enterprise, explicit knowledge, especially core knowledge, is hardly collected. Main reasons come from the fact that by its nature, knowledge is very difficult to be made explicit; it’s usually in experiences and skills learned by owners themselves.

**Core knowledge of the SMEs in Phetchabun**

Core knowledge of all firms in our sample is mostly about their products, how it comes into present form, its origin and details of its production processes. It’s obvious for them that to be ahead of their competitors they have to know how to create new product, know to manage people (effective human resource management) and know useful networks. Moreover, they also were interested in details critical knowledge like knowledge on related products and consumer demand in order to gather that knowledge and make it ready to use on time. All successful firms usually learn from their mistakes and are willing to fight oncoming obstructions. Experience, a form of knowledge, is praised by all respondents to be a very important factor. Not just knowledge on product that is valued, knowledge on ways to conduct businesses including people control, patience and perseverance received from parents and ancestors
Knowledge Creation of SMEs in Phetchabun

Normally in the case of highly competitive environment, firms try to get knowledge from every source possible. From this research, many evidences indicate that firms paid a lot of attention to knowledge from customers to get product details that customers really want.

Socialization:

For high technology group, knowledge sharing was achieved between owners or major shareholders with top level managers, and between top level manager and high level managers. Knowledge transferred, instead, was done from high level managers to staffs of the firm. Because firms at this size have many employees, owners need their representatives to look after their properties. Top managers are usually hired to manage overall picture of the firm. These managers are responsible to set up high level managers that see day-to-day operations. Since problems, big or small, occur every day, regular meeting is really needed. Knowledge exchanges on operations are at this level of management while owner contact frequently with top manager with different type of knowledge. Staffs daily received information and orders regarding how to operate, directly from manager such as plant manager.

For labor intensive group, there are many knowledge creators. It is more complicated because firms have to deal with more workers. They need more managers. The different also is the emergence of “second generation owners,” who receive knowledge directly transferred from the owner. Another creator is “trainers from outside.” This expresses the need for outsiders to improve workers’ efficiency. Human resource staff of the firm may not have enough resources (time, specific knowledge) to handle this task.

For innovative group, firms in this group of industry are smaller but they proudly set up their royal customers. Some are able to compete with foreign multinational companies. Knowledge exchange within this group is more complicated on the relationship with inventors or people who are responsible for research and development of the firm. Relationship between owner and inventors sometime is direct but sometime working through manager.

For market leader group, knowledge sharing of this group is getting more centralized. Technology used in this group is lower than previous 3 groups. The
knowledge that is on the owner who gains long time experience that is sometime very difficult to be transferred. Therefore, trusted workers come to take some responsibilities from second generation owners. Since competition is high and production process could be copied, firms at this level tend to have advantage over competitors by creating networks and have a good relationship with suppliers. Training from outside is also important like other group.

Finally, for local wisdom group, it is smallest group compared with other 4 groups above. So the relationship is simple. Knowledge sharing mostly happens within family members (first with their spouse). There are knowledge transfer to second generation owners and staffs (with more limited content). With limited resources by its nature, networks are crucial for them both in monitoring customers’ needs and seeking for new marketing channels.

**Externalization:**

As shown in table 2, explicit knowledge of each industry was listed. Some were done by quality assurance system and other international standards such as ISO 9000 and other Thai government environmental standard. Automatically, procedures were recorded and some were really used in firm operations. Other types of explicit knowledge involve information needed for basic business operation such as accounting and finance. The rest of explicit knowledge of working records, problem records and working procedures. Techniques were used to access this category of knowledge, depending on type of production of that particular SMEs.

**Combination:**

Mostly, it’s in the form of accounting database, statistical records and document system. Technologies were used to make it connected among different database and to make it online. This type of knowledge creation is the basis for a small company to jump to the next level of accomplishment; even it’s not difficult to do so.

**Internalization:**

Since knowledge management techniques of SMEs in this area of Thailand is still in its early stage of trial and error, knowledge created inside and outside was not fully internalized as it should be. This may not be a special case. The processes of turning knowledge into knowledge of the firm are complicated and
take a lot of time. However, the future is promising because SMEs firm especially the success one is very much interested to take advantage of knowledge management techniques and tools to utilize the knowledge they possesses.

**Marketing Knowledge Creation of SMEs of Agricultural Industry in Phetchabun**

There are different levels of SMEs. Most market leaders usually pass basic requirement of quality product such as GAP (Good Agricultural Practices) and the government food safety standard. Many indicators show that the dynamic of tacit-explicit relationship of Nonaka model can be used to express how SMEs in agricultural industry in this area create new knowledge including marketing knowledge. However, many SMEs of this industry missed breakthrough opportunity to expand its business size, not because of the lag of knowledge of production technique but the lag of the right marketing channel and demand.

**Knowledge Creation Procedures and Economic Values**

From the sample, statistical relation between knowledge creation practices and income are significant but rather weak. To confirm this, Information we tracked from the SMEs firms qualitatively show that knowledge directly determine the level of income especially in the case of competitive business environment. Even by looking at a broader view of knowledge management, it is not easy to identify that linkage because it is usually embedded in labor and other production factors. That could be the reason that those linkages are not strong. Moreover, time of knowledge usage is normally not in the record; it is hard to point out when the result of knowledge application will emerge. This is why “externalization”

**Discussion and Conclusion**

From our analysis on the knowledge management practices of the SMEs operated in Phetchabun, we found that certainly size and type of product will confine parts of their operation-related knowledge. To effectively use knowledge, successful firms treat knowledge as a tool and use it achieve their main objective which is being success in business and to solve daily problems.

On knowledge creation, within Thai cultural context, to effectively transfer knowledge (one of the main element of knowledge creation) within organization especially when there are many workers, knowledge creators should do it
informally using coaching style of communication. Beside trials and errors experiment of business operation (such as production development), this type of activities should be one of many methods to make important knowledge known throughout organization. To gain more knowledge from outside, they should form both social and political networks formally and informally to the point that new ideas are emerged.

On knowledge management in general, firm should possess important core knowledge such as how to produce the quality of product and how to fulfill customer needs; as business expand, firm should seek for more outside sources of knowledge such as government and other types of modern business networks (using, for instance, internet technologies), and as the same time be alert to seek for more knowledge continuously. For a firm to be success, as we learn from the research: first, probably the most important, firm should have long experience of selling products and managing staffs and be patient and diligent as they face harsh obstacles.

**Research Limitation and Direction for Further Research**

This works should be explored further to set up knowledge creation model for specific industry. Sample should be extended to other areas as well. On qualitative side, details should be obtained more on other process of knowledge management to understand the whole knowledge management process. All results should be reviewed by informants again to confirm what we found here. To measure the links of knowledge management procedures and at the same time generalize results of the research further, quantitative methods should be added, for example, getting samples from other industries and other areas.

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Strategic Renewal of Curricula Classics: A Case Study

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Abstract
The design of a university major more or less depends on the needs of the society. When the enrollments of a discipline across all programs have exceptional declining trends, strategic renewal of curricula of the discipline is imperative. To meet the challenge of stable low enrollments in the Management Information System (MIS) programs, the renewal of the MIS curriculum is taking place. This paper presents a case study of strategic renewal of MIS classic courses for all business majors.

1. Introduction
There has been a great deal of concern about the low enrollments in Management Information Systems (MIS) majors during the recent years (Harris et al. 2012). At the 2010 PACIS conference, the President of Association of Information Systems (AIS) made a profound presentation of “The Future of Academic MIS” (George 2010). The speech summarized previous predictions for the future, the history of lessons, and the reality of academic MIS, as well as the diversified viewpoints of the past 15 presidents of AIS. While there are many factors that influence the enrollments, and there is no magic to instantly reverse the low enrollments in MIS programs, it is clear to the MIS faculty members that strategic renewal of the MIS curricula and pedagogies is imperative.

There is no doubt that the body of knowledge of IS and IT is important to business education (AACSB 2010). Thus, advanced MIS courses that are subsequent to the core introductory MIS course can be useful for all non-MIS majors who are interested in the advanced MIS topics. Offering advanced MIS courses to all business majors might relieve the enrollment pressure for the MIS programs, and, at the same time, make the MIS discipline more relevant to business education by providing opportunities for all business majors to learn innovative IS/IT topics (Plice and Reinig 2007). This raises the question: What is
a strategic issue for the MIS faulty to survive? This paper is to present a case of strategic redesign of two classic MIS major courses: the information systems analysis and design (ISAD) course and the database design and implementation (DB) course, for all business majors. The rest of the paper is organized as follows. Section 2 provides a background of the issue. Section 3 presents the major consideration of redesign of MIS courses for all business majors. Section 4 discusses our experiences of implementing the redesign of the two courses for all business majors. Finally, Section 5 summarizes the study.

2. Background of Issue

MIS has become a discipline in business education in the 1970s. It has experienced turmoil periods since. In the past several years, many MIS programs have difficulties to sustain. The teaching methodologies in MIS are continually renovated in response to the changes of information technology (Avison et al. 2006; Guidry et al. 2011). Decades ago, MIS was more likely to focus on the implementation of information systems for business. Gradually, systems users and consultants found that commercialized business application software packages, ERP, SaaS (Software as a service) were readily available on the software market. As a result of the proliferation of commercialized business applications software, the nature of systems analysis, design, and implementation has been changed. In fact, the theme of information systems development for ordinary business enterprises has been shifted from system construction to system acquisition (Wang 2005). Nowadays, information technology has become a kind of commodity. Ordinary business organizations acquire commercial software products to develop information systems, while only IT frontier organizations (such as Google and facebook) might have to use the construction approach to the systems development. Research (Chao and Shih 2005) supported by a survey has shown that there has been the availability of a variety of job opportunities for organizational and end-user computing professionals and these jobs require primarily system acquisition skills instead of system construction skills (Brookshire et al. 2007; Harris et al. 2012).

The following major common characteristics of MIS would make the MIS courses less relevant to business education, as discussed below.
(1) **Information system construction focusing**

During the past years, MIS have been over-emphasizing software system construction. On the other hand, the business users are not particularly concerned with the construction aspects, but would like to have explicit specifications about the business process that can be carried out by the commercial software products. This is similar to consumers of cars not wanting to review the manufacturing blueprints when making the purchase decision (Wang 2002).

(2) **Secondary material for business education**

Many MIS courses teach secondary material. For example, many database textbooks (e.g., Gillenson 2011) generally include a chapter of object-oriented database, regardless of the fact that few business database systems are using object-oriented database. Many database textbooks (e.g., Elmasri and Navathe 2011) even include technical details of DBMS functionalities such as concurrency control which are not essential for database design and implementation.

(3) **Weak managerial context**

Paradoxically, regardless of the closeness of MIS and management science/operation management, decision methodologies are commonly weak or even missing in the existing MIS textbooks. For example, unlike systems construction, systems acquisition analysis must involve an intensive decision process to choose one software product among the alternatives for the new system.

(4) **Insufficient practical components**

Group project concepts and skills are a major component of MIS courses for business (Keys 2002). Project skills refer to the learned capability of students to work as a team and to complete the required information systems development deliverables on time. While project skills are a crucial learning outcome in business, the traditional MIS textbooks do not provide comprehensive guidelines for practical information systems projects.
3. Strategic Course Redesign

A strategic course redesign includes the design of new teaching material, the design of new teaching approach, and the design of assessment measures, as discussed below.

3.1. Development of new teaching material

To provide better teaching material for all business majors in studying the MIS courses, a new set of teaching material (Wang and Wang 2011; 2012) has been developed. The new teaching material covers all important topics of MIS to deliver the comprehensive concept of information system development, but emphasizes the unique features that implement the redesign of the courses in a broad business context, as discussed in Section 4 of the cases.

3.2. New approach to teaching the redesigned courses

Based on our experiences of teaching the redesign courses, we consider that the project approach is effective. When students learn MIS through lectures, they often remember little more than lists of keywords or isolated exercise questions. On the other hand, using the course project approach, students reach out, find business organizations, identify system development opportunities for the organizations, determine system requirements for them, and initiate system acquisition plans. It is clear to us that students cannot effectively learn systems acquisition without doing projects aided by project management tools.

3.3. Assessment of strategic course redesign

There have been few guidelines for assessment of strategic course redesign although general guidelines for assessing courses at the pedagogy level are available (Stevens et al. 2011; Grant 2012). At the strategic level, enrollments and students evaluations are important success indicators. At the pedagogy level, tests for readings (e.g., multiple choices questions or problem solving question) are often used for evaluating students’ performance, course projects for real-world problems of MIS are the major instrument for evaluating students’ learning outcomes in the redesigned course, as discussed in Section 4 of the cases.
4. The Case Study

This section describes the two cases of redesign of classic MIS courses. For each case, we present the main topics of the redesigned course in comparison to the original one, the learning contents and their learning outcomes for all business majors, and the positive consequence of the redesign.


The redesign of the ISAD course emphasizes topics directly related to information systems acquisition, including business process modeling, structured systems analysis, packaged systems, multiple criteria decision analysis, and projects. All these topics are included in the 2010 Curriculum Guidelines (Topi et al. 2010), the MIS discipline curricula guidelines. Table 1 lists the main topics of the original course in comparison to the redesign.

Table 1: Redesign of the ISAD Course

<table>
<thead>
<tr>
<th>Main Topics</th>
<th>Original Course</th>
<th>Redesigned Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems development life cycle (SDLC)</td>
<td>Primary theme is system construction</td>
<td>Primary theme is system acquisition</td>
</tr>
<tr>
<td>Systems analysis</td>
<td>Process modeling UML / Use case for software engineering</td>
<td>Data flow diagram for process modeling</td>
</tr>
<tr>
<td></td>
<td>Data modeling Details of ER diagram</td>
<td>Refers to database course</td>
</tr>
<tr>
<td>Systems design</td>
<td>Application software alternatives design</td>
<td>Detailed procedure of commercial software alternative development</td>
</tr>
<tr>
<td></td>
<td>Decision making involved in systems design</td>
<td>Detailed decision making models for system acquisition</td>
</tr>
<tr>
<td></td>
<td>System infrastructure design Lack of clear section</td>
<td>Detailed items of system infrastructure design</td>
</tr>
<tr>
<td></td>
<td>System architecture design General description of networking</td>
<td>Detailed examples of system architecture</td>
</tr>
<tr>
<td></td>
<td>User interface design Details of user interface design</td>
<td>Criteria for design and assessment of user</td>
</tr>
</tbody>
</table>
Table 2 lists the important learning contents that are relevant to all business majors.
Table 2: Important Learning Contents of the ISAD Course for All Business Majors

<table>
<thead>
<tr>
<th>Important Learning Contents</th>
<th>Learning Objectives for All Business Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Business process modeling using data flow diagrams</td>
<td>• Be able to model business process&lt;br&gt;• Understand business process improvement&lt;br&gt;• Develop systems thinking ability</td>
</tr>
<tr>
<td>2. Decision making process and tools (Weighted Average Decision Matrix and AHP) for system acquisition</td>
<td>• Understand decision making process&lt;br&gt;• Be able to apply decision making methods&lt;br&gt;• Develop rational thinking ability</td>
</tr>
<tr>
<td>3. Gap analysis and backward-design</td>
<td>• Be able to evaluate commercial software systems for business&lt;br&gt;• Be able to analyze trade-offs&lt;br&gt;• Develop design thinking ability</td>
</tr>
<tr>
<td>4. Complete ISAD cases of real-world system acquisition development</td>
<td>• Understand the process of system acquisition&lt;br&gt;• Be able to plan a system acquisition project&lt;br&gt;• Develop design thinking ability for system acquisition</td>
</tr>
</tbody>
</table>

The effectiveness of teaching and learning is the key criterion for assessment of course redesigns. It is difficult to find a practically applicable objective measure of the effectiveness of practical ISAD skills which involves complex intellectual activities; however, there are two subjective measures that have commonly been used for the evaluation of the teaching approach: students’ course evaluation and analysis of students’ artifacts. The overall students’ evaluations were consistently positive (i.e., above 4 on a 5-point scale) in this redesigned ISAD course over the past five years. It is our understanding that students’ teaching evaluation can be a measure for the overall satisfaction of students, but is not the best criterion for assessing the redesign of the ISAD course. The course redesign was evaluated on the basis of a comparison of the quality of students’ project reports that were produced by two sets of students; that is, one set took the
redesigned course and the other took the course before the redesign. Eighteen (18) project reports with the top grades in each set were examined by one of the authors. Each project report was evaluated against the rubric. Our preliminary examination indicates that the quality of students’ course projects for the ISAD course has been improved.

The enrollments of the redesigned ISAD course since 2008 have been stable high, which would not occur if this course was offered for the MIS majors only, as shown in Figure 1. It is concluded that this ISAD pedagogical redesign is positive.

![Figure 1: Enrollment Numbers of the Redesigned ISDA Course](image)

4.2. Case B: redesign of the Database Design and Implementation course

The redesign of the DB course emphasizes topics directly related to data management, including physical data storage concepts, conceptual data model (ER diagram), database languages (SQL), database administration, and projects. All these topics are included in the 2010 Curriculum Guidelines (Topi et al. 2010). Table 3 lists the main topics of the original course in comparison to the redesign.
The two subjective measures have been used for the evaluation of the teaching approach: students’ course evaluation and analysis of students’ artifacts. The overall students’ evaluations were consistently positive (i.e., above 4 on a 5-point scale) in this redesigned DB course over the past four years. It is our understanding that students’ teaching evaluation can be a measure for the overall satisfaction of students, but is not the best criterion for assessing the redesign of the DB course. The course redesign was evaluated on the basis of a comparison of the quality of students’ project reports that were produced by two sets of students; that is, one set took the redesigned course and the other took the course before the redesign. Fifteen (15) project reports with the top grades in each set were examined by one of the authors. Each project report was evaluated against the rubric. Our preliminary examination indicates that the quality of students’ course projects for the DB course has been improved.

