



A BRIEF STUDY OF EDUCATION MALAYSIA GLOBAL SERVICE (EMGS) UNDER SWOT ANALYSIS

Komalaa Chandrasekaran¹, Too Lee Kuang²

Student^{1&2}, BSc (Hons) Cyber Security, Asia Pacific University, Kuala Lumpur, Malaysia

ABSTRACT

As an entrepreneur running an enterprise, will face challenges of making decisions almost every day. One way to make a reasonable and good decision is by having a framework for decision making. SWOT analysis is used to analyze the planning processes and determine the specific strategies for achieving the organization's goals and missions. This dissertation examines the usefulness of a framework or the analysis in enabling an organization to attain its goals efficiently and effectively. A well stated business strategy will offer an internal guideline on how a business is performing and also in identifying trends, competitive factors, opportunities, vision, mission and direction in the future by using the effective Porter's Five Forces Model. To this end, this paper is also documented on how an organization is setting out to achieve their goal using IT as the business's future strategy. Everyone is aware that Information Technology plays an important role in the business world as it could upgrade the market and provide more convenient services to customers. Other than that, this dissertation also explains the appropriate understanding and acceptance of IT security, system risks and recovery should now be regarded as an essential requirement within the modern business.

Keywords: *Application, Cyber Security, Risks, Global Services*

I INTRODUCTION

1.1 Company background - Education Malaysia Global Services

Education Malaysia Global Service (EMGS) would be the research topic for today. After marked Malaysia's education as Malaysia's New Key Economic Area, The Ministry of Education established EMGS. EMGS is a wholly owned company and works with Ministry of Home Affairs, the Malaysian Immigration Department and the Ministry of Education. It is very accommodating for the international students to continue their tertiary education in Malaysia. EMGS is also establishes as One- Stop-Centre for international student services. Management and Processing of International Student Applications for a Student Pass or Visa, annual renewals and the processing of the i-Kad to Public and Private Higher Education Institutions. EMGS also promote Malaysia as an International Education Hub to the worldwide. Furthermore, EMGS had brought in value added services such as STARS Portal,

Application Tracking Mechanism, process efficiency, multiple screening of application and enhanced process of student's safety and welfare, mobile applications and web portals that aid and provide availability for the customers or the students.

