INVITATION

"Covering the Global Economy from Diverse Perspectives"

The 19th IAGBT-KITRI Biannual Conference and Research Symposium Theme: "Sustaining the Momentum of Global Business and Trade Transformation"

BIANNUAL CONFERENCE MEETING

January 8, 2018 Daffodil International University, Dhaka, Bangladesh

[Bangladesh - China - Korea - Malaysia- Philippines - U.S.A.]

- International Academy for Global Business and Trade (IAGBT)
- The Korea International Trade Research Institute (KITRI)
- Asian Trade Association (ATA)
- APEC Studies Association of Korea
- BK+Chung-Ang University 'Global Leader Project Team of Next Generation Trade and Logistics'
- Daffodil International University, Dhaka, Bangladesh

Welcome

On behalf of the International Academy of Global Business and Trade (IAGBT), the Korea International Trade Research Institute (KITRI), Asian Trade Association (ATA), APEC Studies Association of Korea, BK+Chung-Ang University 'Global Leader Project Team of Next Generation Trade and Logistics', and Daffodil International University, it is with great pleasure that we welcome you to the 19th Biannual Conference Meeting.

We look forward to meeting you, sharing ideas, and working together to engage our values, our work and our world.

Sincerely,

Soonhwan Jeon

Chairman of International Academy of Global Business and Trade President of the Korea International Trade Research Institute

Conference Schedule for January 8

Place : Daffodil International University, Dhaka, Bangladesh

• Opening Ceremony (09:00 - 9:25)

• Opening Address	Prof. Soon-Hwan Jeon (Chairman of IAGBT and President of KITRI),	
	Korea	
• Welcome Speech	Professor Dr. Yosuf Mahbubul Islam (Vice Chancellor of Daffodil	
• weicome Speech	International University), Bangladesh	
	Professor Dr. Md. Fokhray Hossain (Director, International Affairs,	
	Daffodil International University), Bangladesh	
	Professor Rafiqul Islam (Dean, Faculty of Business & Economics,	
. Commenterlateres	Daffodil International University) Bangladesh	
Congratulatory Address	Prof. Julieta A. de los Reyes (Assistant Chancellor of University of the	
	Philippines), Philippines	
	Prof. Gyoung-Gyu Choi (President of APEC Studies Association of	
	Korea), Korea	
	Prof. Chang-Bum Choi (Chung-Ang University), Korea	

	E Keynote Speech	
	Subject: Dynamics of Organizational Change Management	
	• Presenter: Dr. Md. Sabur Khan (Chairman, Board of Trustees, Daffodil	
09:25	International University), Bangladesh	
	• Subject: Policy Actions for Bangladesh to Graduate from LDC Status by	
09:50	2025	
	Presenter: Chair Prof. Ki-Kwan Yoon (Daffodil International University),	
	Bangladesh	

	Session 1-1		
Moderator	Prof. Shin-Kyuo Lee (Paichai University), Korea		
09:50-	 Subject: Challenges and Prospects of Technopreneurship: Context of Bangladesh Presenter: Prof. Md. Fokhray Hossain and Prof. Nafees Imtiaz Islam (Daffodil) 		
10:15	 International University), Bangladesh Discussants: Prof. Amelia L. Bello (University of the Philippines), Philippines Prof. Chang-Bum Choi (Chung-Ang University), Korea 		
10:15- 10:40	 Subject: A Study on the Disclaimer of Accepting Bank under L/C Transaction Presenter: Dong-Chun Kim (Konkuk University), Korea Discussants: Prof. Sae-Woon Park (Changwon National University), Korea Prof. Sayedul Anam (Daffodil International University), Bangladesh 		

	Session 1-2	■ Session 2-2
Moderator	Prof. Fokray Hossain (Daffodil	Presenter: Prof. Byoung-Yook Yu
Moderator	International University), Bangladesh	(Mokpo National University), Korea
	 Subject: A Comparative Analysis of 	Subject: U.S. Economic Situation
	Rice Crop Agribusiness	and Effects on the Defense
	Models of the Selected	Industry
	Countries in Asia	Presenter: Prof. Myeong Hwan Kim
	Presenter: Prof. Faustino Q.	(Indiana
	Arrienda (University of	University-Purdue
10:50-	the Philippines),	University Fort Wayne),
11:15	Philippines	U.S.A.
	• Discussants: Prof. Gyoung-Gyu Choi	 Discussants: Soon-Hwan Jeon
	(Dongguk University),	(Joongbu University),
	Korea	Korea
	Prof. Amelia L. Bello	Prof. Byoung-Yook Yu
	(University of the	(Mokpo National
	Philippines), Philippines	University), Korea

	■ Session 1-3	■ Session 2-3	
	Prof. Md. Azizur Rahman (Daffodil	Prof. Arlene C. Gutierrez (University	
	International University), Bangladesh	of the Philippines), Philippines	
	 Subject: A Framework for the 	 Subject: A Study on Transport 	
	Korean Financial Hub	Terms of Incoterms 2010	
	Strategy in the Changes of	FCA and CPT	
	Global Financial Industry	 Presenter: Prof. Sae-Woon Park 	
	Presenter: Prof. Gyoung-Gyu Choi	(Changwon National	
	(Dongguk University),	University), Korea	
11:15-	Korea	Discussants: Prof. Seoung-Taek Lee	
11:40	• Discussants: Prof. Bates M. Bathan	(Wonkwang University),	
	(University of the	Korea	
	Philippines), Philippines	Prof. Eun-Young Nam	
	Prof. Young-Tae	(Renmin University of	
	(Gregory) Park	China), China	
	(Dongeui University),		
	Korea		
	Subject: Lessons Learned from	 Subject: A Comparative Study on 	
	Conditional Cash Transfer	the International	
	Programs of Bangladesh	Commercial Arbitration	
	and the Philippines	between Korea and	
	• Presenter: Prof. Amelia L. Bello and	Bangladesh	
	Rolando T. Bello	 Presenter: Prof. Byoung-Yook Yu 	
11:40-	(University of the	(Mokpo National	
12:05	Philippines), Philippines	University), Korea	
	• Discussants: Prof. Fokray Hossain	• Discussants: Prof. Eun-Hye Lee	
	(Daffodil International	(Joongbu University),	
	University), Bangladesh	Korea	
	Prof. Rozina Akter	Prof. Jong-Won Yun	
	(Daffodil International	(Changwon National	
	University), Bangladesh	University), Korea	