Table 3: Redesign of the DB Course

<table>
<thead>
<tr>
<th>Main Topics</th>
<th>Original Course</th>
<th>Redesigned Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data quality</td>
<td>Lack of clear boundary between data and information</td>
<td>• Highlight data redundancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Differentiate information from data</td>
</tr>
<tr>
<td>Physical storage</td>
<td>File systems</td>
<td>Emphasizes on B-tree</td>
</tr>
<tr>
<td>Data models</td>
<td>Hierarchical / Network / Relational / Object-oriented models</td>
<td>Focuses on relational model only</td>
</tr>
<tr>
<td>Conceptual data model (ERD)</td>
<td>Free format of ERD</td>
<td>Enforce physical ERD</td>
</tr>
<tr>
<td>Logical database design</td>
<td>Lack of specific steps for normalization process</td>
<td>Detailed steps for normalization process</td>
</tr>
<tr>
<td>Physical database</td>
<td>Focuses on physical storage</td>
<td>Major physical database</td>
</tr>
</tbody>
</table>
Table 4 lists the important learning contents that are relevant to all business majors.

**Table 4: Important Learning Contents of the DB Course for All Business Majors**

<table>
<thead>
<tr>
<th>Important Learning Contents</th>
<th>Learning Objectives for All Business Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Data and information</td>
<td>• Understand data redundancy</td>
</tr>
<tr>
<td></td>
<td>• Be able to differentiate information from data</td>
</tr>
<tr>
<td>2. Physical relational data model (physical ER diagram)</td>
<td>• Understand relational data model</td>
</tr>
<tr>
<td></td>
<td>• Be able to apply physical ERD for database design</td>
</tr>
<tr>
<td>3. Physical database design technique and data deployment for distributed database</td>
<td>• Understand physical database techniques</td>
</tr>
<tr>
<td></td>
<td>• Be able to make decision on data deployment for distributed database</td>
</tr>
<tr>
<td>4. Complete project of real-world database development</td>
<td>• Understand the process of database development</td>
</tr>
<tr>
<td></td>
<td>• Be able to plan a database project</td>
</tr>
<tr>
<td></td>
<td>• Develop design thinking ability for database design and implementation</td>
</tr>
<tr>
<td></td>
<td>• Be able to apply SQL for business applications</td>
</tr>
</tbody>
</table>
The enrollments of the redesigned DB course since 2009 have been stable high, which would not occur if this course was offered for the MIS majors only, as shown in Figure 2. It is concluded that this DB pedagogical redesign is positive.

![Figure 2: Enrollment Numbers of the Redesigned DB Course](image)

4.3. Lesson We Learned from the Cases

It has been our experience that, while the flexible nature of teaching accommodates differing pedagogical approaches and allows instructors to set teaching-learning strategies on their own, the course project method is an effective tool for the ISAD course and the DB course. The following primary lessons have been learned from our practices during the past three years.

1. Since the redesigned ISAD course and the DB course were offered, the numbers of enrollment of non-MIS majors in the two courses have been high.

2. IT has become a kind of commodity for ordinary business organizations. We need to redesign our MIS courses to serve a wide population of business students. We are convinced that the shifting of theme from system construction to system acquisition is the right direction for the redesign of the ISAD course and the DB
course. The new design made multiple teaching modules (e.g., lecture, reading, and course project) cohesive in terms of practical problem solving skills.

(3) Generally, teaching practical MIS skills for all business majors is a challenging task. It involves several stages of course projects, including project proposal, midterm progress inspection, and final deliverables. The students’ evaluation has consistently indicated that students have benefited from course projects in problem solving skills for business. The most demanding activities on the instructor’s side include the one-to-one supervision of individual student’s projects and the intensive evaluation work load. When a class size was large (e.g., more than 35), time constraints could diminish project-specific cares. Other drawbacks of the approach to teaching and learning project skills have been observed as well. First, the ISAD course projects are normally group activities. It is hard to evaluate project skills at the individual level. Second, it is always a demanding task to provide a balance between practical project skills and broad course contents for the limited class time.

5. Conclusion

One of the most important aspects of effective business education is to help business students develop practical problem solving skills. In the history of MIS, ISAD methods have been dominated by computer software construction-centered approaches. The proliferation of commercial off-the-shelf software products, ERP systems, and SaaS has introduced new tasks of acquirement analysis for the ISAD field. Our redesigned ISAD course shifts the emphasis and enhances the business students’ practical skills for systems acquisition. To offer the ISAD course for all business majors, we must make a strategic redesign. In the DB field, the practical project skills have been missing in the traditional courses. To offer the DB course for all business majors, we must teach more DB applications in addition to DB development. This paper has explained the redesign of the ISAD course and the DB course for all business majors, and has presented our case of the effective strategic redesign. Our experience has indicated that the redesigns of the two MIS courses are useful for teaching practical systems development skills for all business majors, and strategically make the MIS discipline more relevant to business education in general. We conclude that the strategic renewal of the classic MIS courses meets the challenges for the future of academic MIS.
References


The Current Status and Future of K-12 Online Education: US Case

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Malik Ozturk
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Abstract

Cyber Schools, digital schools, online schools, virtual schools, internet schools, and e-learning, no matter what it is called online education is a new phenomenon in education that is not fully understood. A new trend that is hard to comprehend by just reading or hearing about it. The investigator of this study did not solely rely on the literature and decided to visit a cyber-charter school district and visit the homes of cyber charter school students to gather observational data for this study. The investigator was aware of a new learner type that is called “Screenagers” in the literature. A case study approach was used to develop insights into the phenomenon, in this case, the present and future of cyber education. Qualitative inquiry methods were used in this study. These methods allowed the researcher to capture an understanding of the perspectives of the CEO’s, cyber charter parents and education academics regarding cyber education. Consisted with its theoretical framework, Constructivism, this study has followed a qualitative approach to explore the nature of construct. The goal of this qualitative case study was to explore what the charter school directors, cyber charter school parents and education academics believed the current situation of cyber schools in a US State to be and what their visions of cyber schools were for the future. Through this search, the researcher examined the effects of the progresses that are currently taking place in the cyber schools and across this US state. Three different methods of data collection were used; site visit and interviewing charter CEOs, home visits to cyber charter students’ homes and interviewing parents, and information sessions and interviewing education academics. A leadership group consisting charter school CEOs, including the researcher visited the cyber charter school district led by one of the CEOs to learn how cyber curriculum can be integrated into their existing academic programs. The leader of the group was the president of the state’s coalition of public charter
schools and CEO of one of the charter schools in the state. The investigator also visited homes of fourteen cyber charter school students as a second step of data collection. Cyber charter parents were interviewed on the subject; the investigator visited the homes of 14 cyber charter school students in the state and took observation notes as they were either receiving a box full of instructional materials from the cyber charter School or working on the computer connected to their online classrooms. Later, information gathered from the site visit and home visits were presented to thirty-six education academics in six different information sessions. After the information sessions, education academics were interviewed on the subject. Three different questions asked during interviews; How cyber curriculum can be integrated into existing academic programs of brick and mortar charter schools? What is your role as a cyber charter school parent? What do you believe the present state of cyber schools in your state is? Cyber charter school CEOs reported on a conceptual change in schooling, from two extreme end of schooling; traditional brick and mortar schools and futuristic cyber schools to combination of both; Brick and Click Schools. Parents reported that while some of public school parents are accused of using schools as baby-sitting services, cyber charter schools required full time supervision at homes. Education academics reported heavy criticism on social development of cyber school students.

Key Words: Online education, brick and mortar schools brick and click schools, cyber schools, screenagers.

1. Introduction

"Online learning is a disruption that cannot be stopped," Joseph J. O'Brien, (Director of the Chester County Intermediate Unit)

Cyber Schools, digital schools, online schools, virtual schools, internet schools, and e-learning, no matter what it is called online education is a new phenomenon in education that is not fully understood. A new trend that is hard to comprehend by just reading or hearing about it. The investigator of this study did not solely rely on the literature and decided to visit a cyber-charter school district and visit the homes of cyber charter school students to gather observational data for this
study. The investigator was aware of a new learner type that is called “Screenagers” in the literature. For example, two teenagers are sitting on a curb texting each other. A screenager is a teenager who spends a lot of time on an electronic screen. Screenager activities are sending e-mails, text messages, and instant messages, downloading movies and music, Web surfing and gaming. Cyber charter school students are not only teenagers; this cyber charter school district had students from kindergarten to 12th grade (Rushkoff, 1997).

Today’s generation of pupils is frequently referred to as Generation Y or the Millennial Generation. Generation Y, as one high school student defines, has “technology in their blood”. These pupils do not know existence without computers and the Internet. US Department of Education to one study, 94% of these pupils use the Internet for school related study. Pupil access to the Internet at school has grown radically over the years (Rosendale, 2009). Could cyber schools be a solution to the country of India’s biggest educational problem? Human Resource Development (HRD) Minister Kapil Sibal has reported in 2010 that there is a shortage of 1.2 million teachers in India and K-12 education in India currently is not mandatory. Could online education, a global phenomenon, be solution to India’s problem? More specifically, could laid-off New Jersey teachers teach Indian children in the comfort of their houses? When Katrina hit Louisiana and destroyed the State’s whole Educational System literally and physically wiped out all the brick and mortar schools, could cyber schools have been a quicker solution than rebuilding the brick and mortar schools back? 50 percent of all high school courses will be given online by 2019. This does not mean that brick and mortar school buildings will disappear but some courses will be in class, some will be online (Christensen, Johnson & Horn, 2008).

The US Department of National Education Technology Plan encourages states, districts, and schools to deliver all students with access to online learning opportunities and to establish criteria for getting credit via online learning that parallels the criteria for getting course credits in local schools; however, current traditional educational systems are not fully equipped to deal with the challenges of implementation. Elementary and secondary school administrators have concerns about virtual education that are similar to those associated with traditional education, which is summarized into three major categories: policy, quality, and funding. Within the category of quality, a major
concern is training for teachers of virtual courses. Unlike traditional education, administrators seeking resources to aid in virtual program formulation will find a scarcity of research in the K-12 levels. We see changes taking place in the educational arena; a new enthusiasm in the infinite possibilities of the digital age for changing how we learn, how we teach, and how the countless fragments of our educational system fit together – an uproar for change that is bringing transformations and incomparable changes in our nation’s history (United States Department of Education) (Morse, 2010).

The educational world has been transformed through technology. From the early beginnings of the one-room schoolhouse to the modern day classroom, the physical environment for learning is an ever-evolving concept. Distance learning is hardly a new innovation in education. The earliest form of an extended classroom or distance education was paper-based correspondence. The research revealed that instruction associated with distance learning could accelerate learning as good or better than conventional classroom instruction, and the lack of direct contact was not disadvantageous to the learning process (Means et al., 2009). In recent years, computers have been added to the education mix as supplemental enrichment. The availability of the Internet, advanced software applications, and accessibility to widespread use of the personal computers have all contributed to adapting, expanding, and elevating the level of distance learning. Curriculum and instruction can now be delivered in a timelier and a personal way. Again, more recent research has supported the success of distance learning for the adult learner. The Carnegie Foundation reviewed multiple comparative studies and found no significant differences in student learning outcomes for mastery of coursework from online instruction to that of traditional educational settings. These studies primarily focused on adult level distance learning models (Terry, 2009; Grigorovici & Russill, 2002).

The latest trend in the e-learning environment is now taking place at the K-12 level. By 2001, over 25% of states in the United States had operational or planned state-sanctioned K-12 virtual schools in place. This figure represents only a fraction of all K-12 virtual offerings. State-sanctioned virtual schools are operated and financially supported by state-level governments. State virtual schools currently represent the leading option in distance education. College and university based virtual schools offer independent learning high school courses
and video-based continuing education programs to K-12 online courses. Consortium cyber schools are national, multi-state, state-level, or regional in nature; these virtual offerings act as agents for outside provider chances or share courses among partners. Local education agency-based virtual schools are created by local public schools and school districts. These schools serve to support and supplement alternative educational needs to the local population of students. Many schools utilize a hybrid model of both distance and face-to-face instruction. Virtual charter schools operate under state charters and are exempted from some state rules and regulations depending on charter specifics and charter school law. Private virtual schools make up a smaller portion of overall national offerings and primarily serve a large population of home-school students. Lastly, many for-profit companies have contributed an important job to the establishment of cyber school offerings, including creating courses, delivery platforms, curriculum, web development, and software applications (Terry, 2009). Virtual education provides differentiated learning environments, exposure to advanced level technologies, flexible scheduling, and one-to-one teacher-student interaction. Additionally, virtual schools are being explored as a possible solution to the ever-growing achievement gap in American education. The new frontier in e-learning models now includes middle and even elementary level learners. These learning models incorporate the addition of a learning coach, usually a parent, to provide additional supervision and support for younger students." Virtual education shares the common goal of increasing student achievement through best practice. Although the why is mutual, the how varies across models. (Terry, 2009; Kafai & Sutton, 1999) According to a study (Cattagni and Farris, 2001), almost 100% of U.S. public schools have Internet connections and the student to computer (internet connected) percentage has increased to a portion of 3.8 to 1. Screenagers spend more time using the Internet than watching television and this new generation of pupils wants a new style of education. An education delivered in a channel to which they are habituated: the Internet (Rosendale, 2009).

The proliferation of the Internet has challenged the boundaries of education’s conventional methods of teaching and learning. Online education represents a vital response to the shortcomings of K-12 education and the need for reform. As a result, online learning continues to grow rapidly across the United States as an increasing number of students, educators, and policymakers realize
the vast benefits of learning unconstrained by time and place. Many online programs were created in response to the need to transcend limitations of time and place and increase availability of courses to students in rural and urban schools. Virtual schools are increasing options for students, allowing for focus on student needs and supporting school reform and redesign efforts in K-12 education, online learning is an emerging but rapidly growing phenomenon. Emergence of online learning represents a convergence of several factors: the development of the Internet and the World Wide Web, the utilization of computers in instruction, the use of media to unite teacher and student at a distance, and the integration of technology into all aspects of education (El-Tigi, Lewis & Mac Entee, 1997). However, questions still remain about the educational needs best addressed through online learning as well as its impact on school improvement and learner outcomes. Online education represents a crucially important response to the shortcomings of K-12 education and the need to reform. With the United States economy transitioning away from manufacturing and toward a greater percentage of knowledge-based jobs, 90% of the fastest growing jobs in the economy require a college degree and only 70% of all public high school students graduate, and only 32% of all students leave high school qualified to attend four-year colleges (Watson, 2007). In addition to helping address these shortcomings, online education can also facilitate mastery of essential 21st century skills by stressing self-directed learning, time management, and personal responsibility, along with technology literacy in a context of problem-solving and global awareness.

In 2004, many political and educational leaders realize that global trends are changing the nature of education. With the call for school reform being heard, several groups in America have recently identified school reform as a major and current priority. The US Department of Education has identified high school reform models that support student achievement, and has acknowledged small school size, scheduling choice, charter schools, career academies, early college initiatives, and student engagement as research-based models that contribute to improved student achievement. The National Governor’s Association (NGA) formed a task force to study redesigning high schools in order to make them more relevant and rigorous to the lives of America’s students. The task force initiative responded to employers’ needs for more highly skilled and better-educated workers, suggesting that reforms include
choices in high school programs and opportunities to earn college credit or professional credentials. The National Association of Secondary School Principals called for redesigning high schools that are more rigorous and personalized for American students. Each of the reform models offered and recommended by these groups is an example of a proven strength of online learning that is central to success in the new global economy. By providing scheduling flexibility, personalization, freedom from a large physical school, engaging tools of distance learning, opportunities to accelerate learning, and access to rigorous academic programs, virtual schools are not just important examples of school reform models, but online education may also represent the best hope for bringing high school reform quickly to large numbers of students (Barkley, 2010).

1.1. History of the visited Cyber Charter School

The town where the cyber charter school is located was an economic and cultural powerhouse through most of the 20th century, due to its vibrant steel industry. Like many similar communities, this town suffered a devastating decline beginning in the late 1970s and ceasing with the closure of Steel Mills in 1982. The Town's influence as a hub of industrial and cultural progress seemed to disappear overnight and the community faced an economic and educational turmoil. The community's population declined quickly as people moved out of the area to search for new jobs; The town's tax base fell dramatically which, combined with decreasing enrollment, forced city officials to close down its public high school in 1986 (Moe & Chubb, 2010). In the following years, there was great anxiousness among high school students and their families because there was not even one community in that County that would agree to educate the students from this town on a long-term basis. In 1990, the community of another town in the neighboring state, which is approximately 10 miles from the town, agreed to educate the high school students from the town for the next 20 years. This was a great easement to the students, families and community leaders in the town. However, it raised concerns in the capitol city and throughout the state because tax dollars were now being sent to the neighboring state to educate their students.
In 1997, a new charter school law in the state provided a new opportunity for the community of the town. The next year, the town received a $25,000 state grant to put together a plan to address the educational turmoil in its community. Under the leadership of its CEO, this Cyber Charter School was created and started enrolling students in the fall of 2000. Utilizing a truly cutting-edge approach, Cyber School formulated an advanced union of modern technology and proven academic methodologies to deliver high-quality educational choices to students and families.

Initially designed to provide educational services to approximately 50 students from the town, Cyber Charter Schools had over 500 students enroll in the first year and it has seen fast growth ever since.

2. Goal

The purpose of this qualitative case study was to explore what the charter school directors, cyber charter school parents and education academics believed the current situation of cyber schools in a US State to be and what their visions of cyber schools for the future were. Through this search, the researcher examined the effect of the progresses that are currently taking place in the cyber schools and across this US state. Three different methods of data collection were used; site visit and interviewing charter CEOs, home visits to cyber charter students’ homes and interviewing parents, and information sessions and interviewing education academics.

Three different questions asked during interviews.

How cyber curriculum can be integrated into existing academic programs of brick and mortar charter schools?

What is your role as a cyber-charter school parent?

What do you believe the present state of cyber schools in your state is?

3. Methods

A case study approach was used to develop insights into the phenomenon, in this case, the present and future of cyber education. Qualitative inquiry methods were
used in this study. These methods allowed the researcher to capture an understanding of the perspectives of the CEO’s, cyber charter parents and education academics regarding cyber education.