★ 12:10-13:20 (Lunching time)

	Session 1-4	Session 2-4
	Prof. Jeanette Angeline B. Madamba (University of the Philippines), Philippines	Prof. Soon-Hwan Jeon (Joongbu University), Korea
13:20- 13:45	 Subject: A Study on the Intra-Asia Container Market Presenter: Prof. Young-Tae (Gregory) Park (Dongeui University), Korea Discussants: Mar B. Cruz (University of the Philippines), Philippines Prof. Md. Azizur Rahman (Daffodil International University), Bangladesh 	 Subject: A Case Study of a Trade Settlemet Dispute under Letter of Credit Presenter: Prof. Shin-Kyuo Lee (Paichai University), Korea Discussants: Prof. Byoung-Yook You (Mokpo National University), Korea So-Yeon Jeoung (Chung-Ang University), Korea
13:45- 14:05	 Subject: Empirical Analysis on the Affiliation between Employee Motivation and Employee Engagement: A Survey in Financial Institutions of Bangladesh Presenter: Prof. Nujhat Anjum Ani (Daffodil International University), Bangladesh Discussants: Prof. Gyoung-Gyu Choi (Dongguk University), Korea Prof. Nurul Mohammad Zayed (Daffodil International University), Bangladesh 	 Subject: Modelling the Service Quality on Consumer Satisfaction, Repurchase Intention and Word of Mouth Intention in O2O Commerce Presenter: Seok-Beom Choi (Cheju Halla University), Korea Discussants: Prof. Seo-Young Lee (Mokwon University), Korea Byoung-Ger Min (Chung-Ang University), Korea

	■ Session 1-5	■ Session 2-5
Moderator	Prof. Julieta A. de los Reyes (University of the Philippines), Philippines	Prof. Sae-Woon Park (Changwon National University), Korea
14:10- 14:35	 Subject: Determinants of LDC's Participation in the WTO Dispute Settlement Process Presenter: Halima Runa and Prof. Eun-Mi Kim (Chonbuk National University), Korea Discussants: Prof. Arlene C. Gutierrez (University of the Philippines), Philippines Prof. Nujhat Anjum Ani (Daffodil International University), Bangladesh 	 Subject: South Korea's Budget Waste Reporting System: A Case Study for China Presenter: Prof. Eun-Young Nam (Renmin University of China), China Prof. Eun-Hye Lee (Joongbu University), Korea Discussants: Prof. Mar B. Cruz (University of the Philippines), Philippines Seok-Beom Choi (Cheju Halla University), Korea
14:35- 15:00	 Subject: A Business Performance Assessment of Three Modes of Fishery Farming in Green Island, Palawan, Philippines Presenter: Prof. John Christopher C. Bungar, Prof. Jeanette Angeline B. Madamba, Prof. Loida E. Mojica, Prof. Loida E. Mojica, Prof. Normito R. Zapata, Jr. and Prof. Mar B. Cruz (University of the Philippines), Philippines Discussants: Prof. Sayedul Anam (Daffodil International University), Bangladesh Prof. Faustino Q. Arrienda (University of the Philippines), Philippines 	 Subject: An Empirical Study on the Value of Scenic View of Korea Presenter: Dr. Jong-Won Yoon and Prof. Sae-Woon Park (Changwon National University), Korea Discussants: Dong-Chun Kim (Konkuk University), Korea Ho Shin (Chung-Ang University), Korea

	■ Session 1-6	■ Session 2-6
Moderator	Prof. Gyoung-Gyu Choi (Dongguk University), Korea	Prof. Md. Arif Hassan (Daffodil International University), Bangladesh
15:10- 15:35	 Subject: Testing Balassa-Samuelson Model to Examine Purchasing Power Parity (PPP) of Bangladesh: 1972-2016 Presenter: Prof. Nurul Mohammad Zayed (Daffodil International University), Bangladesh Discussants: Prof. Loida E. Mojica (University of the Philippines), Philippines Md. Sariful Islam (Daffodil International University), Bangladesh 	 Subject: Sustainable Development through Social Entrepreneurship Presenter: Asma Akter (University Malaysia Perlis), Malaysia Dr. S M Sohel Rana and Prof. Mohammad Masum Iqbal (Daffodil International University), Bangladesh Discussants: Prof. Md. Anhar Sharif Mollah (Daffodil International University), Bangladesh Md. Iqbal Bhuyan (Chungnam National University), Korea
15:35- 16:00	 Subject: E-Commerce Adoption in Selected Agribusiness Micro, Small and Medium Retail Enterprises (MSMEs) in Laguna, Philippines: Why a Slow Take Off? Presenter: Prof. Loida E. Mojica, Prof. Jannie Gracelyn P. Aviles, Prof. Jeanette Angeline B. Madamba and Prof. Agnes T. Banzon (University of the Philippines), Philippines Discussants: Prof. Nurul Mohammad Zayed (Daffodil International University), Bangladesh Prof. Amelia L. Bello (University of the Philippines), Philippines 	 Subject: Disaster Preparedness of Farms in the Philippines: Some Lessons and Insights Presenter: Prof. Mar B. Cruz and Prof. Arlene C. Gutierrez (University of the Philippines), Philippines Discussants: Prof. Amelia L. Bello (University of the Philippines), Philippines Md. Arif Hassan (Daffodil International University), Bangladesh

	Session 1-7	■ Session 2-7
Moderator	Prof. Chang-Bum Choi (Chung-Ang University), Korea	Prof. Mohammad Masum Iqbal (Daffodil International University), Bangladesh
16:10- 16:35	 Subject: The Impact of Terrorism and Trade Openness on Tourism Demand in Bangladesh Presenter: Md. Iqbal Bhuyan and Prof. Keun-Yeob Oh (Chungnam National University), Korea Discussants: Prof. Chang-Bum Choi (Chung-Ang University), Korea Dr. S M Sohel Rana (Daffodil International University), Bangladesh 	 Subject: Sustainable Environment Is a Prerequisite for Efficient Investment: A Pilot Study on Manufacturing Firms of Bangladesh Presenter: Prof. Md. Azizur Rahman, Prof. Md. Anhar Sharif Mollah and Dr. Roni Bhowmik (Daffodil International University), Bangladesh Discussants: Halima Runa (Chonbuk National University), Korea Prof. Young-Tae (Gregory) Park (Dongeui University), Korea
16:35- 16:00	 Subject: Comparative Analysis of Value Chains of Native Chicken in Batangas and Quezon, Philippines Presenter: Prof. Julieta A. Delos Reyes, Prof. Bates M. Bathan, Prof. Maria Cynthia R. Oliveros, Prof. Jennifer C. Padrid and Prof. Emmanuel F. Flores (University of the Philippines), Philippines Discussants: Prof. Fokray Hossain (Daffodil International University), Bangladesh Prof. Rozina Akter (Daffodil International University), Bangladesh 	 Subject: A Business Model Analysis of Virtual Currency Platforms in the Philippines Presenter: Prof. Arlene C. Gutierrez and Mar B. Cruz (University of the Philippines), Philippines Discussants: Dr. Roni Bhowmik (Daffodil International University), Bangladesh Asma Akter (University Malaysia Perlis), Malaysia

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	■ Session 1-8	■ Session 2-8
Moderator	Prof. Amelia L. Bello (University of the Philippines), Philippines	Prof. Faustino Q. Arrienda (University of the Philippines), Philippines
17:10- 17:35	 Subject: Foreign Exporter Fairness and Korean Importer's Commitment Presenter: Prof. Chang-Bum Choi (Chung-Ang University), Korea Discussants: Prof. Nujhat Anjum Ani (Daffodil International University), Bangladesh Prof. Bates M. Bathan (University of the Philippines), Philippines 	 Subject: A Case Study of Foreign Direct Investment in Bangladesh Presenter: Prof. Rozina Akter and Md. Sariful Islam (Daffodil International University), Bangladesh Discussants: Prof. Md. Arif Hassan (Daffodil International University), Bangladesh Loida E. Mojica (University of the Philippines), Philippines
17:35- 18:00	 Subject: Forecasting Bilateral Trade Gap between Bangladesh and South Korea and Mode of Minimizing Trade Gap Presenter: Prof. Md. Azizur Rahman, Prof. Sayedul Anam and Prof. Md. Arif Hassan (Daffodil International University), Bangladesh Discussants: Prof. Nafees Imtiaz Islam (Daffodil International University), Bangladesh Prof. Arlene C. Gutierrez (University of the Philippines), Philippines 	 Subject: A Study on the Voluntary Standards in the Global Food Industry Presenter: Prof. Seoung-Taek Lee (Wonkwang University), Korea Discussants: Prof. Sae-Woon Park (Changwon National University), Korea Prof. Ki-Moon Han (Hannam University), Korea

• 18:30~ Reception

Challenges and Prospects of Technopreneurship: Context of Bangladesh

Professor Dr. Md. Fokhray Hossainⁱ Nafees Imtiaz Islamⁱⁱ

Entrepreneurship plays an increasingly critical role in the global economy. Its essence is not just about launching ventures, but more on value creation and capture through a genuine understanding of human needs and the development of innovative products and services. On the other hand, technopreneurship is not a product but a process of synthesis in engineering the future of a person, an organization, a nation and the world. This paper attempts to describe how entrepreneurial mindset initiates innovative changes wherever possible; harnesses technology as an enabling tool for learning and business; and stresses the importance of developing responsible and ethical entrepreneurs who are committed to using their entrepreneurial expertise and resources to bring about significant economic and social development in the society and nations as well, in which they operate. This research also addresses the nation's effort to promote and develop a technopreneurial environment leading to a vibrant and thriving sector of high growth technology-oriented companies. The study also highlights the development and challenges of technopreneurship in Bangladesh and focuses on the recent act and policies of ICT. To address the successful entrepreneurial activities, some examples of Chinese technopreneurs were also cited.

Key words: Entrepreneurship, technopreneurship, organization, Act, Policies ICT, Chinese technopreneurs

JEL Classification: L26, O31, O33

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Introduction

Entrepreneurship is defined as a way of thinking and acting that is opportunity obsessed, holistic approach and leadership balanced, for the purpose of nation building. Interestingly, innovation is also an integral component of entrepreneurship. More specifically, innovation is the specific tool of entrepreneurs, the means by which they exploits change as an opportunity for a different business or a different service. Entrepreneurship pursuit of opportunity without regard to the resources currently under one's control. On the other hand, Technopreneurship is a simple entrepreneurship in a technology intensive context. It is a process of merging technology provess and entrepreneurial talent and skills.