Consisted with its theoretical framework, Constructivism, this study has followed a qualitative approach to explore the nature of construct. A case study is a bounded system that is used to understand the selected case in depth (Baytak, 2011). CEOs of nine brick-and-mortar charter schools visited the home of a US state’s cyber charter school district in a first step toward adding their own online courses through a proposed state Charter School Digital Network. The researcher was one of these visiting nine Brick and Mortar charter School CEOs. These nine CEOs spent a whole day visiting the facilities, talking to the administrators and staff, listening to presentations. At the end of the day, ten charter school CEOs, including the CEO of host cyber charter school district were interviewed on the subject; A leadership group consisting charter school CEOs, including the researcher visited the cyber charter school district led by one of the CEOs to learn how cyber curriculum can be integrated into their existing academic programs. The leader of the group was the president of the state’s coalition of public charter schools and CEO of one of the charter schools in the state.

The investigator also visited homes of fourteen cyber charter school students as a second step of data collection. Cyber charter parents were interviewed on the subject; The investigator visited the homes of 14 cyber charter school students in the state and took observation notes as they were either receiving a box full of instructional materials from the cyber charter School or working on the computer connected to their online classrooms. Later, information gathered from the site visit and home visits were presented to thirty- six education academics in six different information sessions. After the information sessions, education academics were interviewed on the subject. After the data collection at the school site and students’ homes, the researcher prepared a presentation on the cyber charter school and had 6 information sessions with 6 education academics in each session. A total of 36 education academics participated in these information sessions. Interviews were done after each information session.
4. Data Collection

Observations notes during facility visits and home visits, interviews of Charter CEOs, cyber charter school parents, and education academics were used as the descriptive data collection tool regarding the current and future state of cyber education in this US state. The researcher was the primary instrument for data collection and analysis. During the interviews, the subjects expressed their thoughts and opinions and his or her own perspectives on how they believe the current state of their school to be and what they believe cyber schools will be in the future, and Interview notes were taken. The critical factor was not the quantity of informants, but the quality of the responses. The selection of the informants of the study was based on the fact that they were all current brick and mortar charter CEO’s, cyber charter school parents, and Education academics in this particular US state. Using the analysis process recommended by Lincoln and Guba (1985) the identified emerging themes were reported by 1) consensus themes, which are when the majority of the participants stated the theme, and 2) supporting themes, which are when two or three of the participants stated the theme.

5. Results

Based on the guidelines of case study research methodology, the findings of the current study can be categorized with the following themes;

Findings from the Site Visit and Interviewing Charter CEOs

The physical site included office buildings, a warehouse where the cyber charter school shipped everything from crayons to laptops to cyber charter school students’ homes (There was a post office and a repair shop inside the warehouse), a performing art school where cyber charter schools students occasionally met for social activities.

After touring of the physical site, The CEOs engaged in a round table discussion followed by the interview. The investigator asked one open-ended question; How cyber curriculum can be integrated into existing academic programs of brick and mortar charter schools? One of those attending, CEO, said, “I am very excited about the possibility of expanding our school without having to expand the facility.” He also said adding online curriculum will free his school from the limitations of its locality, bringing great teachers and a wider
variety of course offerings to students. He hopes to add several cyber classes this fall through the program. The idea of visited cyber charter school’s sharing online curriculum and its CEO, at the charter school coalition’s annual leadership conference, proposed expertise with their brick-and-mortar counterparts. The host CEO took the group on a tour of the Cyber facilities. “There is a great opportunity now,” he told them. “If we take advantage of it we can be leaders for a long time. If we don’t, we’ll be spectators. “He said public school districts finally have begun adding cyber curriculum, and State’s 124 bricks-and-mortar charter schools need to do the same if they wish to remain competitive. A presentation of a “plug-and-play” virtual school model showed the educators how they can add the Interactive courses they want from a menu of 250 state-approved courses. The website would function as part of the host school, and is designed to be flexible, inexpensive and easily customized. “I think this collaboration is extremely important. Brick-and-click is the wave of the future,” said another CEO.

Findings from Home visits to cyber charter students’ homes and Interviewing Parents

Following instructional materials were in the boxes that cyber charter School Students received; one laptop, one printer, one iPad for 11th and 12th grades, one certain brand Touch Pad, Text Books by a well-known company. All instructional materials had the cyber charter school’s logo. The investigator asked one open-ended question: What is your role as a cyber-charter school parent? The investigator observed that all cyber charter school students needed an adult supervisor when they are home. Parents of cyber charter school students reported during the home visits that cyber school employees makes occasional phone calls to the homes to make sure that their students are being supervised. Some parents reported that cyber charter employees interviewed the parents as a pre-condition for enrollment and made sure that their students will be supervised home after they are admitted to the cyber charter school. 12 of 14 parents reported that while some of public school parents are accused of using schools as baby-sitting services, cyber charter schools required full time supervision at homes. 8 of 14 Parents of elementary cyber school students reported that they feel like their children having problems finding playmates at
an age where play is everything. Remaining 6 of 14 parents of middle school and high school students reported similar concerns about social activities of their teenagers.

**Findings from Information Sessions and Interviewing Education Academics**

The researcher has shared all the information that he has gathered during the site visit and home visits. The investigator asked one open-ended question: What do you believe the present state of cyber schools in your state is? 32 of 36 Education Academics pointed out that cyber charter school students’ social development will suffer, activities that the cyber charter school is organizing such as field trips, student clubs, dorms, tutoring centers and occasional gatherings for performing art activities, study groups etc. will not be enough for cyber charter students’ social development.

6. **Discussion and Conclusion**

The CEOs use internal and external sources for professional development on a wide variety of topics, which differed from school to school. The CEOs foresee changes in traditional brick and mortar schools so that they can compete with cyber charter schools. Some of these changes could be an increase in the amount of technology used in brick and mortar schools or others such as the offering of online courses. Lastly, Cyber CEOs might transfer their schools into brick and click schools to avoid criticism by cyber charter parents on social development of cyber school students. Same criticism was made by 32 education academics as part of this study. Cyber elementary charter school students miss out on play due to the fact that they do not have as many friends as brick and mortar elementary students do. Cyber middle and high school students miss out on social activities due to the fact that they do not have as many friends as brick and mortar middle school and high school students do.

Future research needed to study the impact of online education on social development of kindergarten and elementary cyber students, middle school students and high school students separately.
All these might lead the way to a conceptual change in schooling, from two extreme end of schooling; traditional brick and mortar schools and futuristic cyber schools to combination of both; Brick and Click Schools (Smart & Cappel, 2006).

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Knowledge Transfer Activities for the Development of Organic Rice Production of Community Producers Based on Sustainable Development Concept in Thailand

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Abstracts

Main objective of this research is to set up knowledge transfer activity for the development of organic rice production of community producers based on sustainable development concept in Thailand. The research attempts to 1) study the development of organic rice production process, and 2) develop knowledge transfer activity strategy for the development of organic rice production of community producers based on sustainable development concept in Thailand. Mixed method research were used and the findings are as follows: 1) Even with the Thai Government supports as stated in the Strategic Plan for Development of Thailand Organic Agriculture 2013-2019, at present there are few organic rice community producers of organic rice in Thailand, and their development processes now are at the beginning stage which are not systematic, minimal concern about sustainable development, especially environmental dimension and lacks of knowledge and technology to support organic rice production process, 2) the strength of organic rice production in Thailand is that there are many rice planting areas and farmers; the weakness is the lack of knowledge about organic rice production; the opportunity is the supporting policies related to organic rice production from Thai Government, and the threat is the high competition in global rice market between rice exporters from many countries, especially within ASEAN, 3) various present knowledge transfer activities were currently conducted by few community producers in the research areas such as activities in Farmer School, in learning center and from different types of training, and 4) suitable knowledge transfer activity strategy for the development of organic rice production of community producers based on sustainable development concept in Thailand as indicated by this research is the use of participatory knowledge transfer activity strategy, SCAPEN Strategy. This strategy was separated 6 steps,
Sustainable development concept, Communication, Awareness, Participation, Education, and Networking.

Introduction

Sustainable development proposes a new paradigm of decision making for all sectors of society. It entails a new perspective on present issues and challenges, and requires a better appreciation of the complex interconnections between the economic, social and environmental aspects of current challenges. In order to attain sustainable development, 1) environmental policies need to be socially and economically feasible; 2) social policies need to be environmentally and economically feasible; 3) economic policies need to be socially and environmental feasible (Bell, Halucha, and Hopkins, 2000). Therefore, not only sustainable development is the concept for Thailand, it is also the world development concept.

To adopt this perspective is like looking at current problems through a new lens. The sustainable development lens focuses attention not only on the integrated of three aspects above but also on the horizons of the future as a way of seeing more desirable approaches to the problems of the present (Bell, Halucha, and Hopkins, 2000).

Over the past quarter-century Thailand has enjoyed remarkable economic growth, making the country an economic leader and prominent development partner in the region. This growth has not come without a cost. Rapid development, urbanization, and the spread of industrial activity have had a serious impact on the country’s people and ecosystems. Much of the country’s forest cover has been lost, while roughly half of Thailand’s rivers and lakes are classified as having poor water quality. There is overused of land and water and a lack of planning in certain sectors. Climate change also threatens to have a major impact on Thailand, especially its low-lying central region, which is also the most fertile area of the country, and coastal areas which are prone to flooding due to rising sea levels. Consequently, energy conservation, conservation technologies and alternative energy are now some of the highest-profile issues and areas of green activity in Thailand. With a new constitution that mandates improved environmental
governance, Thailand is attempting to reverse these trends while decentralizing the process of environmental decision making (UNDP Thailand, 2012).

Government agencies and other organizations provide helps for this problems. For example, UNDP provided the sustainable development programs such as environmental programs that based on a partnership approach that brings in a number of stakeholders, including communities, NGOs, and local and national authorities. Their Global Environment Facility (GEF) has allocated US$23.9 million to Thailand through 2010 in two critical focal areas: biodiversity and climate change. UNDP also manages the GEF Small Grants Program, through which over 200 small projects have been implemented in Thailand since 1998 (UNDP Thailand, 2012).

The effects of all the projects above on the production of goods and services are still not impressive. The rice production in Thailand is generally the same as in the past. Most of Thai community producers don’t have innovative idea for the production of green products that reflects interconnections of economic, social and environmental aspects. This is an indication of the lack of knowledge, the most important factor of production process sustainability.

Thailand has a strong tradition of rice production. It has the fifth-largest amount of land under rice cultivation in the world and is the world's second largest exporter of rice (Maierbrugger, 2013). Thailand has plans to further increase its land available for rice production, with a goal of adding 500,000 hectares to its already 9.2 million hectares of rice-growing areas (The Nation, 2009). In 2008, The Thai Ministry of Agriculture expects rice production to yield around 30 million tons of rice (Nirmal, 2008). The most produced strain of rice in Thailand is jasmine rice, which is a higher quality type of rice. However, jasmine has a significantly lower yield rate than other types of rice, but it also normally fetches more than double the price of other strains in a global market (The Nation, 2009).

The government wanted to promote urban growth, and one of the ways it accomplished this was by taxing the rice industry and using spending money in big cities. In fact, during 1953, tax on rice accounted for 32 percent of government revenue. The government set a monopoly price on exports, which increased tax revenue and keep domestic prices low for Thailand. The overall effect was a type of income transfer from farmers to the government and to urban consumers (who purchased rice). These policies on rice were called the "rice
premium," which was used until 1985 when the government finally gave in to political pressure. The shift away from protecting the peasant rice farmers by the government moved the rice industry away from the egalitarian values that were enjoyed by farmers to more of a modern-day, commercial, profit-maximizing industry (Pasuk Phongpaichit, and Baker, 1995).

The Thai government had strong incentives to increase rice production and they were successful in most of their plans. The government invested in irrigation, infrastructure, and other pro-rice projects. The World Bank also provided finance for dams, canals, locks, ditches, and other infrastructure in the Greater Chaophraya Project. These policies helped lead rice land to increase from 35 million to 59 million rai from 1950s to 1980s. During 1961 to 2007, The rice production has about tripled in terms of total paddy rice produced. While Thailand's rice production has not increased every year, which is not to be expected, one can see a trend line for steady significant increases since the 1960s.

A large portion of this rapid expansion was due to increased production of rice in northeast Thailand (Perehudoff, 2007). While in the past, central Thailand was the main producer of rice, northeast Thailand quickly caught up to a comparable amount of production. This was in part due to the new road systems between northeast Thailand and the shipping focused cities on the coastline. The villages that had a significant portion of rice production were also changing as farmers went from more subsistence practices to mostly wage labor (exchange labor also virtually disappeared). Cows were being replaced for tractors to work on the farm and irrigation technology was updated in most villages. The green revolution was just starting to spread among the world’s agricultural industries. Rice farmers and merchants took advantage of new rice varieties, strains, fertilizers, and other technological advances. The International Rice Research Institute (IRRI) was also disseminating knowledge, technology, new rice strains, and other information to rice producers in Thailand. From the 1950s to 1970’s rice production per unit of land increased by almost 50 percent (Pasuk Phongpaichit, and Baker, 1995).

By the end of 2012, Thailand had around 17 million tonnes of milled rice in stockpiles. It planned to export a large part of it through government-to-government contracts in 2013. Unfortunately, beaten by India and Vietnam, Thailand lost the spot of Top Rice exporting country in 2012.
While all of these advances helped improve overall production of rice in Thailand, many low-income farmers in Thailand were left worse off. Many peasants were unable to hold onto their land that they used to harvest rice on and had to become tenants to survive. The government would always expect tax revenue, even during a bad year, and this pushed many low-income farmers even closer to the margin. New technologies also pushed up the entrance cost of rice farming and made it harder for farmers to own their land and produce rice. Farmers that already had somewhat large scale operations or could afford all the new chemicals, rice strains, and tractors benefited greatly while the normal peasant was turned from a land owning rice producer to a manual laborer on others land (Pasuk Phongpaichit, and Baker, 1995).

Rice has many important roles in Thai society from food to work. Rice uses over half of the farmable land area and labor force in Thailand. It is one of the main foods and sources of nutrition for most Thai citizens. Rice is also of the main components of Thai exports (Evenson, Herdt, and Hossain, 1996). The Thai rice industry also faces a few big threats. According to Setboonsarng the top three threats are, “(i) increase in competition in the international market; (ii) growing competition with other economic activities that increases the cost of production, especially the labour cost; and (iii) degradation of ecological conditions. Rice research has to address these challenges.” As the world becomes “flatter,” and the rice production around the world become more competitive, it becomes harder for Thailand to keep its competitive advantage and the margins Thai rice producers have been used to. For the second threat, the modernization of Thailand has led to an increase in wealth and the cost of labor, making it more expensive for rice farmers that use cheap manual labor. Third, the massive amount of land used for rice can have long term adverse effects on the yields of the land.

However the market for organic rice is still in its infancy, but is growing year on year as more and more consumers realize there is now a choice. Thailand is currently facing increasing competition on several fronts, both conventional and novel-conventional, from countries such as Vietnam, whose exports are rapidly catching up with Thailand, and novel, from countries such as China, which has deployed biotechnology to complement its conventional breeding programs, to produce hybrid rice yielding double that of current varieties. Thailand faces an even greater threat to its niche market, homemade fragrant rice, and in 2004
prevented an attempt by American scientists to develop its own varieties of Jasmine rice. Such an undertaking would have led to a permanent collapse in incomes for poor rice farmers in northeastern Thailand, probably with grievous social consequences. Thailand is still vulnerable to this threat today (The National Innovation Agency, 2006).

Innovation is not only required in the development of new products. It can also be applied to the marketing of new rice products and to the development of an identifiable Thai brand. A national brand could be considered which would certainly complement the “Kitchen of the World” initiative. However, ensuring recognition of a Thai brand will require major investment in brand-building in key high-value markets such as the EU, USA and Japan (The National Innovation Agency, 2006).

Clearly then, there is a growing realization in the rice sector that innovation must be put to work to enhance the competitiveness of the sector in the global marketplace. Already, some ambitious companies are adopting new technologies and methods to truly compete, but they are relatively few in number. It must be realized that innovation is not a reactive process; it must be an integral part of a company’s structure for it to survive. There must also be a sound understanding of intellectual property and its management and an efficient regulatory system to ensure that the maximum value of innovative thinking is captured (The National Innovation Agency, 2006).

Compared with other rice producing countries, Thailand’s rice economy has benefited relatively little from Green Revolution technologies, and there has been limited investment in downstream value added products. Thailand’s rice sector could benefit enormously from a coherent rice innovation policy, which would focus on increasing productivity and water use efficiency, technology transfer for downstream processing, and promotion of high value specialties for international markets (The National Innovation Agency, 2006).

In conclusion, Thailand has many community producers who produce rice but they are not organic rice. Moreover they are not knowledge based production, and need sustainable production development supported by knowledge transfer activities from both local and global sources. Even if Thai community producers have regularly conduct knowledge transfer activities among producers, workers, public sector personnel, business sector personnel and other important
stakeholders, they are not able to develop their rice products under sustainable development concept.

There are many indications that make us believe that it’s because they don’t have the right strategy, especially knowledge transfer strategy. This research try to fill this gap by first analyzing their overall knowledge transfer activities of their production, and then searching for knowledge transfer activities that could lead to a sustainable production process. Therefore main objective of this research is to set up knowledge transfer activities of community producers for the development of organic rice based on sustainable development concept in Thailand. Later, the results of this research could be implemented for Thai community producers in the area.

**Research Objectives**

This research is an effort to set up knowledge transfer activity for the development of organic rice production of community producers based on sustainable development concept in Thailand. The research attempts to 1) study the development of organic rice production process, and 2) develop knowledge transfer activity strategy for the development of organic rice production of community producers based on sustainable development concept in Thailand.

In pursuit of the above objective, this paper will include the following topics: conceptual framework, methodology, results, discussion and conclusion, research limitations and direction for further research at the end.