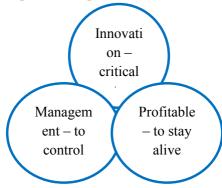
Entrepreneurship and Technopreneurship

The understanding of entrepreneurship owes much to the work of economist Joseph Schumpeter and the Austrian economists such as Ludwig von Mises and Friedrich von Hayek. According to Schumpeter, an entrepreneur is a person who is willing and able to convert a new idea or invention into a successful innovation. Entrepreneurship forces "creative destruction" across markets and industries, simultaneously creating new products and business models. In this way, creative destruction is largely responsible for the dynamism of industries and long-run economic growth.

Defining Technopreneurship

Technopreneurship is the use of technology as an integral and key element in the transformation of goods and services A technopreneur is an entrepreneur who is technology savvy, creative, innovative, dynamic, dares to be different and take the unexplored path, and very passionate about their work. They take challenges and strive to lead their life with greater success, take failure as a learning experience, a stimulator to look things differently and stride for next challenge. Technopreneurs continuously go through an organic process of continual, sustainable improvement and always try to redefine the dynamic digital economy. Technopreneurership evolves in dynamic, innovative situations.

Basic Characteristics of Technopreneurship



Literature review

Entrepreneurship, according to Onuoha (2007), "is the practice of starting new organizations or revitalizing mature organizations, particularly new businesses generally in response to identified opportunities." Schumpeter (1965) defined "entrepreneurs as individuals who exploit market opportunity through technical and/or organizational innovation". For Frank H. Knight (1921) and Peter Drucker (1970) "entrepreneurship is about taking risk". Bolton and Thompson (2000) have defined an entrepreneur as "a person who habitually creates and innovates to build something of recognized value around perceived opportunities". Hisrich (1990) defined that an entrepreneur is characterized as "someone who demonstrates initiative and creative thinking, is able to organize social and economic mechanisms to turn resources and situations to practical account, and accepts risk and failure". Thomas and Mueller (2000) argue that the study of entrepreneurship should be expanded to international markets to investigate the conditions and characteristics that encourage entrepreneurial activity in various countries and regions. It is reasonable to expect that entrepreneurs reflect the dominant values of his or her national culture and national culture has definite effect on entrepreneurship (Thomas & Mueller, 2000).

In his book, 'Principles of Innovation and Technopreneurship', Rangarirai Mbizi (2012), introduces the subject innovation as a product of applied research, it starts by introducing creativity as a starting point of a technopreneurial process and then looks at Schumpeter's Creative destruction. Innovation is later on discussed in relation to invention, various sources of innovation, types as well as diffusion of innovation was looked at. Value of experimentation to innovation success as well well as reasons for innovation failure were discussed. Technopreneurship has been explained, as well as an explanation on how it is related to entrepreneurship, technology has been also discussed and the vicious cycle of technology. Qualities of technopreneurs were explained together with a comparison of technopreneurs and entrepreneurs.

Daniel Mankani (2003), tells in his book, 'Technopreneurship: The Successful Entrepreneur in the New Economy', what it takes for an entrepreneur to be successful in today's high risk, high tech industry. The book provides information on what went wrong and why and cover some of the mistakes made by established technopreneurs and the lessons we can learn from them. It also covers practical topics like the challenging opportunities that can be found in the technology sector, de-mystifying technology, writing a business plan and how to raise capital.

Investment in technologies and innovations

More than half of the world's internet users are now in Asia. The majority of the global middle class is in emerging markets (EM), and nearly 90% of the next billion entrants will come from Asia, according to the Brookings Institute. Instead of paying with cash or credit cards, EM consumers use mobile wallets to get lunch or pay for utilities, making the most of swift modern digital infrastructure especially in buzzing urban hubs.

The largest emerging markets are still the growth engines of global GDP. The IMF predicts that the global economy will grow 3.5% in 2017, while the most populous emerging markets will grow much faster. India is to rebound with 7.2% growth in 2017–2018, and 7.7% in 2018–2019. The IMF has also revised up China's growth by 0.2% to 6.7% in 2017.

Technopreneurship in Bangladesh

Technopreneurship is evolving in Bangladesh as the pillar of development and government has already formulated and passed several policies to boost and encourage the technopreneurs by addressing ICT developments. A number of acts, policies and guidelines are in place to guide the nation towards the realization of Digital Bangladesh. The ICT Policy 2009 and the 'Strategic Priorities for Digital Bangladesh 2011' also contain elaborate work plans. Because of the cross-cutting nature of the vision, these work plans encompass priorities in almost all development sectors. These policies and regulations have provided a first round enabling environment for the implementation of the Digital Bangladesh enterprise. The ICT Policy 2009 has now been updated to ICT Policy 2015. ICT Division of the Government of the People's Republic of Bangladesh has introduced submission of innovative project in providing financial grant for

Policies and Regulatory Framework

ICT D 1. 2000	Malila Dealine Dalia - Childina
 ICT Policy 2009, now updated to ICT Policy 2015 	 Mobile Banking Policy Guideline
 Right to Information Act 2009 	 National Telecom Policy 2010
Perspective Plan	Guidelines on Mobile Financial Services (MFS) for
 ICT Act 2013 (amended) 	the Bank
Strategic Priorities of Digital Bangladesh	 Secretariat Instructions 2014 (amended)
Cyber Security Policy 2010	 Proactive Information Disclosure Guidelines 2014
 Information Security Policy Guideline 2014 	Innovation Team gazette
Rural Connectivity Policy Guideline 2010	 National Portal management gazette
Broadband Policy	 Hi-Tech Park Authority Act 2010
Mobile Keypad Standardization Policy	 ICT Fellowship and Donation Policy
Guidelines for Utility Bill Payment	Guideline for Private STP 2015
National e-Governance Architecture	e-Krishi Policy

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ICT Industry of Bangladesh

Bangladesh targets to reach of earning \$1 billion from exports by 2018. Bangladesh government will build internet literacy centres across the country to increase internet penetration, which is 40 percent now. However, the International Telecommunication Union said in its latest report that internet penetration in Bangladesh is only 14 percent and the country ranks 144th in its ICT Development Index. Data from the Export Promotion Bureau shows earnings from the sector stand close to \$250 million. According to recent report, 'UNCTAD B2C e-commerce index 2017, Bangladesh ranked 117.

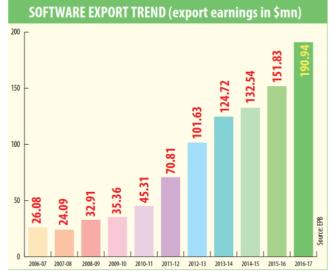


Figure 1: Software export earnings (2006-2017) Source: Export promotion Bureau, Bangladesh

According to recent report, 'UNCTAD B2C e-commerce index 2017':

Share of individuals using Internet	18
Share of individuals with an account (15+, 2014 or latest)	31
Secure Internet servers per 1 million people (normalized, 2016)	24
Index Rank (2015 data)	117

According to the Export Promotion Bureau (EPB) data, the earnings figure for the fiscal year which ended on June 30 was 19.34% above the fiscal year target of \$160 million (Figure 1).

Internet Subscription

The total number of Internet Subscribers has reached 79.227 million at the end of September, 2017.

Operator	Subscriber (in million)
Mobile Internet	73.817
WiMAX	0.090
ISP + PSTN	5.321
Total	79.227

Source: http://www.btrc.gov.bd/content/internet-subscribers-bangladesh-september-2017

Promotion of e-Business and Commerce:

The capacity of local ICT industry plays an important role to empower techno entrepreneurship. To support the development of the ICT industry, Bangladesh Hi-Tech Park Act was passed in 2010. Subsequently, Bangladesh Hi-Tech Park Authority (BHTPA) was established in 2010 for creation, management, operation and development of hi-tech parks across the country.

To establish special purpose facility to meet unique infrastructure requirement of the ICT industry, Kaliakoir Hi-Tech Park, Janata Tower Software Technology Park and Jessore Software Technology Park are being implemented. BHTPA has already approved 3 (three) private Software Technology Parks. Moreover, STP/HTP/IT parks have been proposed: Mohakhali IT Village, Silicon City Rajshahi, and Electronic city Sylhet. "Twelve (12) IT park Project " of Unique design in Dhaka, Comilla, Chittagong, Cox's bazar, Gopalganj, Jamalpur, Mymensingh, Sylhet, Rangpur, Khulna, Barisal & Nator District and "IT training incubation centre" in different places.

Online Transaction and Payments Infrastructure

Usage of ICT in e-transactions, e-commerce and e-procurement has been made possible through the amended ICT Act 2006. The Government has applied the provision for digital signature through appointing the Controller of Certifying Authorities (CCA). The Office of the CCA has issued licenses for 6 (Six) Organizations as Certifying Authority (CA). 5 (Five) CAs have developed the capacity to provide digital signature certificates to government and private organizations and individuals. The Bangladesh Computer Council (BCC) has been issued license as the CA for issuing digital certificates to the government organizations. The Right to Information (RTI) Act 2009 has taken effect in order to make information easily available. The Bangladesh Bank has already inaugurated the National Payments Switch (NPS) to facilitate interbank electronic transactions that will support online and mobile based financial transactions of customers. Promotion of e-Business and Commerce: The capacity of local ICT industry plays an important role to empower businesses and citizens. To support the development of the ICT industry, Bangladesh Hi-Tech Park Act was passed in 2010. Subsequently, Bangladesh Hi-Tech Park Authority (BHTPA) was established in 2010 for creation, management, operation and development of hi-tech parks across the country.

It is believed that the promotion of ICT based model targeting micro, small and medium enterprises (MSMEs) will play important role in fostering entrepreneurships in the country. To take advantage from this potential, SME Foundation has undertaken a project to study growth potentials of software companies and constraints limiting the exploitation of those potentials.

In order to make ICT industry vibrant, a number of activities have been implemented. The ICT business promotion council spearheaded by Ministry of Commerce supported BASIS in promoting ICT industry including the publication of software and IT service catalogue 2014. The Gartner global consultancy rated Bangladesh as among the first 30 most attractive destinations for IT/ITES outsourcing. Also, Bangladesh was rated as the 26th most preferred destination of IT/ITES outsourcing by another international consultancy, A.T. Kearney. Bangladesh entered the latter's *Global Services Location Index* in 2014. Moreover, Bangladesh has been ranked as number i.e. financially Bangladesh is the most attractive destination for outsourcing/ off shore business.