**Conceptual framework**

To reach the objectives of the research, conceptual framework shown in figure 2 below demonstrates relationship between sustainable development concept (Agenda 21, the Rio Declaration on Environment and Development, 1992; WBCSD Vision 2050, 2012; ICUN, 2006), green production concept (Thailand Business Council for Sustainable Development (TBCSD), 1993; Turan, 2007; Michelini and Razzoli, 2004), knowledge based production (Powell and Snellman, 2004), the production of organic rice, organic rice for global market, and the knowledge transfer activity strategy considered to be appropriate for the organic rice in Thailand.
This research is mixed method research. There were used both quantitative and qualitative research methodology. Under present complicated economic system, knowledge transfer activity involving culture, environment and economic issue, combination of local and global knowledge in Thailand and unique characteristics of organic rice as a innovative product, this methodology was chosen to be our main research procedures which can be divided into 7 steps: (IIED and ODA, 1994) (1) Select a location and gain approval from local administrative officials and community leaders 100 producers from 2005 community rice producers around of Thailand (Bureau of Rice Production Extention (BRPE), 2013). (2) Collect both secondary and field data (spatial, time related, social, environmental, economic and governance) by community survey, participatory and non participatory observation, individual and group interviews of community producers, group discussion, public opinions, and share information with selected communities. (3) Synthesize and analyze that both of quantitative and qualitative
data (4) Identify problems and opportunities to resolve them with volunteered community rice producers (5) Rank opportunities and prepare maps, action plans, reports and costing (including basic work plan for all members of the community). (6) Adopt and implement the knowledge transfer activity strategy. (7) Follow-up, evaluate and disseminate knowledge transfer activity strategy, maintain momentum through addressing new issues.

**Figure 2: Seven Steps of the Research**

**Results**

The research findings focus on two points as follows:

(1) the organic rice production slowly increased from 2007 to 2013 although Thai Government proposed a policy about organic agriculture (Strategic Plan for Development of Thailand Organic Agriculture 2013-2019). Now there are few community producers of organic rice in Thailand, and their development processes at present are at the beginning stage which are not systematic, minimal concern about sustainable development, especially environmental dimension and
lacks of knowledge and technology to support organic rice production process. Most of agriculture products in Thailand like rice are still traditional in term of production methods.

They are under organic standard. Moreover three dimensions of sustainable development concept including economic dimension, social dimension and environmental dimension hasn’t been actively applied. In fact, 95.01 percent of farmers in Thailand are still traditional both in term of production methods, only 4.99 percent are organic rice production in term of production methods. The highest percentage of farmers in organic rice production community is in the north-eastern part of Thailand. The result is shown in table 1.

<table>
<thead>
<tr>
<th>Community Rice Producers</th>
<th>Percentage (%)</th>
</tr>
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<tbody>
<tr>
<td>Non organic rice producers</td>
<td>95.01</td>
</tr>
<tr>
<td>Organic rice producers</td>
<td>4.99</td>
</tr>
</tbody>
</table>

**Summary**

100

The development process of organic rice production at present are at the beginning stage which are not systematic because the community producers still produce organic rice following the traditional production method and within the bound of their families or communities. They are minimal concern about sustainable development, especially environmental dimension and lack of knowledge and technology to support organic rice production process. So their products are not popular in the wide area of Thailand. The result from secondary and field data by community survey, participatory and non participatory observation, individual and group interviews of community producers, group discussion, public opinions, and share information with selected communities are shown in table 2.
Table 2: Present rice production methods

<table>
<thead>
<tr>
<th>Production Processes</th>
<th>Rice production methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Way</strong></td>
<td>Most of producers are non organic rice production</td>
</tr>
<tr>
<td><strong>Material Use</strong></td>
<td>Most of producers use not pure organic materials.</td>
</tr>
<tr>
<td>(fertilizer, insecticide)</td>
<td>Traditional/Modern knowledge &amp; technology but lack of knowledge &amp; technology to support organic rice production process.</td>
</tr>
<tr>
<td><strong>Production Knowledge &amp; Technology</strong></td>
<td>Most of producers evaluate product quality such as moistness, rice kernel, taste etc, but lack organic quality evaluation.</td>
</tr>
<tr>
<td><strong>Product Evaluation</strong></td>
<td>Use traditional marketing that it is minimal concern about sustainable development concept, value added in agricultural products.</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td>Lack of study on consumer behavior in global market. Lack of study and understanding of marketing trend such as green marketing, cooperate social responsibility (CSR) etc.</td>
</tr>
</tbody>
</table>

The data in table 1 and table 2 show that the development of organic rice production should be changed to knowledge-based production. Knowledge-based production is the production that emphasizes knowledge as the most important material in production process. However knowledge-based production will be possible if community producers have the better way of turning knowledge to practical knowledge that really improve production process.
Knowledge management is the process that set up to identify, seek, create, share, learn, and use knowledge to gain a certain type of benefit. That is to say knowledge management is important for new business organization especially community business that lack the original knowledge and technology for developing their products. Most of successful cases of knowledge management process for business development have good knowledge transfer model which is considered to be the key success factor of knowledge management process. However no knowledge transfer process that suitable for any organization management. So business organizations should develop knowledge transfer activities that suitable their organizations.

(2) From this research SWOT analysis found that the strength of organic rice production in Thailand is that there are many rice planting areas and farmers; the weakness is the lack of knowledge about organic rice production; the opportunity is the supporting policies related to organic rice production from Thai Government, and the threat is the high competition in global rice market between rice exporters from many countries, especially within ASEAN

(3) Organic rice producers in Thailand have various present knowledge transfer activities were currently conducted by few community producers in the research areas such as activities in Farmer School, in learning center and from different types of training.

(4) Suitable knowledge transfer activities for development of organic rice based on sustainable development concept in Thailand as indicated by this research is the use of SCAPEN Model. This model was separated 6 steps, Sustainable development concept, Communication, Awareness, Participation, Education, and Networking.

The research findings focus on three points as follows: (a) organic rice production in Thailand are still traditional both in term of production way, material use, production knowledge& technology, product evaluation, and marketing. Three dimensions of sustainable development concept including economic dimension, social dimension and environmental dimension hasn’t been actively applied.

Appropriate knowledge transfer activities for the production of organic rice in Thailand is participatory knowledge transfer activities among community producers, workers, public sector personnel, business sector personnel and other
important stakeholders. The model that we found suitable for this industry is SCAPEN Model. The model is divided into six elements which are: (1) Sustainable development concept is the information to develop production to sustainable production. (2) Communication is the knowledge communication activities among stakeholders. (3) Awareness is the stakeholders awareness to develop production to sustainable production. (4) Participation is the stakeholders participation in knowledge transfer activities. (5) Education is the practical knowledge transferring method among stakeholders whole education system by formal education for example teaching in school, college, university, informal education for example attending training courses in community knowledge centers, non-formal education for example searching knowledge from anywhere, anytime, any person, or receiving knowledge from mass media etc., and (5) Networking is the building of network include knowledge network, political network, societal network, economic network, and environmental network.

To implement this model, one should follow these 6 steps:

**step 1** to distribute sustainable development concept to community producers by various way through community leaders, economic measure, social etc.,

**step 2** to communicate sustainable development concept to community producers through opinion leaders, local expert,

**step 3** to make awareness in sustainable development concept among community producers through participatory activities such as public forum, public hearing, traditional show etc.,

**step 4** to encourage participation among community producers though public planning, public interesting, economic measure etc.,

**step 5** to educate community producers through non-formal education activities, and

**step 6** to build networking through community social event, create mutual economic interest.

However, the most important step that is considered to be a key success factor is step 2. One of the major reasons is from what this research was discovered to be the biggest obstacle of knowledge transfer activities in this industry is the difficulties of communicating sustainable concepts to community producers.
Based on one of sustainable development concept, knowledge transfer activities have to be used strategically. Therefore, to develop organic rice in Thailand, knowledge transfer of practical knowledge should be one of the key production activities (Figure 2).

![SCAPEN Model Diagram]

**Figure 2: Shows six steps to SCAPEN Model**

**Discussions and Conclusions**

**Discussions**

This study confirms the use of SCAPEN model in the development of organic rice based on sustainable development concept in Thailand. This model realizes that perceived usefulness, and subjective norm which were perceptive factors adapted from the model should have significant influences on knowledge transfer activities adoption among community producers. To cover all the factors behind the adoption of knowledge transfer activities and sustainability development, it also include the role of knowledge factors, environments and industrial factors, individual characteristics, learning style, organizational characteristics cultural factors, and technological factors.
In addition, we suggest that the knowledge transfer activities would improve the development of other sustainability rice production in Thailand. Our comprehensive model above can be taken as a research model for proposition development and further empirical investigation.

**Conclusions**

Main objective of this research is to set up knowledge transfer activities of community producers for the development of organic rice based on sustainable development concept in Thailand. Specifically, the research attempts to 1) study the development of organic rice process, and 2) develop knowledge transfer activities of community producers for the development of organic rice based on sustainable development concept. Both quantitative and quality methods were used in this research. We found that 1) Although Thai Government proposed a policy about organic agriculture, Strategic Plan for Development of Thailand Organic Agriculture 2013-2019, but at present there are few community producers of organic rice in Thailand, and their development processes now are at the beginning stage which are not systematic, minimal concern about sustainable development, especially environmental dimension and lacks of knowledge and technology to support organic rice production process, 2) the strength of organic rice production in Thailand is that there are many rice planting areas and farmers; the weakness is the lack of knowledge about organic rice production; the opportunity is the supporting policies related to organic rice production from Thai Government, and the threat is the high competition in global rice market between rice exporters from many countries, especially within ASEAN, 3) various present knowledge transfer activities were currently conducted by few community producers in the research areas such as activities in Farmer School, in learning center and from different types of training, and 4) suitable knowledge transfer activity strategy for the development of organic rice production of community producers based on sustainable development concept in Thailand as indicated by this research is the use of participatory knowledge transfer activity strategy, SCAPEN Strategy. This strategy was separated 6 steps, Sustainable development concept, Communication, Awareness, Participation, Education, and Networking.
The model for the strategy we found suitable for this industry is SCAPEN Model. Implication of this model can be divided into six steps: step 1 to distribute sustainable development concept to community producers by various way through community leaders, economic measure, social etc., step 2 to communicate sustainable development concept to community producers through opinion leaders, local expert, step 3 to make awareness in sustainable development concept among community producers through participatory activities such as public forum, public hearing, traditional show etc., step 4 to encourage participation among community producers though public planning, public interesting, economic measure etc., step 5 to educate community producers through non-formal education activities, and step 6 to build networking through community social event, create mutual economic interest.

This model could be used for transferring knowledge for the development of sustainability organic rice production in Thailand. In the future, the author will apply this model for other sectors, and improve the model to make even more general.

**Research Limitations and Direction for Further Research**

This research has two main limitations: (1) limit of amount of community producers who produce organic rice in year 2012-2013.

Further research is required to develop appropriate research hypotheses to carry on with the research. Future studies can explore deeper the exact knowledge transfer strategy in the other industry and the influence of knowledge management practice on organizational performance and productivity. We believe that this rather complex model can be taken as a research model to investigate knowledge management in detail both in other industry and in its effect on organizational performance and productivity.

However to apply the model to other industry, other area and other cultural context need extensive field survey of stakeholders on both quantitative and qualitative side. In order to improve performance of an organization, we may not need all factors in SCAPEN model depending on contextual factors of each situation. The model appears in this paper is simply treated as a general case.
References


Perehudoff, Carol.(2007)."Thailand's miracle grain for all seasons; Humble rice has the power to feed, cleanse, fight ravages of time." The Toronto Star [Toronto] 30 June 2007.


Behavior of Monthly Total Returns of U.S. Treasury Bills:
1926 To 2011

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Abraham Habib
University of Massachusetts Boston, USA

Abstract

This paper explores the behavior of total monthly returns of Treasury bills over the period January 1926 to December 2011. We examine three types of month effects: if the mean of T-bills total monthly returns of the entire data set, and of a given month were significantly different from zero; if the mean of T-bills total monthly returns of a given month was different from the mean of the other eleven months stacked; and if the variance of the T-bills total monthly returns for a given month was different from the variance of the other eleven months stacked. The mean of T-bills total monthly returns (0.294%) for the entire data set as well as the mean of all the months were significantly greater than zero. No month effect was detected either in terms of mean or in terms of variance. When the data are sliced into three sub-periods, we find results similar to what we find for the entire data set. The non-existence of significant differences in the means or the volatilities of the returns of a month compared to the other eleven months stacked together shows that T-bills market is largely efficient. This is contrary to what we found with similar studies on monthly returns of long-term Treasury and corporate bonds. The mean of T-bills total monthly returns during the Republican presidencies (0.372%) was higher than during the Democratic presidencies (0.215%). Compared to the other eleven months stacked, the variance of the returns of December during Republican presidencies was lower and it was higher during Democratic presidencies.
The U.S. Treasury bills market is one of the most active markets in the world. U.S. Treasury securities are the debt financing instruments of the United States federal government. T-bills have maturities of 1-month, 3-month, 6-month, and 1-year. They are issued at a discount to face value and reach full value (par value) at maturity. The difference between the discount price and par value is the interest or return earned. They carry a par value of $1,000 and up to $5 million. T-bills are backed by the credit of the U.S. government, and are thus considered close to risk-free investment. From 1928 to 2011, U.S. three-month T-bills provided investors with a 3.61% compound annual return. With 3.11% compound annual inflation, the real return over this period has been 0.50%. During this period, the annual returns have ranged between 0% and 15%, with the returns ranging from 0% to 5% in 59 of the 84-year period. Historically, T-bills have realized the highest returns during the inflationary 1970's and early 1980's. T-bills have realized the lowest returns during the years of the Great Depression (the 1930's), during the 1940's, when interest rates were price controlled ("pegged") by the Federal Reserve, and recently during the "Great Recession" period and thereafter (2008 - 2011).

With such an active trading in T-bills and with sophisticated investors that include many foreign governments, the T-bills market is expected to exhibit a high degree of efficiency. For example, we will not expect to find monthly seasonality in the returns from T-bills. This paper explores some aspects of the behavior of the monthly returns from T-bills in general and the presence of monthly seasonality in particular. Insight into the behavior of U.S. T-bills returns has implications for investors and policy makers. The next section deals with previous research on the U.S. T-bills returns behavior, followed by research methodology of this study, analysis of results, and summary and conclusion.

Contrasted to the extensive research on equity returns, few investigations examine seasonality in the fixed income markets and even fewer in the T-bills market. Gibbons and Hess (1981) found some day-of-the-week effects in the trading of thirty-day T-bills between 1963 and 1968. Ferri, Goldstein, and Oberhelman
(1984) also look at the day-of-the-week effect in T-bills return. The result of this study show for the data tested that the day-of-the-week effect in the returns of the bill market are occasional but irregular features of the market. Eiseman and Timme (1984) explore intraweek seasonality in the federal funds market using data from January 1966 to June 1982, and found seasonality to vary over time in intensity and relative size. Park and Reinganum (1986) find unusual price behavior of T-bills that mature at the turn of calendar months. Flannery and Protopapadakis (1988) find intraweek seasonality continue to be significant but not uniform. Chen and Chan (1997) found using monthly returns from 1926 to 1990 T-bills return showed strong October effect during economic expansion and strong November effect during contraction.

Research Methodology

The goal of this research is to find if there was a month effect in U.S. T-bills total monthly returns for the period of the study (1926-2011) and if so, was it more pronounced during Democratic presidencies or Republican presidencies. Many studies have used the dummy variable methodology to detect market seasonality. Chien, Lee and Wang (2002) provide statistical analysis and empirical evidence that the methodology may lead to misleading results. We avoid this problem by following the methodology used in Hamid and Dhakar (2003) through which they analyze seasonality in the monthly changes of the Dow Jones Industrial Average.

We study the month effect in three different ways. Unless otherwise stated, significance in all cases is tested at the 5% level.

1. If the mean of T-bills monthly total returns was different from zero. The mean of monthly total returns for a given month $i$ is subjected to the following hypothesis test: $H_0$: $\mu_i = 0$ vs. $H_a$: $\mu_i \neq 0$. We use the standard t-test for testing this hypothesis.

2. If the mean of T-bills total monthly returns of a given month was different from the mean of the other eleven months stacked. We conduct the following hypothesis test for a given month $i$: $H_0$: $\mu_i = \mu_j$ vs. $H_a$: $\mu_i \neq \mu_j$, where $j$ represents the remaining 11 months other than $i$. Since the variances for many $(i, j)$ periods and the sample sizes were unequal, we use the more conservative t-test assuming unequal variances.
3. If the variance of the T-bills total monthly returns for a given month was different from the variance for the other months. We conduct the following hypothesis test for a given month $i$: $H_0: \sigma_i^2 = \sigma_j^2$ vs. $H_a: \sigma_i^2 \neq \sigma_j^2$, where $j$ represents the remaining 11 months other than $i$. We use the standard F-test for testing this hypothesis.

In addition to the t-test and F-test, we use three nonparametric tests which do not depend on the assumption of normal distribution of the data series. Kruskal-Wallis nonparametric test is a test of differences in population medians. Mood’s Median test is like Kruskal-Wallis test but is more robust against outliers. Mann-Whitney test is a 2-sample rank test (also called the two-sample Wilcoxon rank sum test) of the equality of two population medians.

To gain deeper insight into the month effect, we divide the entire period (January 1926 to December 2011) into three sub-periods:

- 1926 to 1945 (which includes the Great Depression years, and the Second World War);
- 1946 to 1972 (which includes the Breton Woods fixed exchange rate era, and the break down of that era in 1972);
- 1973 to 2011 (which includes the volatile world we live in since the first oil crisis of 1973).

We analyze the behavior of T-bills total monthly returns for (a) the entire data, (b) the three sub-periods, (c) the Republican presidencies, and (d) the Democratic presidencies.

**Data and Descriptive Statistics**

The data consists of U.S. T-bills total monthly returns January 1926 to December 2011. The data is obtained from Stocks, Bonds, Bills, and Inflation Yearbook 2012. The data contains 518 months which saw Republican presidents, and 514 months which saw Democratic presidents. That gives us 1,032 months of observations.
The descriptive statistics for the monthly T-bills total monthly returns are shown in Table 1. The mean monthly return for the entire period was 0.29% and the median is 0.26%. The distribution of monthly means is positively skewed. The maximum monthly return was 1.35% in June 1981 and the minimum was -0.06% in November 1938.