Bangladesh has introduced online payment for both domestic and international transactions. Online payment gateway service providers play an important role as an easy media in bringing numerous small fixed incomes home against ICT services provided by the freelancers. Besides, the authorized dealer banks have been directed to cooperate with Online Payment Gateway Service Provider (OPGSP) for the purpose of remitting small amounts of overseas income earned by freelance ICT-services' exporters at low cost. In order to spure-commerce activities in the country, Bangladesh Bank has set up a National Payment Switch (NPS) to ensure the interoperability of different payment channels. The commercial banks having an ATM/POS/e-Payment Switch or being connected to any other shared switch network will be able to send inter-bank or inter switch payment instructions to the NPS for clearing and settlement purpose. This Switch acts as an electronic clearing settlement system and manages all electronic payments through cards and payment gateways irrespective of their ownership. The Switch went live on 27 December, 2012. Already many banks have connected with NPS. It will help to consolidate legitimacy and credibility to ecommerce activities through secured electronic settlements of all financial transactions. Banking sector of Bangladesh will then improve further in green banking initiatives. The scope for providing faster banking services at a low cost will enlarge due to NPS. Electronic shopping will increase and people will be able to pay all types of utility and other recurring payments electronically. Implementation of "Banking Application Software" has been completed to automate overall banking activities of Bangladesh Bank. Most of the financial transactions of the government are settled automatically at present. As a result, all the accounts of the government are balanced everyday automatically. Under this software, salaries are paid to government employees through electronic fund transfer (EFT).

Government initiative in facilitating Start-up in Bangladesh

The Program – Connecting Startups

This program will connecting Startups to markets and investors - Providing mentoring and incubation to promising Startups by providing space, logistic support, and training; organizing opportunities through exposure to VCs and other funds; creating opportunities for access to markets.

bKash: a pioneer example of technoprenuership

bKash Limited, a subsidiary of BRAC Bank, started as a joint venture between BRAC Bank Limited, Bangladesh and Money in Motion LLC, USA. The ultimate objective of bKash is to ensure access to a broader range of financial services for the people of Bangladesh. It has a special focus to serve the low income masses of the country to achieve broader financial inclusion by providing services that are convenient, affordable and reliable.

More than 70% of the population of Bangladesh lives in rural areas where access to formal financial services is difficult. Yet these are the people who are in most need of such services, either for receiving funds from loved ones in distant locations, or to access financial tools to improve their economic condition. Less than 15% of Bangladeshis are connected to the formal banking system whereas over 87% have mobile phones. These phones are not merely devices for talking,

but can be used for more useful and sophisticated processing tasks. bKash was conceived primarily to utilize these mobile devices and the omnipresent telecom networks to extend financial services in a secure manner to the under-served remote population of Bangladesh.

Features of Bkash channel

- Fast: bKash is dedicated to widening the net of financial inclusion among the people of Bangladesh by facilitating money transfer through mobile phones. bKash provides Mobile Financial Services allowing customers to send, receive, and pay money from their mobile phones.
- Affordable: Send and receive money with minimal effort and cost. bKash provides the highest benefits to its customers at an affordable cost, enabling everyone to access the formal financial system of the economy. In addition to eliminating initial monetary costs involved in entering the banking system, bKash greatly minimizes opportunity costs such as time and effort required to access such services. The service charges are minimal and there are no hidden costs involved.
- Secure: Every transaction is protected by customer/client's very own PIN and state-of-theart technology provided by VISA.
- Convenient: bKash users enjoy increased convenience of accessing their finances from their own mobile phones anytime, anywhere. bKash gives the flexibility to perform transactions 24 hours a day, 7 days a week, regardless of time and place.
- Nationwide: bKash is the easiest and safest way to send or receive money instantly on customer/client's mobile, nationwide.

Future Startup Innovators

Brain Station 23: BrainStation23, a globally leading one of the best software development company in Bangladesh. Brain station 23 is now a global name which has spread out to Netherlands, Denmark, Switzerland, Canada, UK, USA, Israel and the Middle East all along. From working with startups to developing enterprise solutions and managing business process successfully, they help their clients with customized IT solutions and keep their IT operations run effectively.

Raisul Kabir is the founder of Brainstation-23. He started Brainstation right after graduation from BUET in 2006, today it is an over 120 people company with 100+ engineering graduates. Raisul graduated from BUET, in EEE. He started his first company Paradigm Neomedia in 2003 when he was a student which became a famous web design company at that time. He is also the founder of an e-commerce company called Biponee, which he started in 2012. Later, he sold out the company in 2015 to Zero Gravity Venture.

Field Buzz:

Field Buzz is one of the fast growing startups in data analytics space in Bangladesh. Habib Ullah Bahar is the Co-founder of Field Buzz, a software system that uses smartphones to help organizations in managing their remote or dispersed operations. Without any external capital,

Field Buzz has acquired famous clients in many different countries including in Afghanistan, Germany, USA and Bangladesh within 2 years, since its inception

Styline Collection

Styline offers an online store-front where consumer can find everything related to their outfit trend. All products are imported from Malaysia and China along with local product too. Their vision is to make this platform interactive so that at some point, anybody can order own design product.

Khobaib Chowdhury is the founder and CEO of Styline Collection Limited. Started in early 2015, the startup has grown manifold and became the first startup from Bangladesh to attend MaGIC Accelerator program in Malaysia (August 2016) – Asia's equivalent to Y-Combinator in the USA.

Belancer

Belancer, a local freelancing marketplace, beta launched early this year with a vision to help local companies to avail the service of freelancers to get their projects done. The problem Belancer aims to solve is pretty simple: you can't post a project on existing freelancing marketplaces like Upwork or Freelancer.com etc. from countries where outward remittance transfer is restricted. As a result countries like Bangladesh, Pakistan and many other developing countries can't post project and hire freelancer via existing platforms. Md. Shofiul Alam, co-founder of Belancer has a long story of starting things. After graduating from Daffodil International University, he worked for couple of startup companies before starting his own company. He helped few of them to grow from a four people team to fifty plus people team. He started his first company in 2010 after leaving his high paying corporate job in Middle East. The reason was he wanted to build something of his own. So he knew, to some extent, what it takes to build a company.

Light of Hope

Light of Hope is a project created by a team of some enthusiastic people who are working to make a change in the education system of Bangladesh. Aim of this organization is to provide e-learning facility to rural schools where there is no electricity. They provide Laptops, Projectors, Audio Visual e-learning materials, Solar system etc. to those schools which are situated in remote area where there is no electricity or enough facilities for proper education. They also provide books and essential education materials to the students of those remote areas. The founder of this project is Md. Waliullah Bhuiyan. Mr. Nasimul Islam Maruf and Md. Asaduzzaman Shoeb co-founded this project. They both are the assistant professor of Electric and Electronics at AIUB. Now this project has almost 100 active members working on it. There are also some other sub-projects running under this project.

Pathao

Pathao becomes trusted community fueled mode of transport in Bangladesh. By leveraging proprietary technology, they provide top-notch service at rock-bottom prices. The app-based ride

sharing concept has changed the landscape of commuting in Bangladesh. The convenience of ondemand rides paired with unbeatable pricing has made Pathao the most popular choice amongst the tech-savvy users in Bangladesh. On the other hand, hundreds of small businesses have partnered with them to enhance their logistics to support door-to-door deliveries, 7 days a week. Currently available in Dhaka and Chittagong, Pathao is now working to make Pathao available across every district in Bangladesh. In 2015, Hussain M Elius started the initiative or venture, Pathao. In just a year, the delivery team grew from 2 to over 60, with 4 fulfillment centers spread across Dhaka and branches in Chittagong, Sylhet, and Rajshahi. Pathao, now, handles over 500 deliveries a day and are continuing to grow steadily.

10 Minute School

Ayman Sadiq is the founder of, widely popular, 10 Minute School, one of the biggest online learning platforms in Bangladesh. Ayman has graduated from IBA, University of Dhaka in 2016. He, a passionate teacher and learner himself, started 10 Minute School when he was still a student. Today his organization creates accessible educational content specifically designed to cater to the needs of Bangladeshi students aiming for all national and international examinations. 10 Minute School' allows students to learn (and relearn!) tutorials, practice from the follow-up tests, monitor their progress and compare it with others- all this completely 'free' of cost.

Sheba

Adnan Imtiaz Halim is the co-founder and Chief Executive Officer of SHEBA.XYZ, an ondemand service platform trying to change how we avail services from cleaning to housekeeping in Dhaka. Adnan, an engineer by profession, left his well-paid corporate job to start Sheba, today it employees over 40 people and growing rapidly. In 2016, the start plans to open up service both in different parts of Dhaka and is in the process of raising a second round of funding.

DrinkWell

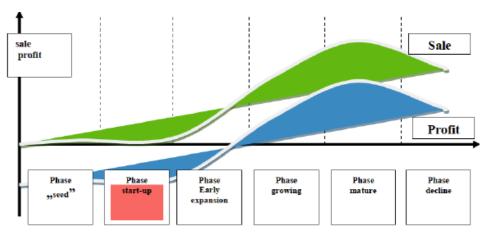
DrinkWell is a social enterprise transforming Bangladesh's arsenic crisis into entrepreneurial opportunity through a micro-franchise business model. Drinkwell currently has a network of over 200 entrepreneurs operating across 5 countries with financing from USAID, GIZ, Nike Foundation, DFID, and international impact investors from Japan, US, Switzerland, and London. Minhaj has a degree in Public Health Studies from Johns Hopkins University in 2011. The founder of DrinkWell is Minhaj Chowdhury After graduation, he won a Fulbright Fellowship and spent the next year in Dhaka, Bangladesh developing and testing three social business models across six villages as potential market-based solutions to the arsenic water crisis. He presented his findings to heads of Bangladesh Ministry of Health, UNICEF, WaterAid Bangladesh, Dhaka WASA, and the US Ambassador to Bangladesh. After his Fulbright, Minhaj spent 2 years helping public sector organizations design and deploy health insurance exchanges and data systems via Salesforce as a technology consultant. Minhaj aims to impact 5 million people by 2020 and 30 million people by 2030 via Drinkwell.

The Tech Academy

Shams Jaber is the founder of The Tech Academy, an alternative technology education center based in Dhaka, Bangladesh teaching children of young age coding and technical disciplines. At this young age, Shams has a more than interesting journey. He dropped out from university to start an alternative technology education institute in 2013 which failed despite huge appreciation from media, industry insiders, students, and parents. But he did not give up. Today, The Tech Academy is one of the fast growing startups in Dhaka changing the technology education institute for children, from both privileged and underprivileged background.

Venture capital and start-ups: tool for development of Technopreneurs

Venture capital is financing that investors provide to startup companies and small businesses that are believed to have long-term growth potential. Venture capital due to its specificity may successfully finance companies in all stages of business, even those extremely specific and difficult. Start-up as a first phase of the development of the company is such a case.



Source: Zelek 2013: 9.

Start-up Matrix

Stages of development of the entity	Objectives of funding	The specificity of funding
Sowing	Feasibility Study Financing	— The most difficult to
stage	— Creation of the project	secure financing
	idea and its	— High technical risks
	continuous improvement	associated with new or
		upgraded technology

		· · · · · · · · · · · · · · · · · · ·
	— Analysis of market	— High market risk
	potential	associated with lack of
	— Analysis of legal	market experience with a new
	conditions	product
	— Final stages of research	— High risks associated with
	activity	management and those
	— Test production /	relating to the management
	technology	team
	— Activities related to the	— The need for funding is
	certification and admission to	relatively small
	trading	, j
Start stage	Financing activities related to	— The need for significant
(start-up)	the	funding
	entering the market	— Moment of verification of
	— Launching the production	business model – acceptance
	and presentation of the	or rejection of the
	product /service to the market	project by the market
	— Intensive marketing	— High level of risk of
	activities	project financing
	— Creation of an initial	r jan 2
	organizational structure	
	— Key areas of business	
Early stage	Financing activities related to	— Financial position of the
of	expansion	company is stable
expansion	of the business:	— Funding with relatively
· · · p ······	— Expanding the product	minimal risk
	range	
	— Expansion into new	
	markets (including foreign	
	ones)	
	— Implementation of the new	
	technologies	
	— The inputs are normally	
	directed to market measures -	
	promotion, brand and	
	distribution channels building	
	ansa roution enaminers bundling	