Table 1: Descriptive Statistics for T-bills Total Monthly Returns: January 1926 to December 2011

<table>
<thead>
<tr>
<th>T-BILLS TOTAL MONTHLY RETURNS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.29%</td>
</tr>
<tr>
<td>Median</td>
<td>0.26%</td>
</tr>
<tr>
<td>Mode</td>
<td>0.30%</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.25%</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.28</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.04</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.06%</td>
</tr>
<tr>
<td>Maximum</td>
<td>1.35%</td>
</tr>
<tr>
<td>Count</td>
<td>1032</td>
</tr>
</tbody>
</table>

Figure 1 shows the frequency distribution of T-bills monthly returns for the entire data set. The returns are far from being normally or log-normally distributed. The Kurtosis (1.28) is much less than it would be under normal distribution (3).
The distribution is presented next in more compact form. Only 12 (less than 1%) of the monthly returns were negative (between -0.06% and -0.01%). Nearly half of the returns (46%) were between 0% and 0.24%. A little over one-third of the returns (35%) were between 0.25% and 0.49%. That means a little over four-fifths of the returns (82%) were less than 0.49%. So less than one-fifth of the returns were 0.50% or higher (highest return was 1.35%). From December 2008 to December 2011, 36 of the returns were 0% (15) or 0.01% (21). The very high Jarque-Berra statistic of 313.25 also shows non-normality of the data series.

Table 2: Frequency Distribution of T-bills Monthly Returns: 1926 to 2011

<table>
<thead>
<tr>
<th>Range of Returns</th>
<th>Frequency</th>
<th>Frequency (as % of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.06% to -0.01%</td>
<td>12</td>
<td>1.16</td>
</tr>
<tr>
<td>0.00% to 0.24%</td>
<td>474</td>
<td>45.93</td>
</tr>
<tr>
<td>0.25% to 0.49%</td>
<td>360</td>
<td>34.88</td>
</tr>
<tr>
<td>0.50% to 0.74%</td>
<td>130</td>
<td>12.6</td>
</tr>
<tr>
<td>0.75% to 0.99%</td>
<td>38</td>
<td>3.68</td>
</tr>
<tr>
<td>1.00% to 1.35%</td>
<td>18</td>
<td>1.74</td>
</tr>
<tr>
<td>Total</td>
<td>1032</td>
<td>100%</td>
</tr>
</tbody>
</table>
Figure 2 shows the trend of monthly returns for the entire data set. The peak period was from January 1978 to December 1982 – the mostly Carter years during which the first and second oil shocks and the aftermath of the inflationary pressures of the Vietnam War led to double digit inflation rates and corresponding high T-bills monthly returns. During these five years the average return was 0.86% (0.29% for the entire data period) or 10.32% annualized.

Figure 2: T-bills Monthly Returns: January 1926 to December 2011

Results and Analysis

**Entire Period (1926 – 2011)**

Firstly, we explore month effect for the entire U.S. T-bills total monthly returns data set. We test for the three types of month effects. Table 3 summarizes the statistical outputs and results of the tests.
Table 3: Month Effect in T-bills Total Returns: January 1926 to December 2011

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>1032</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Mean</td>
<td>0.294</td>
<td>0.292</td>
<td>0.274</td>
<td>0.298</td>
<td>0.300</td>
<td>0.296</td>
<td>0.291</td>
<td>0.296</td>
<td>0.293</td>
<td>0.298</td>
<td>0.307</td>
<td>0.283</td>
<td>0.297</td>
</tr>
<tr>
<td>Median</td>
<td>0.260</td>
<td>0.260</td>
<td>0.255</td>
<td>0.280</td>
<td>0.260</td>
<td>0.260</td>
<td>0.265</td>
<td>0.275</td>
<td>0.255</td>
<td>0.265</td>
<td>0.280</td>
<td>0.265</td>
<td>0.255</td>
</tr>
<tr>
<td>Minimum</td>
<td>-</td>
<td>0.060</td>
<td>0.010</td>
<td>0.030</td>
<td>0.010</td>
<td>0.010</td>
<td>0.020</td>
<td>0.010</td>
<td>0.010</td>
<td>0.000</td>
<td>0.000</td>
<td>0.060</td>
<td>0.000</td>
</tr>
<tr>
<td>Range</td>
<td>1.410</td>
<td>1.050</td>
<td>1.100</td>
<td>1.220</td>
<td>1.270</td>
<td>1.170</td>
<td>1.350</td>
<td>1.250</td>
<td>1.290</td>
<td>1.240</td>
<td>1.210</td>
<td>1.130</td>
<td>1.310</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.253</td>
<td>0.234</td>
<td>0.234</td>
<td>0.259</td>
<td>0.270</td>
<td>0.258</td>
<td>0.251</td>
<td>0.256</td>
<td>0.253</td>
<td>0.253</td>
<td>0.264</td>
<td>0.248</td>
<td>0.262</td>
</tr>
<tr>
<td>Sample Var</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>p-value (m=0)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>p-value (t test)</td>
<td>0.952</td>
<td>0.428</td>
<td>0.867</td>
<td>0.813</td>
<td>0.918</td>
<td>0.945</td>
<td>0.904</td>
<td>0.991</td>
<td>0.854</td>
<td>0.609</td>
<td>0.699</td>
<td>0.913</td>
<td></td>
</tr>
<tr>
<td>p-value (F test)</td>
<td>0.169</td>
<td>0.170</td>
<td>0.391</td>
<td>0.199</td>
<td>0.417</td>
<td>0.484</td>
<td>0.439</td>
<td>0.503</td>
<td>0.513</td>
<td>0.298</td>
<td>0.410</td>
<td>0.321</td>
<td></td>
</tr>
<tr>
<td>Mean % Change</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
</tr>
</tbody>
</table>

Note 1. “Positive” implies that the mean percentage change was significantly greater than zero. “Negative” implies that the mean percentage change was significantly less than zero.

Note 2. “Higher” implies that the mean percentage change was significantly greater than the rest of the months. “Lower” implies that the mean percentage change was significant smaller than the rest of the months.

Note 3: All returns in all tables are in percentage.

The mean of monthly returns for the entire data set of 0.294% was significantly greater than zero (p value=0.00). The means of monthly returns of all the individual months were significantly greater than zero. October experienced the highest mean return (0.307%) followed by September and March (both 0.298%). February had the lowest mean (0.274%). As implied by the blank spaces in the second last row of Table 2, the returns of none of the months was significantly different from the returns of the other eleven months stacked. As implied by the blank spaces in the last row of Table 2, the standard deviations of none of the
months was significantly different from the standard deviation of the returns of the other eleven months stacked. The non-existence of significant differences in the means or the volatilities of the returns of a month compared to the other eleven months stacked shows that T-bills prices were largely efficient. This is contrary to what we found with similar studies on monthly returns of long-term Treasury and corporate bonds.

Figure 3 graphs the mean of monthly returns for the entire data set. On average, there was a slight fall from January to February, a rise in March and then a rather flat trend until August and then rising in September and October. We then see a fall in November and then rise in December. If intently viewed, the figure shows a rather symmetrical distribution in the means of monthly returns with July as the mid-point.

Nonparametric Kruskal-Wallis test result (not reported for brevity) shows no significant difference in the medians of the returns of the twelve months (H statistic = 0.85; p value=1.00). Mood’s Median test also shows no difference in the medians of the monthly returns (Chi-Square statistic = 0.88; p value=1.00).

**Figure 3: T-bills Total Monthly Returns: January 1926 – December 2011**

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.29</td>
<td>0.27</td>
<td>0.30</td>
<td>0.30</td>
<td>0.29</td>
<td>0.30</td>
<td>0.29</td>
<td>0.30</td>
<td>0.30</td>
<td>0.31</td>
<td>0.28</td>
<td>0.30</td>
</tr>
</tbody>
</table>
First Sub-Period (1926-1945)

Table 4 below shows that for this sub-period, in spite of the Great Depression leading to deflation and the pegging of interest rates during World War II, the mean of monthly returns (0.088%) was significantly greater than zero (p value=0.00). The means of monthly returns of all the individual months were significantly greater than zero (p values between 0.00 and 0.01). As implied by the blank spaces in the second last row of Table 4, the returns of none of the months was significantly different from the mean returns of the other eleven months stacked. As implied by the blank spaces in the last row of Table 4, the standard deviations of none of the months was significantly different from the standard deviation of the returns of the other eleven months stacked. The absence of monthly seasonality in returns goes to show the efficiency of T-bills prices in the first sub-period.

Table 4: Month effects in T-bills Total Returns: 1926-1945

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
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<th>Nov</th>
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<td>20</td>
<td>20</td>
<td>20</td>
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</tr>
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<td>0.094</td>
<td>0.096</td>
<td>0.102</td>
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<td>0.087</td>
<td>0.101</td>
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<td>0.093</td>
<td>0.086</td>
<td>0.068</td>
</tr>
<tr>
<td>Median</td>
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<td>0.030</td>
<td>0.020</td>
<td>0.020</td>
<td>0.030</td>
<td>0.030</td>
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<td>0.030</td>
<td>0.025</td>
<td>0.020</td>
<td>0.020</td>
</tr>
<tr>
<td>Minimum</td>
<td>-</td>
<td>0.010</td>
<td>0.030</td>
<td>0.010</td>
<td>0.010</td>
<td>0.020</td>
<td>0.000</td>
<td>0.010</td>
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<td>0.000</td>
<td>0.000</td>
<td>-</td>
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</tr>
<tr>
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<td>0.440</td>
<td>0.520</td>
<td>0.330</td>
<td>0.400</td>
<td>0.350</td>
<td>0.460</td>
<td>0.380</td>
<td>0.370</td>
</tr>
<tr>
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<td>0.390</td>
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<td>0.370</td>
<td>0.460</td>
<td>0.520</td>
<td>0.340</td>
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<td>0.350</td>
<td>0.460</td>
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<tr>
<td>Std Dev</td>
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<td>0.118</td>
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<tr>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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<tr>
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<td>0.005</td>
<td>0.003</td>
<td>0.002</td>
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<td>0.945</td>
<td>0.699</td>
<td>0.876</td>
<td>0.753</td>
<td>0.692</td>
<td>0.896</td>
<td>0.931</td>
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<tr>
<td>p-value (F test)</td>
<td>0.466</td>
<td>0.358</td>
<td>0.366</td>
<td>0.391</td>
<td>0.423</td>
<td>0.137</td>
<td>0.363</td>
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<td>Pos</td>
<td>Pos</td>
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</tr>
</tbody>
</table>

Figure 4 shows the trend of mean of monthly returns from 1926 to 1945. The mean of monthly returns increased from 1926 to 1929, decreased thereafter until 1933, and was within a narrow band after that until 1945. The returns were close to zero in four of those years: 1938 to 1941. America entered the war in 1941 and
high financing needs could have caused returns to be higher but yields were kept low to finance war needs.

Figure 4: Average of Monthly Returns: January 1926 to December 1945

Figure 5 shows that the monthly means of the twelve months from 1926 to 1945 shows some cyclicity with peaks in March, June, and October. There is also an overall falling trend with the low in December.

Figure 5: T-bills Total Monthly Returns: January 1926 to December 1945
Second Sub-Period (1946-1972)
This was an era of fixed-exchange rates and relative domestic progress and prosperity. This was an era in which America helped Europe to rise up from the ashes of the Second World War under the Marshall Plan and also helped Japan to get back on its feet. (The Marshall Plan itself was worth over $120 billion in today’s dollars.) Table 5 shows that compared to the previous sub-period, the mean of T-bills monthly total returns more than doubled (0.228% vs. 0.088%) and this was significantly greater than zero (p = 0.00). The means of all the individual months were positive and significantly greater than zero. As implied by the blank spaces in the second last row of Table 5, the returns of none of the months was significantly different from the returns of the other eleven months stacked. As implied by the blank spaces in the last row of Table 5, the standard deviations of none of the months was significantly different from the standard deviation of the returns of the other eleven months stacked.

Table 5: Month effects in T-bills Total Returns: 1946-1972

<table>
<thead>
<tr>
<th>All</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
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<tr>
<td>Mean</td>
<td>0.228</td>
<td>0.242</td>
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<td>0.223</td>
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<td>0.223</td>
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<tr>
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<td>0.190</td>
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<td>0.030</td>
<td>0.030</td>
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<tr>
<td>Maximum</td>
<td>0.640</td>
<td>0.600</td>
<td>0.570</td>
<td>0.530</td>
<td>0.530</td>
<td>0.580</td>
<td>0.530</td>
<td>0.530</td>
<td>0.620</td>
<td>0.600</td>
<td>0.520</td>
<td>0.640</td>
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<tr>
<td>Range</td>
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<td>0.570</td>
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<td>0.590</td>
<td>0.570</td>
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<td>0.147</td>
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<tr>
<td>Sample Var</td>
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<td>0.000</td>
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<tr>
<td>p-value (m=0)</td>
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<td>0.000</td>
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<td>0.000</td>
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<td>0.000</td>
<td>0.000</td>
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</tr>
<tr>
<td>p-value (t test)</td>
<td>0.610</td>
<td>0.573</td>
<td>0.850</td>
<td>0.562</td>
<td>0.892</td>
<td>0.865</td>
<td>0.964</td>
<td>0.813</td>
<td>0.771</td>
<td>0.451</td>
<td>0.810</td>
<td>0.603</td>
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<tr>
<td>p-value (F test)</td>
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<td>0.525</td>
<td>0.506</td>
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<td>0.408</td>
<td>0.459</td>
<td>0.424</td>
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<td>0.395</td>
<td>0.423</td>
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<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
</tr>
</tbody>
</table>

Figure 6 below shows means of monthly total returns for the second sub-period. Contrasted to the trend for the first sub-period, we see an overall rising trend from
February to December. The cyclicity is less pronounced for this sub-period. The mean returns were between 0.21% and 0.25% with no significant difference in the returns.

**Figure 6: T-bills Total Monthly Returns: January 1946 – December 1972**

**Third Sub-Period (1973-2011)**

From a mean monthly change of 0.088% in the first sub-period and 0.228% in the second sub-period, the mean return increased to 0.444% in the third sub-period as can be seen in Table 6. It was significantly greater than zero. All months experienced mean returns significantly greater than zero. As implied by the blank spaces in the second last row of Table 6, the returns of none of the months was significantly different from the returns of the other eleven months stacked. As implied by the blank spaces in the last row of Table 6, the standard deviations of none of the months was significantly different from the standard deviation of the returns of the other eleven months stacked.

So we find no month effect in terms of either the mean return of a month being significantly different from the mean of the other eleven months, or the volatility of a month being significantly different from the volatility of the other eleven months – either in the entire data period or in the data of any of the three sub-periods.
### Table 6: Month effects in T-bills Total Returns: 1973-2011

<table>
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<tr>
<th></th>
<th>All</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
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<th>Jul</th>
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<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tbody>
<tr>
<td>Mean</td>
<td>0.444</td>
<td>0.429</td>
<td>0.408</td>
<td>0.451</td>
<td>0.467</td>
<td>0.452</td>
<td>0.435</td>
<td>0.453</td>
<td>0.451</td>
<td>0.453</td>
<td>0.457</td>
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<td>0.430</td>
<td>0.390</td>
<td>0.430</td>
<td>0.440</td>
<td>0.430</td>
<td>0.410</td>
<td>0.450</td>
<td>0.440</td>
<td>0.440</td>
<td>0.420</td>
<td>0.400</td>
<td>0.480</td>
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<td>0.000</td>
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<tr>
<td>Std Dev</td>
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<td>0.281</td>
<td>0.295</td>
<td>0.275</td>
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<td>0.001</td>
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<td>0.000</td>
<td>0.000</td>
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<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
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<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
</tr>
</tbody>
</table>

Figure 7 below shows that the trend of the means of the monthly returns of this sub-period is pretty similar to the trend we saw for the previous sub-period; we see an overall rising trend. The returns have ranged from a low of 0.41% in February to a high of 0.49% in December. The returns are depressed little bit because of the low yields since 2007 – close to 0%.

![T-Bills Monthly Returns, 1973-2011](image)
Comparison of Three Sub Periods

Figure 8 shows the means of the various months for the three sub-periods. As we saw for the entire data set, we see a similar pattern for each of the three sub-periods.

Figure 8: Comparison of Three Sub-periods Contrasted With Entire Data Set

An interesting trend is the increase in the mean of monthly returns for each of the three successive sub-periods (0.09%, 0.23%, 0.44%) and corresponding increase in the medians (0.03%, 0.21%, 0.43%) and an increase in the standard deviations of the monthly changes (0.13%, 0.14%, 0.27%).

The means of the three sub-periods are significantly different: the means of the second and third sub-periods are significantly higher than the mean of the first sub-period, and the mean of the second sub-period is significantly higher than the mean of the first sub-period – all for p values of 0.00.
Nonparametric Kruskal-Wallis test result (not reported for brevity) shows significant difference in the medians of the returns of the three sub-periods (H statistic = 386.53; p value=0.00). Mood’s Median test also shows significant difference in the medians of the monthly returns (Chi-Square statistic= 263.59; p value=0.00).

While the means and medians increased, the standard deviations also increased significantly based on F-test. The standard deviation of the second sub-period is significantly higher than that of the first sub-period for a p-value of 0.04. The standard deviation of the third sub-period is significantly higher than that of the first for a p-value of 0.00. The standard deviation of the third sub-period is significantly higher than that of the second sub-period for a p-value of 0.00. The stable period during Breton Woods fixed exchange rate system did not lower the standard deviation of the second sub-period possibly as a result of the effects of the Korean War and the Vietnam War. The even higher standard deviation during the third sub-period (0.27%) is attributable to the volatile world after the break-up of the Breton Woods system and the effects of globalization and technological innovations causing wide-spread dissemination of news and the need for market participants to react faster to such news.

**Month Effect: Republican and Democratic Presidential Periods**

Given the important impact presidencies have on the economy, we explored the three types of month-effects in T-bills total monthly returns during the Republican and Democratic presidencies.
Republican Presidencies

Table 7 shows the statistical output for T-bills total monthly returns during Republican presidencies over the entire period. The mean of T-bills total monthly returns (0.372%) over the 518 Republican months was significantly greater than zero. The median of T-bills total monthly returns during Republican periods was 0.335%. The means of T-bills total monthly returns for all the individual months were significantly greater than zero. We do not see a month effect in terms of mean: the mean return of none of the months was significantly different from the mean returns of the other eleven months stacked. The mean of monthly returns for the twelve months were within 0.34% and 0.39%. However, we see a month effect in terms of variance: the standard deviation of the returns of December was significantly lower than that of the other eleven months stacked. We would not expect to see such an anomaly in a highly efficient market; the volatility of no month should be significantly different from that of the other eleven months.

Table 7: Month effects in T-bills Total Return: Republican presidencies

<table>
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<th>Mar</th>
<th>Apr</th>
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</tr>
<tr>
<td>Mean</td>
<td>0.372</td>
<td>0.341</td>
<td>0.351</td>
<td>0.381</td>
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<td>0.382</td>
<td>0.383</td>
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<td>0.382</td>
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<tr>
<td>Median</td>
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<tr>
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<td>-0.030</td>
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<td>0.080</td>
<td>0.010</td>
<td>0.020</td>
<td>0.030</td>
<td>0.030</td>
<td>0.030</td>
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<td>1.190</td>
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<tr>
<td>Std Dev</td>
<td>0.246</td>
<td>0.204</td>
<td>0.232</td>
<td>0.241</td>
<td>0.261</td>
<td>0.264</td>
<td>0.262</td>
<td>0.272</td>
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<td>0.001</td>
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<td>0.737</td>
<td>0.804</td>
<td>0.784</td>
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<td>0.793</td>
<td>0.648</td>
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<td>0.294</td>
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<td>0.237</td>
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<td>Pos</td>
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<td>Pos</td>
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</tbody>
</table>
Figure 9 shows that the mean returns of March through October ranged within a narrow range of 0.38% to 0.39%. The returns of the first two and last two months ranged within a narrow band of 0.341% and 0.354%. The figure resembles a plateau between March and October.

**Table 8 shows the statistical output for T-bills total monthly returns during Democratic presidencies over 1926-2011. The mean of T-bills total monthly returns (0.215%) over the 514 Democratic months is significantly greater than zero. The overall median of T-bills total monthly returns during Democratic presidencies was 0.120% compared to 0.335% during Republican presidencies. The returns of all the months were significantly greater than zero. Ten of the 12 months during democratic presidencies experienced returns significantly greater than zero. We do not see a month effect in terms of mean: as in the case of Republican presidencies. The mean return of none of the months was significantly different from the mean returns of the other eleven months stacked. The mean of monthly returns for the twelve months were within 0.19% and 0.24%. As in the case of the Republican presidencies, we see a month effect in terms of variance, but of the opposite type: the standard deviation of the returns of December was significantly higher than that of the other eleven months. We would not expect to**
see such an anomaly in a highly efficient market; no month should exhibit volatility significantly different from that of the other eleven months.

Table 8: Month effects in T-bills Total Returns: Democratic presidencies

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tr>
<td>Count</td>
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<td>42</td>
<td>43</td>
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<td>43</td>
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<tr>
<td>Mean</td>
<td>0.215</td>
<td>0.241</td>
<td>0.194</td>
<td>0.215</td>
<td>0.216</td>
<td>0.210</td>
<td>0.200</td>
<td>0.203</td>
<td>0.206</td>
<td>0.213</td>
<td>0.224</td>
<td>0.216</td>
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<td>0.110</td>
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<tr>
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<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.02</td>
<td>0.000</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.000</td>
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<td>1.040</td>
<td>0.890</td>
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<td>1.260</td>
<td>0.820</td>
<td>0.810</td>
<td>0.770</td>
<td>0.770</td>
<td>0.830</td>
<td>0.950</td>
<td>0.990</td>
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<td>1.050</td>
<td>0.900</td>
<td>1.220</td>
<td>1.270</td>
<td>0.840</td>
<td>0.810</td>
<td>0.780</td>
<td>0.780</td>
<td>0.830</td>
<td>0.950</td>
<td>1.050</td>
<td>1.310</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.234</td>
<td>0.255</td>
<td>0.211</td>
<td>0.251</td>
<td>0.254</td>
<td>0.223</td>
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<td>0.204</td>
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<td>p-value (m=0)</td>
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<td>0.000</td>
<td>0.000</td>
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<td>p-value (F test)</td>
<td>0.239</td>
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<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
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<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
<td>Pos</td>
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</tr>
</tbody>
</table>

Figure 10 shows a slightly upward rising trend in the means of monthly returns for the twelve months.
Figure 8: T-bills Total Monthly Returns: 1926-2011: Democratic Presidencies

Comparison between Republican and Democratic Presidencies: 1926-2011

Figure 11 below shows the mean monthly T-bills total returns for the entire period, as well as the mean monthly returns under Republican and Democratic presidencies. The pattern is pretty similar for all three trend lines from February onwards. The high point is October for the entire data period and the Republican presidencies; it is January during Democratic presidencies.

Figure 11: Monthly Mean Returns Contrasted: Republican vs. Democratic Presidencies
Two-sample t-test assuming equal variances shows a significant difference (p value=0.00) between the mean monthly returns during Republican presidencies (0.372%) and Democratic presidencies (0.215%). However, F-test (p value=0.27) shows no significant difference in the standard deviations of monthly returns during Republican presidencies (0.246%) and during Democratic presidencies (0.234%).

Nonparametric Kruskal-Wallis test result (not reported for brevity) shows significant difference in the medians of the returns during Republican and Democratic presidencies (H statistic = 133.45; p value=0.00. Two-sample rank test (called the Mann-Whitney test) of the equality of two population medians also shows significant difference in the medians of the returns under the two types of presidencies (W statistic = 322853.0; p value=0.00).

It would be interesting to see if borrowing during the Republican presidencies was significantly higher than during Democratic presidencies to warrant the higher average returns achieved by investors during Republican presidencies. However, we have to note that such results are not just the action of the presidents in power but also caused by actions of the Congress and the Federal Reserve System. It will be very hard, if not impossible, to isolate the relative impact of the actions of the three parties.

If war periods cause higher prices, Democrats have had more than their share of war presidents: Woodrow Wilson was the war president during First World War, Franklin Delano Roosevelt during Second World War, Harry Truman during Korean War, and Kennedy and Johnson presided over the major part of the Vietnam War. The Depression Years, which depressed prices greatly, were presided over by Republican President Herbert Hoover. These factors could well have accounted for the lower monthly returns during Democratic presidencies.

**Mean Returns during Expansions and Recessions**

The mean monthly returns for the 832 months that saw economic expansion was 0.2920%. The mean monthly returns for the 216 months that saw economic recession was 0.2912%. There is no significant difference between the two means (p value=0.97). The standard deviations of the monthly returns in the two periods are respectively 0.2386% and 0.2965% -- and the difference is significant based on F-test for a p-value of 0.00. Recessions bring greater uncertainty and hence we
would expect to see greater variance of returns in such periods. But we do not see a significant difference in the means of the two economic conditions.

**Mean Returns during Crises**

The mean of T-bills monthly total returns during the various crisis years were as follows:

- **Great Depression (October 1929 to November 1933):** 0.1182%
- **World War II (January 1, 1939 to August 15, 1945):** 0.0151%
- **World War II (December 7 to August 15, 1945)**\(^{13}\): 0.0264%
- **Korean War (June 27, 1950 to July 27, 1953):** 0.1324%
- **Vietnam War (August 1964 to January 1973)**\(^{14}\): 0.3961%
- **Vietnam War (August 1964 to April 30, 1975)**\(^{15}\): 0.4362%

Part of the Vietnam War period was Republican President Nixon’s presidency (January 1969 to August 1974) and then it was Republican President Ford (August 1974 to January 1977). The Vietnam War cost $118 billion, and started the inflationary cycle that tarnished the Carter presidency (February 1977 to January 1981). The mean of monthly returns during this period was 0.694% -- or 8.32% annualized – much higher than for the entire data period (3.53%). The foregoing mean returns are all lower than the mean return for the entire data period (0.294%) except for the mean return during Vietnam War.

**Summary and Conclusion**

This paper explores the behavior of the U.S. T-bills total monthly returns over the period January 1926 to December 2011. We looked at seasonality via the month effect in T-bills total monthly returns. We looked at three types of month effects: if the means of monthly T-bills total monthly returns of the entire data set and of

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\(^{13}\) This period takes into account the formal declaration of war against Japan after the bombing of Pearl Harbor by the Japanese on December 7, 1941.

\(^{14}\) The start of the Vietnam War is assumed as August 1964 when President Johnson got Congressional authorization for use of force for going into combat operations. Prior to that, the U.S. had mainly training and support role with the South Vietnamese Armed Forces. The war formally ended on April 30, 1975, but in this scenario, the end of U.S. active involvement is taken as the Paris accord of January 1973.

\(^{15}\) This scenario takes into account the final fall of the South Vietnamese regime.
each of the twelve months were significantly different from zero; if the mean of total monthly returns for each month was different from the means of the other months stacked; if the variance of the total monthly returns for each month was different from the variance of the other eleven months stacked.

The means of T-bills total monthly returns for the entire data set as well as for each month were significantly greater than zero (p = 0.00). We find that there is some semblance of symmetrical distribution in the monthly returns with July as the mid-point. The means of monthly returns as well as the standard deviations of the returns of none of the months were significantly different from that of the other eleven months.

We sliced the data into three sub-periods to gain greater insight on monthly seasonality. We find significant increase in the means and medians of monthly returns for each of the three successive sub-periods and also an increase in the standard deviations of the monthly returns for the successive sub-periods – which was not significant. The mean of monthly returns for each sub-period and for each month in each sub-period were significantly greater than zero. As in the case of the entire data period, the means of monthly returns as well as the standard deviations of the returns of none of the months in any of the sub-periods were significantly different from that of the other eleven months. The absence of seasonality in monthly returns for the entire data period as well as for the three sub-periods is a testament to the efficiency of the T-bill market to a high degree.

The mean of T-bills total monthly returns for the 518 months of Republican presidencies (0.372%) was significantly higher than the mean of the 514 months of Democratic presidencies (0.214%) and so were the medians. There was no significant difference in the variances of returns of the two presidencies. However, the variance of the returns of December during Republican presidencies was significantly lower compared to the other eleven months; the variance of December was higher compared to the other eleven months during Democratic presidencies.
REFERENCES


1. Introduction

Globalization has been escalating over time to become an inevitable reality throughout the world nowadays; and according to Barber (2012), the world is becoming one big transnational market in which multinational corporations are expanding (p. 29). However, that expansion requires careful attention to different cultural contexts "globalization", thus movies present an adequate vehicle for transnational advertising. Multinational corporations have seized the opportunity to place their products within movies. Expenses on product placements in US media, according to Lehu (2007), have risen from "US$190 million in 1974, to US$512 million in 1985, and US$1.30 billion in 1994 to reach US$3.458 billion in 2004" (p. 34) which highlights the increasing global consumer capitalism. Product Placement in movies, the appearance of a product or brand within a movie scene, generates high global reach and breaks through traditional set campaign-periods. It also guarantees exposure due to its implicit nature that makes it unavoidable unlike traditional TV advertising. Moreover, a successful product placement does not necessarily imply a homogenous trend across cultures; for example, Kureshi & Sood (2011) reveal that in 2007-2009, Romance/Drama movies involved the highest number of product placements in Bollywood while Comedies involved the highest number in Hollywood (p. 250). Therefore, product placement specialists seem aware of cultural barriers hindering placement effectiveness, so they use it differently to fit cultural contexts.

This research paper aims at comparing trends of product placement as a means of transnational advertising within French and American movies through analyzing a sample of movies produced in France and the United States. Content analysis is used to explore variables such as product category, average placement per minute,
and type of placement. Research findings indicate that clothing brands were the most frequently placed products in the French movie compared to beverage products in the American one. This implies that patterns of product placement differ according to variables within different cultural contexts, thus global strategies are employed to fit each context.

2. Literature Review

Globalization and Cinema

In a globalized interconnected world, global consumerism prevails as a result of multinational corporations expanding in transnational markets. However, according to Lechner (2012), this expansion faces cultural barriers in local markets as globalization does not necessarily result in a homogenous effect across cultures (p. 107). Therefore, globalization becomes an effective strategy for global expansion. Thompson (2004) describes globalization as the process in which "local cultures and the forces of globalization are thoroughly interpenetrated and co-shaping" (p. 632). Multinational corporations have been aware of such notion in their global expansions. For example, Watson (2000) states that Macdonald's has the same taste everywhere, yet it localizes itself within cultural contexts by developing "spicy wings (red-pepper-laced chicken) in Beijing, kosher Big Macs (minus the cheese) in Jerusalem, vegetable McNuggets in New Delhi, or a McHuevo (a burger with fried egg) in Montevideo" (p. 122). In addition, Thompson (2004) asserts that "global brands do exert a systematic influence on the cultural hetero-hybridization engendered by globalization" (p. 638).

The media has been widely used as an effective vehicle that generates global reach as well as culture promotion. For example, Korean pop culture wouldn't have risen in Asia if not for its media uprising in the 1990s in terms of movies, music, and TV programs/series. A movie, according to Walter Benjamin (1935), is considered a strong force that causes a "liquidation of the traditional value of the cultural heritage" (p. 4), thus it reflects culture. According to Doobo Shim (2012), not only have Korean movies become a notion across Asian cinemas, but also big Hollywood corporations such as "Fox and Columbia have started to take Korean movies on for their global distribution runs" (p. 359). Moreover, Kureshi and Sood (2011) state that Hollywood movies have a "worldwide audience of 2.6 billion" (p. 245); and so they provide an unprecedented economic opportunity for
multinational corporations seeking expansion. As a result, multinational corporations started using product placement in movies since the end of the 18th century.

2.1. Product Placement and its Techniques

According to Hackley, Tiwsakul, and Preuss (2008), product placement is a tool of advertising "in which the message, the sender and the precise intention behind a brand seen in a television (TV) show, movie or computer game are often implicit" (p. 109). Wilson handball in "Cast Away", Mini Cooper in "Italian Job", Facebook in "Social Network" are just few examples of product placement in movies. It has been used since the end of the 18th century as a form of embedding consumer capitalism within entertainment. Jay Newell's research, as cited by Lehu (2007), concludes that the first incident of product placement was in 1896 in a French movie (p. 19). However, product placement had gained much more importance by the end of the 19th century after the emergence of technological advancements such as DVRs and TiVo besides the internet that have enabled the viewers to avoid cluttered TV advertising.

Product placement in movies has offered corporations a global reach as well as an implicit presence within movie scenes that makes it unavoidable. Unlike TV advertising, product placement breaks through traditional set campaign-periods, and thus remains in movies forever. Product placement, as a tool of transnational advertising, has been expanding throughout the world; for example, product placement expenses in Indian movies in 2007, according to Burman as cited by Kureshi, and Sood (2011), "were valued to be around Rs 2 billion" (p. 245). Furthermore, Wiles and Danielova (2009), using an event study analysis, concluded that product placements in the sampled movies were accompanied by an "average 89%" increase in firms' stock prices during the movie launching (p. 57).

Product placement could be executed in different ways: verbal, visual, or audiovisual. According to Kureshi and Sood (2011), a verbal placement is "when any of the actors in the film, main or otherwise, mentioned the brand name" whereas a visual placement is when the product or brand appears in the scene whether in the background or as the main item in the camera shot (p. 250). The audiovisual placement combines both aspects within a movie scene, and so the product appears and its name is also mentioned. However, these executions could
be of different levels: blatant or subtle. According to Gupta and Lord (1998), a blatant placement is "made highly visible by virtue of size and/or position on the screen or its centrality to the action in the scene" whereas a subtle placement could be "small in size, a background prop outside of the main field of visual focus, lost in an array of multiple products or objects, low time of exposure" (p. 49). The use of different types and levels of placement signifies the cultural influence that would make a type of placement more effective in one cultural context without the other.

3. Method

3.1. Data Collection

Investigating the different trends of product placements in French and American movies in 2011-2012, I have administered a preliminary content analysis form to measure certain variables within the sampled movies. According to Wimmer R. and Dominick J. (2011), Kerlinger defines content analysis as "a method of studying and analyzing communication in a systematic, objective, and quantitative manner for the purpose of measuring variables" (p. 156). The variables in this study are: frequency of placements (total and average numbers of placements per minute), number of placements of each product, type of placement (verbal, visual, or audiovisual), level of placement (subtle or blatant), nature of the product (consumer product, B2B, or service), nature of the company (local or international), and accreditation of products in final credits. As a quantitative data collection tool, Wimmer and Dominick (2011) state that content analysis is often used as a description of communication messages (p. 157-158), which are simply the product placements within the sampled movies in this paper.

This paper employs a non probability purposive sample which is "used frequently in mass media studies…with the knowledge that it is not representative of the general population" (Wimmer & Dominick, 2011, 94). The sample consists of 2 comedies produced in 2011-2012 that were chosen on basis of similarity in respect of duration, worldwide screening, and total gross. *The Intouchables*, directed by Olivier Nakache and Eric Toledano, is a French-speaking movie produced in France in 2011; on the other hand, Seth MacFarlane's *Ted* is an English-speaking movie produced in the United States in 2012. According to US Box Office website, *The Intouchables* has generated a "worldwide gross of
$426,606,534\) out of which \("13,185,153\) domestic gross\) whereas \(Ted\) has generated a "worldwide gross of $549,218,568\) out of which "$218,665,740 domestic gross" (US Box Office website).

3.2. Findings

There were 24 incidents of product placement within \(The Intouchables\), with an average of one placement every 4:42min. The products most frequently placed were consumer products ranging from cars, food, beverages, clothing, cigarettes and technology to jewelry. Highest number of placements (25%) was for clothing brands: \(Umbro, Adidas, Nike, Kangol, Scholt NYC, and IKKS\). The most frequently placed brand throughout the movie was Maserati Quattroporte car. The only service placed was that of a French transportation company \(Express\). Moreover, 20 out of the 24 placed products were of multinational companies (approximately 83%). Only 3 placements, \(Coca Cola, Nutella, and M&Ms\), were executed audio-visually (12.5%) while all others were visual placements. As for the level of placements, approximately 75% were subtle. Although there were no brand accreditations in the end credits, some of the placed brands, \(Maserati, Mercedes Benz, Renault, Blackberry, and Mars Chocolate\), were mentioned in the acknowledgments.