Venture capital; in Bangladesh: Corporate Venture Capital, Start up

In 2015 Alternative Investment Rule has been passed. Alternative Investment Fund is a "private equity fund" or a "venture capital fund" or an "impact fund" or any other type of fund as declared by the Bangladesh Securities & Exchange Commission, which is a privately pooled investment vehicle which collects funds from eligible investors. It collects subscription by way of private placement only and does not offer its units for public subscription

Technopreneurship: Case study of China

The momentum of technological innovation is gathering strength in China, as people are inspired by the success of technology giants in the country and beyond. Enthusiasm is further fostered by government initiatives to encourage "a new pattern of innovation by the people", in line with which the 13th Five-year Plan (2016-2020) is set to promote the advancement of mass entrepreneurship and innovation as a long-term strategy to facilitate growth. Now, makers and investors are rushing into different technological ventures – despite risks and keen market competition. This has produced huge demand from "technopreneurs" for not only financial resources but also support in areas such as technology, market connections and entrepreneurial development.

Becoming a Nation of Innovators

China is now embracing innovation as a long-term strategy to sustain economic growth. This is partly a response to slowing markets, which have posed challenges to many Chinese enterprises in terms of both domestic and export sales. Innovation is seen as one of the major routes to transforming and upgrading the country's industries. Accordingly, Chinese businesses and individuals are being encouraged to pro-actively re-invent themselves via innovation in order to add value to their business activities.

The community – especially youngsters, entrepreneurs and investors – has been inspired by the success of technology giants such as Alibaba and Tencent. Along with a more liberalised business environment, the number of technology-related start-ups in China – including technopreneurial ventures engaged in technological innovation – has increased exponentially in the last couple of years.

This momentum in favour of innovation is also bolstered by recent government initiatives. Back in 2014, at the Summer Davos Forum, China's Premier Li Keqiang suggested the country would step up institutional innovation, as well as innovation in science and technology, in order to foster growth in the "new normal" era. In a Government Work Report released in March 2015, it was stressed that the authorities would encourage "a new pattern of innovation by the people and innovation by all" as a way to create new impetus to growth.

Flourishing Technopreneurship in China

The government has taken unprecedented steps to promote advanced Internet applications, technology and innovation as growth engines, including through providing subsidies and different kinds of capital financing. Also, local governments, institutions and private entities have been encouraged to set up incubators, accelerators and co-working spaces to nurture the development of new technological start-ups via provision of low-cost office space, equipment, mentoring assistance and sometimes seed money and capital to new businesses. Particular emphasis has been put on promoting technopreneurship, and the search for those who are capable of turning their technological savvy into viable, scalable businesses.

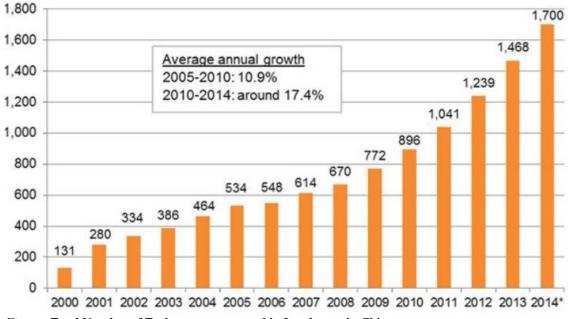


Figure: Total Number of Technoentrepreneurship Incubators in China Source: Torch High Technology Industry Development Center, Ministry of Science and Technology

As stated in the 12th Five-Year Plan for the Development of Technopreneurship Incubators during 2011-2015, the Ministry of Science and Technology (MOST) hoped to raise the number of recognized incubators in China from 896 in 2010 to 1,500 by 2015. But the actual development has outpaced the initial expectation, with about 1,700 incubators already recognized by the end of 2014.

Government has placed equal opportunities for technology-based entrepreneurs and ICT SMEs to participate in the local ICT market as the government realized the importance of SMEs in growing the nation. In addition to that, it is evidenced by the commitment put by the government to support entrepreneurial activity around the country by having various "farming" programs such as incubation programs and communication programs for technopreneurs to grow. There was still lack of information and insufficient knowledge about the opportunities, issues, and challenges underlying this new initiative as the information were kept private, limited, and confidential. Future research could comprehensively examine the effectiveness of the development process by comparing the technopreneurs who undergone the process until graduation with the technopreneurs who do not go through the process. With this comparison, it is easier to evaluate the progress and effectiveness of the programs such as incubation system and funding to start-ups companies. In fact, the extended research could examine the influencing or contributing factors to assess the effectiveness of the programs by developing reliable and valid measures of the dependent variables in order to devise and empirically test measures of venture success.

Conclusion

Technology entrepreneurship is a vehicle that facilitates prosperity in individuals, firms, regions, and nations. The study of technology entrepreneurship therefore, serves an important function beyond satisfying intellectual curiosity.

Bangladesh government has decided to boost the growth of SMEs in information and communication technology industry through its various assistance programs. To align with the development of SME, technopreneurship can play vital role which may also complement the vision 2021 and other perspective plans (7th Five Year Plan) of Bangladesh. Technopreneurship can become the game changer of the economy and development of Bangladesh and so government should give the highest priority in this arena.

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