On the other hand, there were 36 incidents of product placement within \(Ted\) with an average of one placement every 2:56min. The products most frequently placed were consumer products. Highest number of placements (approximately 22%) was for beverage brands: \(Budweiser, Crystal Champagne, Bud Light, DonQ, Pepsi, Jameson, Michelob Ultra Orange Grape Fruit, and Coca Cola\). The most frequently placed brand throughout the movie was \(Budweiser\). Out of the 36 placed products, 28 were of multinational companies (approximately 78%). The local brands placed within the movie were local restaurants as well as a grocery store, a PR firm, and a car rental. In addition, out of the 27 placements, 75% were visually executed whereas the remaining placements involved four verbal and five audiovisual. As for the level of placements, nearly 63% were blatant. In addition, no brand accreditation existed in the end credits.
4. Discussion

The main aim of this research was to compare different trends of product placement within French and American movies. Findings have clearly indicated that product placement, as a means of transnational advertising, is used differently across the small sample of French and American movies. This implies the use of globalization as a strategy to localize product placements according to the cultural context. However, research findings cannot be generalized to all French and American movies due to sample limitations.

Research findings indicate the difference in placement types and levels between *The Intouchables* and *Ted*. Approximately 63% of products in *Ted* were blatantly placed whereas approximately 75% of products in *The Intouchables* were subtly placed. This might imply that American viewers seem to tolerate blatant placements in movies way more than French viewers; thus, blatant placements are dominant in the American movie and subtle ones are dominant in the French movie. Furthermore, findings indicate that one placement would appear every 2:56 min in *Ted* and every 4:42 min in *The Intouchables* which might indicate a higher level of tolerance among American viewers towards frequent product placements in movies.

Although, consumer products were the highly placed ones in both movies, the most frequently placed category differed between the two movies. Beverage products constituted approximately 22% of the placements in *Ted* whereas clothing brands were the most frequently placed ones in *The Intouchables* (25%). *Budweiser* was the dominant brand in *Ted* while *Maserati* was the most dominant in *The Intouchables*. Therefore, the dominance of alcoholic beverages in *Ted* seems to convey a part of the American culture. On the other hand, it seems that luxurious cars are significant in France. As for the types of placement, visual placements were dominant in both movies, but there were incidents of audiovisual placements too. However, verbal placements were only existent in *Ted*, and all four brands, *PS3, Hasbro, Snickers, and Ikea*, were mentioned in a humorous context. This might imply that American viewers seem to be used to product placement that they do not always have to see the product or brand.

In conclusion, there are different trends of product placement within the sample of American and French movies. These differences add to the notion that product placement specialists do employ global strategies tailored to the cultural context.
to ensure its effectiveness. However, further studies are needed that would examine the trends of product placement on a wider sample and among other cultures as well.

**Bibliography**


Section 2 - Abstracts
Empowering Migratory Populations through Local Ethnic Media

Haco Hoang
California Lutheran University, USA

Abstract

Globalization has contributed to two phenomena: 1) a revolution in communication due to advances in technology, and 2) the demand for cheap laborers who migrate across borders due to the needs of economic sectors in other countries. The civil and political rights of migratory workers are often non-existent because they face numerous barriers to social and political activism including limited literacy, socioeconomic constraints, and fears about immigration status. Migratory farm worker populations, for example, often lack social and political empowerment even though they frequently live and work in communities plagued by environmental problems. How can the forces of global communication be harnessed to empower this global yet marginalized workforce? The purpose of this paper is to assess the civic capacity of farm workers in Oxnard, California by assessing: 1) the civic needs of the population, 2) the programming content of two Spanish radio stations; and 3) the concrete ways that the population can be empowered to promote environmental health. Oxnard is a city with a large agricultural sector and significant farm worker population, many who emigrate from Mexico into California for seasonal work. The civic needs of Oxnard farm workers were identified through qualitative surveys to gauge public perceptions regarding environmental risks and civic engagement opportunities. Content analyses of two popular Spanish radio stations in Oxnard were conducted to determine if local ethnic media outlets could be utilized to enhance the civic capacity of farm worker communities. The study found that Spanish radio is a medium that may mitigate, if not eliminate, some key barriers to public engagement on environmental issues for Oxnard farm workers: low levels of education and literacy, lack of financial resources, transportation, work flexibility, fear of employer reprisals, and concerns about immigration status. Radio is an accessible and low-cost, low-risk way for farm workers to learn about environmental health issues and to express concerns about exposure and risk.

Jonathan Haughton
Shahidur Khandker
Suffolk University<USA

Abstract

In 2009, buffeted by the great recession, Thai GDP fell by 2.3%. Monthly survey data show, after controlling for household variables, real consumption per capita rose in 2009 relative to 2008 for most groups, including the poor, and urban and rural households. Losers included some residents of Bangkok, especially those aged 20-29. But school enrollment rates did not fall, and durables purchases rose; households reduced their savings, and also benefitted from lower food prices. A simulation exercise based on the drop in GDP would have missed these effects. Hence the importance of country-specific policy analysis, rooted in timely local evidence.

Firm Investment Decisions in the Post-Conflict Context

Colin W O'Reilly
Suffolk University

Abstract

Economic and political transition can occur through peaceful or violent means. Violent transition disrupts the incentive for firms to make productive investments. This paper studies the determinants of profit reinvestment for firms in post-conflict transition economies. Results indicate that while access to finance is an important determinant of reinvestment during transition, it is not as important in the post-conflict context. However, property rights protections, in particular institutions of contract enforcement, are a more important determinant of profit reinvestment for firms operating in the post-conflict environment than for firms in general. This indicates that obstacles to investment are context specific.
Can Information Ever Be Truly Universal?
Re-evaluating the Dynamic between Knowledge and Globalization

Tom Vine
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University Campus Suffolk, UK

Abstract
The proposed presentation revisits the epistemological dynamic between knowledge and globalization. In the launch edition of the *Journal of Knowledge Globalization*, Rahman & Mahmood (2008: 2) suggest that ‘knowledge globalization is an eclectic process of knowledge sharing’. This paper endeavours to deconstruct this process and in so doing reasons that knowledge sharing is revealed to be subject to at least two tensions. First, the predisposition for humans to seek out novelty is behavior which is - if taken to its logical conclusion - at odds with the process of knowledge sharing. This is a persuasive argument, particularly if we accept the postmodernist position that knowledge is both socially constructed and inextricably bound up with identity. Second, this paper explores the tension between knowledge sharing on a global stage and the asymmetries of information/expertise on which the foundations of exchange apparently rest. Finally, potential means of resolving these tensions are explored in a bid to further refine organizational and strategic thinking.

Reference:
Take My Mother-in-law...Please!” A Study of the Impact of Women’s Power on the Co-residence Decision in China

Chloe Zhang
Suffolk University, USA

Abstract
This paper investigates the effect of the wife’s bargaining power on the decision about intergenerational co-residence (i.e. whether she lives with the husband’s mother or not). By applying a household bargaining model and using the China Health and Nutrition Survey (CHNS) data from 2000, this paper finds evidence in favor of women’s empowerment: the increase in women’s bargaining power, in particular their human capital relative to their husbands, significantly reduces the probability of living with their mothers-in-law, whereas, income power has mixed results. Women’s stronger bargaining power contributes to the Chinese family transition and social revolution.

Retractions in Biomedical Research

Jeff Furman
Boston University, USA
Pierre Azoulay
Joshua Krieger
Fiona Murray
MIT, USA

Abstract
To what extent does “false science” impact the rate and direction of scientific change? We examine the impact of more than 1,100 scientific retractions on the citation trajectories of articles that are close neighbors of retracted articles in
intellectual space but were published prior to the retraction event. Our results indicate that following retraction and relative to carefully selected controls, related articles experience a lasting five to ten percent decline in the rate at which they are cited. We probe the mechanisms that might underlie these negatives pill overs over intellectual space. One view holds that adjacent fields atrophy post-retraction because the shoulders they offer to follow-on researchers have been proven to be shaky or absent. An alternative view holds that scientists avoid the “infected” fields lest their own status suffers through mere association. Two pieces of evidence are consistent with the latter view. First, for-profit citers are much less responsive to the retraction event than are academic citers. Second, the penalty suffered by related articles is much more severe when the associated retracted article includes fraud or misconduct, relative to cases where the retraction occurred because of honest mistakes.

Big Data in Higher Education the University of Otago Experience

Ben Daniel
Russell Butson
University of Otago, New Zealand

Abstract

Big Data—a collection of large and complex data sets, often challenging to process using traditional database management tools, brings new opportunities for institutions of higher education, as institutions continue to face unprecedented challenges in their environment. This paper outlines a number of factors currently triggering changes in the environments of higher education, and challenges associated with these changes. The paper further illustrates how Big Data can be leveraged to address some of these challenges. Experiences from University of Otago Technology Enhanced Analytics (UO-TEA) system are presented, challenges associated with project implementations are discussed.
Big Data and New Product Innovation

Sushil Bhatia
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Abstract

Innovation and new product development is a risky and tough business as most of the new products fail. There are many reasons for that. To name a few - undercapitalization, poor market research, not getting customers involved at the right time and not reaching the market on time. The lack of access to information or the lack of right information is some of the reasons. Due to this it is difficult to conduct business analytics to create the right course of action.

BIG DATA can change all that by providing information and improving these areas.

1. **Market**: Reducing Time to market by 25-30%. Access to the right information, feedback from the customers at the right time can reduce time to market by 25-30% as it has been shown in healthcare industry.

2. **Manufacturing**: improved decision-making by helping to focus on the product features that matter resulting in reduced manufacturing costs and increased quality

3. **Reduce R&D cost**: Big data can also help with open innovation as it can sort through hundreds of ideas very quickly thus reducing the cost of research and development.

4. **Improved customer service**: Installation of sensors in complex equipment can help detect where the defects are during operation resulting in quick repairs, better customer service and lower repair costs.

This paper presentation will expand on the use of Big Data in new product development, innovation and how companies are using this to achieve their goals.
A Study of Emotional-Social Intelligence in Early Childhood Pre-service Teachers

Emine Ferda Bedel
Canakkale Onsekiz Mart University, Turkey

Abstract

Emotional intelligence is defined as the individuals' ability to perceive, assess, express, and regulate or manage emotions in themselves and others. Since the conceptualization of Emotional intelligence in the 1990s, it has received a considerable research attention. Emotional Intelligence measures have been translated to different languages and various studies have linked it to psychological or physical well-being, leadership, job satisfaction and performance. Research suggests that emotional intelligence is a better predictor for success than Intelligence Quotient, therefore, it should be considered as an important dimension of strategic personal and occupational growth. In the field of education, there is a growing interest in emotional intelligence and it is generally examined in relation to academic performance. In addition, some other studies exist documenting the link between emotional intelligence and teaching efficacy which emphasizes the importance of exploring emotional intelligence in teacher candidates. This study aims to measure emotional intelligence of early childhood pre-service teachers and to investigate statistical differences regarding gender and class level. To collect data, the Bar-On Emotional Quotient Inventory (EQ-i) has been used. The EQ-i consists of five interrelated dimensions: Intrapersonal, Interpersonal, Stress Management, Adaptability and General Mood Scale. To analyze data, descriptive statistics and variance analysis were used. Results will be reported during presentation.
How to Come Up With an Educational Strategy in a “Technology Implemented Versus Traditional Class” Setting

Gul Celkan
Middle Georgia State College, USA

Abstract

Times are changing fast, and it gets hard at times to catch up with all the advances in technology especially in educational institutions as so many factors need to be considered and reconsidered before coming up with the best practices in using technology across the campus for teaching purposes.

In a college setting, using technology seems the best solution to solve a lot of issues concerning students. This is easier said than done for the mere reason that not all courses blend well with hybrid or on-line learning. This implies the decision-making bodies at colleges have to bear in mind the characteristics of the course first before coming up with binding ideas.

A country’s economy has impact on education as well. While good economy helps prosper colleges, bad economy implies budgetary cuts, poor financing and finding other means to make up for these losses. They may have to find ways of solving these issues but one thing should not be put into oblivion. These should not be made at the expense of the students.

The current strategy followed by most if not all tertiary institutions suffering from some kind of economic recession due to low student enrollment, less state subsidiary, or higher costs of education, is to seek refuge in hybrid learning programs. Online classes had been popular for some time now, but now colleges are making all kinds maneuvers to implement hybrid learning to replace face-to-face learning.

It is with no doubt the primary obligation of the College President and his “crew” to find the best solutions for the college not only to recruit more students and hire qualified academic personnel but also to offer education using the best means possible. In our time, people always consider technology as a primary tool to be used in all classes. This sounds like a well and carefully crafted idea. However, when you start considering it for each and every course offered on campus, you
come up with the shortcomings; These shortcomings are such that they cannot be overcome overnight. They imply a complete change in teaching methods.

Having had experience with a hybrid learning class, I will emphasize the positive and negative impacts such classes may have on students as well as even some instructors if teaching policies are not carefully wrought.

To keep abreast with the century using technology in education becomes a must, however, the strategies to be followed during the process should be well consulted with all the stakeholders.

Understanding of Cultural Beliefs on Death and Bereavement Processes among Caucasian American and Japanese Students

Sukanya Ray
Karine Toussaint
Quan Diep
Arumi Horikoshi
K Ide
Natalie Garcia
Suffolk University, USA

Abstract

This study was a preliminary exploration of attitudes towards death and bereavement among Japanese and Caucasian American college-age women. Participants completed several questionnaires that assessed their levels of death anxiety, death depression, personal attitudes towards death and bereavement, and perceptions of their culture’s, family’s, and/or religion’s attitudes towards death and bereavement. Trends suggested lower levels of death anxiety and death depression in Japanese students, more personal acceptance of death and bereavement in Caucasian American students, and greater cultural acceptance of death as perceived by Japanese students. This study offers suggestions for in depth multi-dimensional approaches to the study of death and bereavement across cultures.
Overcoming Ideology for Critical Democracy in Education

Sirous Tabrizi
Western University, Canada

Abstract
In a global society, where an emphasis on equality and social justice is important, equality of opportunity is of high importance especially for minorities. Within government policy groups, there are a number of highly influential ideologies. Two currently popular ones include neo-liberalism and neo-conservatism. While both neo-liberalism and neo-conservatism seek to create opportunities for all citizens, through different means, their impact on education may hamper this. Furthermore, either ideology may hamper the development of critical democracy in a society. This paper will examine how neo-liberalism and neo-conservatism influence attempts to implement critical democracy in education, and why an emphasis on critical democracy regardless of the underlying ideology is better for education.

MOOC and the Future Higher Education Strategy

Mawdudur Rahman
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Abstract
MOOC (Massive Open Online course) is around for more than year. It stated with one course at the University of Manitoba in 2008. MOOC got a lot attention with professors from Harvard, MIT, and Stanford University joining the bandwagon in 2012. Within this time it has opened up new avenues /dimensions to the domain of higher education. On the one hand it has opened unlimited opportunities for learners, wider reach for the instructors. Hundreds and thousands of students from all over the globe are taking courses from professor of Harvard, MIT, Stanford sponsored platforms - Udacity, Coursera, and edX. On the other side there are counter arguments about the academic value and quality and over
all sustainability of such courses. Can such courses meet to academic requirements to earn credits for an academic degree? Is this movement a fad or is a direction to a future education system? This paper will examine the reality of MOOC and the strategic directions for future higher education system. I concluded that structural changes in higher education must come and academic institutions must embrace the new directions and embrace the new player. The older players will change or lose the ground.

Managing Higher Education to Meet the Challenges of India Tomorrow

Geeta Sudhir Nair
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Abstract

The present paper portrays the important role higher education plays in our economy and society of today and tomorrow. A brief review of the strengths and weaknesses is chalked out for a reality check. Later, ways and means of managing higher education, focusing on domestic reforms and internationalization are suggested to address the challenge of an increasing youth base of our burgeoning population to meaningfully engage the youth, as well as harness human resources for a qualitatively better growth.

Key words: higher education, reforms, internationalization, youth.
The Development of Teaching-Learning Process to Create Humanized Pharmacy Service

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Ministry of Public Health, Thailand

Abstract

Nowadays, people are paying more and more attention to the humanized health care (HHC) concept, since health service providers (care givers) have been working more and more like service machine. The care givers always consider health problem separately from the patients’ environment. Diseases have been always diagnosed, rather than the whole person’s illness and difficulties contributing to the diseases. As a consequence, the care givers would always focus on eliminating the diseases, and ignore to address the person’s illness and difficulties. Therefore there has been a lot of front page news highlighting conflicts between care givers and patients. There are many researches and developments on humanized medical care, and humanized nursing care, but humanized pharmacy service (HPS) is very hard to find, especially for teaching-learning process constructing HPS providers.

This research aimed to 1) identify the characteristic of HPS, and 2) establish teaching-learning protocol contributing to HPS. The intervention was the adoption of knowledge management (KM) and appreciative inquiry (AI). HHC communities of practice (HHC COPs) were invited to share their tacit knowledge and real experiences, under the friendly atmosphere following the concept of AI. An AI expert was invited to be the modulator for this focus group discussion.

Questionnaires containing two questions: 1) what is your definition for HPS; and 2) how can you perform HPS, were distributed amongst the students prior to the intervention, immediately after the intervention, and three months after the intervention when the student came back from their hospital fieldwork. For more understanding, focus group discussions between students and teachers were employed after each questionnaire data collection. The collected data were
analyzed by content analysis. The data quality was assured by triangulation technique, since the teaching team consisting of three pharmacists analyzed the data independently.

The HPS, extracted from this study, was the service characterized by the happiness of service providers and clients. By this it meant the service providers should have affection in their works, so they were willing to serve their clients with their best. In addition, these service providers had to realize that a client was a whole person who needed help. Then, they could recognize clients’ illness and difficulties by adopting systematic thinking. This resulted in compassion and benignity. These attributes would motivate service providers to help clients unconditionally, in order to alleviate clients’ difficulties. Thus we could say that these service providers had service mind. When the clients were helped, they would be happy. The clients’ happiness then could act as immediate reward empowering the service providers to continue their good deeds.

Teaching-learning model developed in this research was effective to prepare the student for HPS. The teacher should be able to create network with communities of HHC practice, in order to give the students opportunity of knowledge and experience sharing with these experts. This method is also the KM. HHC insight from direct experience from the experts would be shared and exchanged with teachers and students. As a result, the teachers and students could understand and depict what HPS was. Moreover, the shared experiences from various situations could be easily applied when the students had to encounter similar situations. Most of all, knowing that there were some care givers dedicated themselves to help people was a very good motivating factor inducing the students to do the same thing.
Should Educational Strategies be at the mercy of the Economy?

Gul Celkan
Middle Georgia State College, USA

Abstract

Times are changing fast, and it gets hard at times to catch up with all the advances in technology especially in educational institutions as so many factors need to be considered and reconsidered before coming up with the best practices in using technology across the campus for teaching purposes.

In a college setting, using technology seems the best solution to solve a lot of issues concerning students. This is easier said than done for the mere reason that not all courses blend well with hybrid or on-line learning. This implies the decision-making bodies at colleges have to bear in mind the characteristics of the course first before coming up with binding ideas.

A country’s economy has impact on education as well. While good economy helps prosper colleges, bad economy implies budgetary cuts, poor financing and finding other means to make up for these losses. They may have to find ways of solving these issues but one thing should not be put into oblivion. These should not be made at the expense of the students.

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It is with no doubt the primary obligation of the College President and his “crew” to find the best solutions for the college not only to recruit more students and hire qualified academic personnel but also to offer education using the best means possible. In our time, people always consider technology as a primary tool to be
used in all classes. This sounds like a well and carefully crafted idea. However, when you start considering it for each and every course offered on campus, you come up with the shortcomings. These shortcomings are such that they cannot be overcome overnight. They imply a complete change in teaching methods.

Having had experience with a hybrid learning class, I will emphasize the positive and negative impacts such classes may have on students as well as even some instructors if teaching policies are not carefully wrought.

To keep abreast with the century using technology in education becomes a must, however, the strategies to be followed during the process should be well consulted with all the stakeholders.

**Globalization and Education Curricula**

**Zakaryae Arsalane**  
School of Arts and Humanities  
University of Moulay Ismail, Morocco

**Abstract**

This study aims to give perception to educational curricula in the light of globalization through answering the following questions:

A) What are the effects of globalization on education?

B) What is the role of educational curricula on facing the challenges of globalization?

To answer these questions the study builds upon existing research which includes books, journals, previous globalization conference findings, and texts related to this field.
The researcher comes up with a comprehensive view concerning globalization concepts, its related fields, characteristics, tools, institutions, components and results.

To explain the effects of globalization on education as a subsystem from the whole community system; a light had been thrown on globalization’s aims from the perspective of international and national educational systems. Perceptions have been set up to encounter the challenges which education faces, as follows:

- Building strong human beings and orienting their capacities.
- Becoming independent.
- Integration and unionization in an institutionalized community.
- Active dialogue with others.

From the survey of literature, which concerns globalization curriculum and the changes, the study set up perceptions to the role of educational curricula to encounter the global challenges. In light of the results recommendations have been suggested.

**Improve Students’ Team Performance in Business Education:**

An Empirical Study from University Campus

Weichu Xu,

Mary Rogers

Framingham State University, USA

**Abstract**

Team skill is becoming an important asset that employees can bring into organization. For business schools, they try to prepare business students to acquire teamwork skill in their business education to prepare for students’ future career. How to work with other team members and make team work effectively is an important issue in business education.
In this paper we focus on how to use 12 steps method to help business students to learn how to improve their teamwork skill and how to improve their team performance. We examine the relationship between 12 different steps and team performance. This paper first discusses existing methods and research on which factors will have impact on the team performance. Then we focus on 12 steps method and how to use it to improve team performance. Based on previous discussions and research, we propose and examine several hypotheses on the relationship among 12 steps and its impact on team performance with a dataset collecting from university student teams. The last part of paper explores the future research agenda to have a further study in this field.

Keywords: Team performance, student, university

Lessons in Globalizing the Classroom Experience: A Decade of Effort at Framingham State University

Sandra R Sutherland
Framingham State University, MA, USA

Abstract

Although universities have always been a place where ideas are freely exchanged in the pursuit of higher understanding, universities have differed and evolved in how to best organize to accomplish this goal. Universities routinely search for the best professors in their discipline, recruit the best students in the market and thereby deliver the best educational experience.

Today’s situation is no different. However, universities today are faced with greater competition, a shift in the role of professor from expert to facilitator, a more diverse student population and a clear sense that we live in a global community competing for the same resources. It is therefore important for faculty and students to be aware of their global environment with its different beliefs,
ideas, resources and constraints. To facilitate this global understanding, faculty is encouraged to go abroad. This enables them (1) to better understand their discipline in a foreign environment and thus pass on that knowledge and (2) to instinctively and more persuasively inspire students to go abroad. Students also need institutional support to get formal academic exposure to other countries through faculty led tours and a variety of study abroad programs. The purpose of this paper is to share lessons from what Framingham State University has done to offer an academically enriched global experience to their students and how this effort eventually fit into the strategic plan of the university.

Sustaining Regional Competitiveness: The Role of Bio-tech Clusters in Promoting Knowledge Intensive Services (KIS) in the NCER Region of Malaysia

Sharifah Rohayah
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Abstract

Knowledge intensive services (KIS) are important trajectory of the modern economies, which are critical to the economic growth, innovation and knowledge diffusion. In particular the links between high tech industries and KIS have become growth factor in many regions. The innovation process, the mechanisms of knowledge exchange and the respective linkages between sectors are important elements in the current process of firm development, and for countries like Malaysia, knowledge has become a key source of competitiveness where knowledge intensive sectors in production and services have a lead in transforming the economy and region. The paper focuses on the analysis of Bio-tech cluster in promoting KIS especially Research and Development (R & D) related services for regional development. The aim is to assess the establishment and concentration of bio-tech firms in the Northern Corridor Economic Region
(NCER) in Malaysia and the extent to which they promote linkages and networking within and beyond the region. The regional governance structure is explored in order to reveal the role of institutional framework in enhancing the bio-tech industries and geographical clustering in this region. In direct connection with the universities, the existence of bio-tech parks and hi-tech parks as well as the bio-tech centre in the northern states, the bio-tech industry has gained essential ingredient to sustain and develop. The findings revealed important occurrence of clustering and mechanism of knowledge exchange through collaborative networking and linkages between the manufacturing and services sector as well as with the universities. Globalization and knowledge based economic development have indeed transformed and expanded the production activities. Location still remains a major influence on firms’ strategies and in promoting clustering initiatives and collaborative networks amongst firms and industries for sustaining growth. This phenomenon increasingly transforms the geographic distribution and structure in the metropolitan and the peripheral areas.

Keywords: regional competitiveness, KIS, R &D services, NCER region, Malaysia
Means to Reach the Sustainable Tourism Objective in Turkey’s Tourism Strategy 2023

Banu Bedel

Ministry of Culture and Tourism. Turkey

Abstract

Tourism is one of the main sources of revenue in Turkey, which also has deep social, economic and environmental impacts. In order to enhance the positive contributions of this sector while minimizing its detrimental effects, sustainable tourism has been adapted as one of the objectives of Turkey’s Tourism Strategy 2023 issued by The Turkish Ministry of Culture and Tourism. A national award scheme concerning the Environmental Friendliness of Accommodation Establishments has been prepared and been in place since 2008. There is also ongoing international work within ISO TC 228, Technical Committee on Tourism and Related Services on the preparation of an international standard in this field. Another collaborative endeavour involves accessibility of tourism facilities. There is also the UNESCO World Heritage Committee proposal to adopt sustainable tourism approach to preserving heritage and promoting economic prosperity in heritage areas. This study aims to assess the existing work and develop guidelines for sustainable tourism in heritage areas using sustainable tourism criteria of UN World Tourism Organization. These guidelines may be useful to reach the national objective stated in the strategic plan, as well as contribute to global sustainability.
How Beneficial Are Charitable Benefit Corporations in the Marketplace?

Miriam F Weismann

Suffolk University, USA

Abstract
It has been said that “B Corp certification is to sustainable business what Fair Trade certification is to coffee or USDA Organic certification is to milk.” B Corps are certified to meet rigorous standards of social and environmental performance, accountability, and transparency. Until recently, fiduciary duty rules restrained a traditional corporate entity from engaging in little more than meeting its legal and fiduciary duty to maximize shareholder wealth. Stakeholder-oriented companies risked shareholder litigation for the unauthorized dissipation of corporate assets aimed at securing social or charitable goals. As the Chicago School of Economics made clear, the funds of the corporation belong to the shareholders and “doing good” was not the legal prerogative of the company, it was the choice of the shareholders. A growing number of states have changed the rules by enacting legislation which changes the rules of fiduciary duty and allows corporations to use corporate funds to support sustainable and charitable business practices. Sounds good in theory but has the creation of this new form of business organization achieved any real benefits in the marketplace?
I. Methodology & Data

In this section I will discuss the methodology I proposed to use and the data used in my paper.

I.A. Methodology

The starting point for thinking about the determinants of a child’s health status is a health production function. We can estimate a health production function for the regions of Vietnam based on Grossman (1972) theoretical model.

The utility function is,

$$\max U = U(\phi, H, Z)$$

where $H$ is health stock in period $t$; $\phi$ is the flow of services per unit of health stock; $h = \phi H$ is the total quantity of health services available for consumption in period $t$; $Z$ represents all other commodities besides health.

The health production is,

$$I_t = I_t(M_t, TH_t; E_t)$$

where $I_t$ is gross investment in health; $M_t$ is medical services; $TH_t$ is the time spent on producing health; $E_t$ is education level.

The household production is,
\[ Z_t = Z_t(X_t, T_t; E_t) \]

where \( Z_t \) is the investment in all other commodities besides health; \( X_t \) represents goods inputs; \( T_t \) is time spent producing other commodities; \( E_t \) is education level.

Based on the above theoretical model, we can estimate the determinants of a child’s health:

\[ H = f(HI, E, \varepsilon) \]

In general, a child’s health status (H) is determined by three kinds of variables, health inputs (HI), the local health environment (E) and the child’s genetic health endowment (\( \varepsilon \)).

Substitute health inputs from the above equation, we can estimate a reduced-form equation:

\[ H_i = (Y, \Omega, MS, FS, \eta, E, \varepsilon) \]

where \( Y \) is household per capita income; \( \Omega \) is the characteristic of household; \( MS \) is mother’s education level; \( FS \) is father’s education level; \( \eta \) is household’s taste and preference; \( E \) is characteristic of the local environment; \( \varepsilon \) is child’s genetic health endowment.

Estimate the pooled form model:

\[ H_i = a_0 + \sum_{j=1}^{k_1} a_j X_{ij} + \sum_{j=1}^{k_2} b_j X_j + e_i \]

where \( H_i \) is health measure; \( X_{ij} \) are the \( k_1 \) variables on individual \( i \) on household \( j \); \( X_j \) are the \( k_2 \) household variables; \( e_i \) is the disturbance term.

Divided variables used into four groups: child characteristic; parent characteristic; household characteristic; and environment characteristic. Child characteristic includes variables such as age, gender, breastfeeding status, birth order, etc.
Parent characteristic includes variables such as education, employment, marital, age at child birth, etc. Household characteristic includes variables such as household size, economic status, numbers of children, etc. Environment characteristic includes variables such as water from well/river, toilet, regional effects, etc.

**I.B. Data**

This paper uses several household surveys completed in Vietnam: the 1993 Vietnam Living Standards Survey (VLSS), the VLSS 1998, the 2002 Vietnam Household Living Standard Survey (VHLSS), VHLSS 2004, VHLSS 2006, and the 2009 Vietnam Urban Poverty Survey (UPS). The VLSS 1993 used a multistage cluster sampling procedure to pick 4,800 households; the VLSS 1998 covered 5999 households; the VHLSS 2006 covered approximate 3500 households; and the UPS 2009 covered approximate 3000 households. All VLSS (VHLSS) data are nationally representative, and the UPS data are regionally representative. The household questionnaires for the Vietnam Living Standard Survey could run to more than 100 pages. The questionnaires were based on the format used by the World Bank in other Living Standards Measurement Surveys, and were adapted to Vietnamese conditions and needs. The surveys were undertaken the State Planning Committee and the General Statistical Office, with technical assistant from the World Bank and significant financial support from the United Nations Development Program (UNDP) and the Swedish International Development Agency (SIDA). In these surveys, the household questionnaire covered many different topics, including income and expenditures, credit and savings, employment, health, education, housing, fertility, and small household businesses. These surveys are well suited for examining the determinants of child health in Vietnam. All household members, children and adults, were filed for details. The great amount of household information, including detailed income and expenditure data, can reduce problems of omitted variable bias.
Review of Evidence between Corporate Governance and Mandatory IFRS Adoption from the Perspective of Agency Theory and Information Symmetry

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Abstract

Prior studies illustrate the issues of agency theory stemmed from the separation between ownership and management. As such, information asymmetry between the agent and principal is the major reason why agent can take advantages from adverse selection and moral hazard, which is the obvious problem in recent accounting scandals. Boards of directors therefore have fiduciary duties to exercise effective corporate governance mechanism to control information asymmetry. We have reviewed the extant literature on whether corporate governance is positively related to more and better disclosure as an attempt to reduce information asymmetry. Also, when IFRS requires more disclosure and IFRS adoption becomes mandatory for many jurisdictions, we examined recent studies on whether firms adopting IFRS with corporate governance regimes can reduce information asymmetry by making themselves more transparent. In general, empirical findings are mixed due to the complex and inter-related nature of corporate governance systems including single-country or cross-country studies, self-constructed or comprehensive corporate governance metrics and whether self-selection and endogeneity can be controlled in modeling.
FACEBOOK USE BY ACCOUNTING & MIS STUDENTS

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Abstract
Social networking continues to increase in popularity, with about two-thirds of all internet users belonging to at least one social networking site (Duggan and Brenner, 2013). Since its founding in 2004, Facebook has grown to become one of world's leading social networking site. It now reports over a billion monthly active users (Facebook, 2013). Social media in general and Facebook in particular have provided a rich setting for studies in a variety of use and user topics such as gender (Junco, Merson and Salter, 2010), ethnicity (Gabre and Kumar, 2012; Grasmuck, Martin and Zhao, 2009), privacy (Lewis, Kaufman and Christakis, 2008; Pinchot and Paulet, 2012; Whitcomb and Fiedler, 2010), identity construction (Boyd and Heer, 2006), and the effect of social media on student engagement and academic performance (Junco, 2012).

Facebook is pervasive in students’ lives and can impact their academic careers in a variety of ways. Case and King (2012) examined the social networking behavior of students enrolled at a private northeastern U.S. university who used Facebook and Twitter. They found that approximately 65% of the respondents indicated social networking is either somewhat or very important to them. There appeared to be a gender difference, with a higher percentage of females indicating that social networking is important to them. The percentage of students indicating that social sites are important to them fell as students rose in academic class. The findings also indicated that although Twitter is not used as much as Facebook, it is becoming more popular.

Other research indicates that using Facebook for educational advantage may not be a priority for many students. For example, Akyildiz and Argan (2011)
examined Facebook usage among college students in Turkey and found that more than 90% of the students have a Facebook account, log in to Facebook several times a day, have 101-300 friends, and spent 15-30 minutes daily on Facebook-related activities. Their predominant uses of Facebook tend to be having fun, contacting friends, and following the news as opposed to conducting educational and school related work. Studies of students in other countries have supported an average use time of at least 30 minutes per session while finding little support for Facebook's educational value (Hew 2011, Pempek et al. 2009). However, while enhancing the educational experience may not be a predominant theme among Facebook users, there is some research that indicates it can be useful. Jackson (2012-2013) found that new students who joined a university-sponsored Facebook group that provided pre-enrollment contact and integration information had higher retention rates than the new students who didn't join. Additionally, Duncan and Barczyk (2013) found that students tended to have favorable impressions of Facebook for classroom use and, surprisingly, older students thought it provided a greater social learning experience than their younger counterparts.

In Facebook, a user can develop a profile by providing personal information, interests, photos/videos and “likes,” and choose settings that control who may view this information. The user can then identify other Facebook users as “Friends,” collect “Friends” through a process called Friending, and interact with them through Facebook functions like posting, chatting, email, and feedback. In addition, users may also join groups or form associations for information sharing, allowing for the quick dissemination of information and coordination of plans and activities (Ellison et al. 2007, Huang 2011). Recent research findings indicate that a majority of students spend at least 30 minutes per session on Facebook (Akyildiz & Argan, 2011; Pempek, et al., 2009). Some researchers suggest that Facebook users tend to spend their time socializing with others based on pre-existing relationships (Pempek et al., 2009).

By default, Facebook Likes are publicly available information. Using a logistic linear regression model with dimensionality reduction preprocessing, Kosinski, Stillwell and Graepel (2013) found that Facebook Likes can be used to accurately predict a number of highly sensitive personal attributes such as gender, age, ethnicity, religious and political views, sexual orientation, intelligence, happiness,
use of additive substances, and parental separation. The authors note that such a predictive ability can be used both positively, as in the provision of improved products and services, as well as for negatively, because it can be so easily and perhaps incorrectly applied to large numbers of people without their individual knowledge or consent.

Whitcomb and Fiedler (2010) examined the relationship between induced negative emotions and perceived privacy risk in Facebook. YouTube videos showing incidents of college students exposing themselves to privacy risks through personal information disclosure were used to induce emotions. Using a sample of thirty-four (34) students, they found that the respondents exposed themselves to significant privacy risks through their Facebook activities. Interestingly, they found that female subjects’ perception of risk was greater than that of the male subjects.

Very little research has been done to evaluate the use of Facebook within HBCUs (Historically Black College or Universities - see Gabre and Kumar (2012) as an example). In this study, using students from an HBCU, we look at differences in Facebook use and attitudes between HBCU accounting & MIS students. Study limitations as well as future directions are also discussed.