1.2 Student Pass Processes

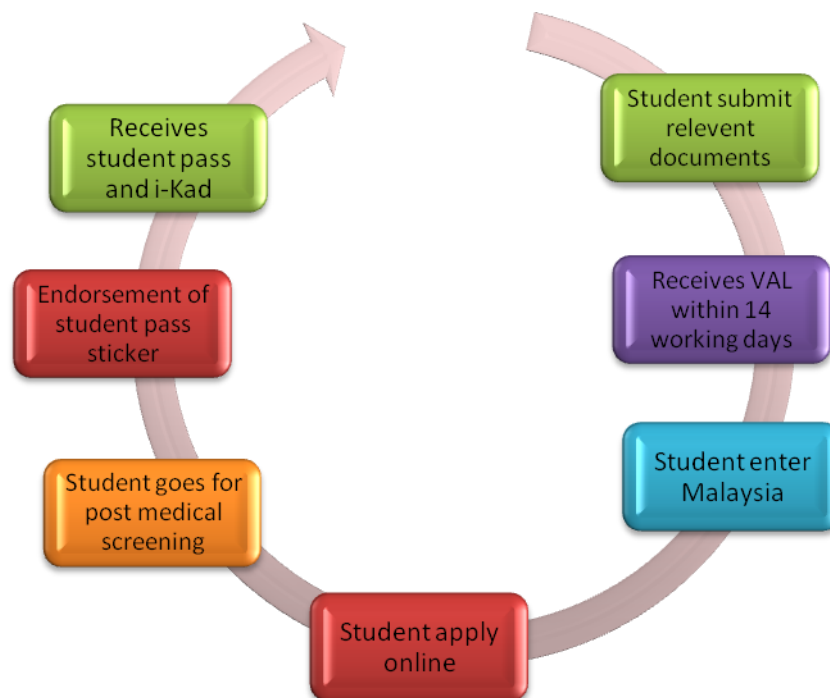


Figure 1: Student Pass Process

The processes of student pass or visa starts when a student receives and accepts the offer letter from a respective institution in Malaysia to continue their tertiary education shown in the above “Fig.1”. The student then browses through the official website of EMGS [1] and they have an option to directly apply and submit for the visa online. Later, the institution will advise and guide the students to hand in few necessary documentations such as copy of offer letter, IM14 form, 2 passport sized photos, academic certificates, pre-medical screening report, personal bond and as well as payment. Student pays RM 1000 for the visa processing fee, RM 250 for the medical screening fee, RM 50 for i-Kad fee and also few other related payments such as Multiple Entry Visa fee, immigration fee and courier fee. Student can always keep track of their application status via the EMGS official website. They just have to insert their passport number and nationality. EMGS will issue the Visa Approval Letter (VAL) within 14 working

days subjected to immigration's discretion if all the documents meet the requirements. Once received the VAL, international students from Visa-Required Countries are required to attain Single Entry Visa (SEV) from the Malaysian embassy and international students from Non-Visa Required Countries can just submit the VAL at the Malaysia Immigration checkpoint of entry. Later on, the international student should obtain the post medical screening at any EMGS's panel clinics within 7 days upon arrival. The student's passport is received at front counter of EMGS for sticker issuance and the student would receive i-Kad, an identity card. The student pass and i-Kad can be renewed every year. The following "Fig.2& Fig.3" shown EMGS.



Figure2: EMGS's Official Website

[Log In](#) [Register](#)



[About EMGS](#) [Get Started](#) [Study in Malaysia](#) [Living in Malaysia](#) [Courses & Institutes](#) [Get in Touch](#)



CHECK APPLICATION STATUS



EMGS Mobile app now sends automatic status notifications of your visa application progress!

Download Now !



TERMS & CONDITIONS

EMGS WEBSITE TERMS OF USE

1. The service located at www.educationmalaysia.gov.my is a web site (Site) owned and operated on behalf of Education Malaysia Global Services ("EMGS"). This legal notice applies to the entire contents of the Site and to any correspondence by e-mail between us and you. Please read these terms carefully before using the Site. Using the Site indicates that you accept this legal notice in full. If you do not accept this legal notice in full, you must leave this Site immediately. The contents of this Site, including but not limited to the text and images herein and their arrangements, unless otherwise noted, are copyrighted. All rights reserved. All Trademarks referred to are the property of their respective owners.

☒ I have read and agree to the the terms and conditions as set out above. *

☒ I consent to the processing of my personal data in accordance with the Privacy Policy which I confirm I have read and accepted. *

CHECK APPLICATION STATUS

Travel Document Number *

Nationality *

* Required Fields

Figure3: Application Status Checker

II ANALYSIS OF CURRENT MARKET

Key point in becoming the most profitable organization is totally depends on the customers that are targeted to. Analyzing the current market of an organization is referred as a process of gathering information which includes on the reactions of the targeted market and the customers to your efficacious product or services. Quantitative and qualitative assessment of market is also meant in analyzing the current market of an organization. Current market analysis is done by all the organization or so called as a must do process when starting up a new strategy. A good market analysis would able an organization to identify gimmick investors and most importantly captivate and magnetize a customer's perspective on a service. The current market of Education Malaysia Global Service (EMGS) could be straightforwardly analyzed by using the organization's strengths, weaknesses, opportunities and threats. SWOT analysis is used for the analyzing process of the current market. This analysis is a very useful technique for understanding a company's venture. SWOT stands for Strengths, Weaknesses, Opportunities and Threats [2]. SWOT analysis method shown in "Fig.4" is used to evaluate the main 4 elements in the project, business venture or of an industry. SWOT analysis is originated by Albert S Humphrey in 1960s using the data from the fortune 500 companies.

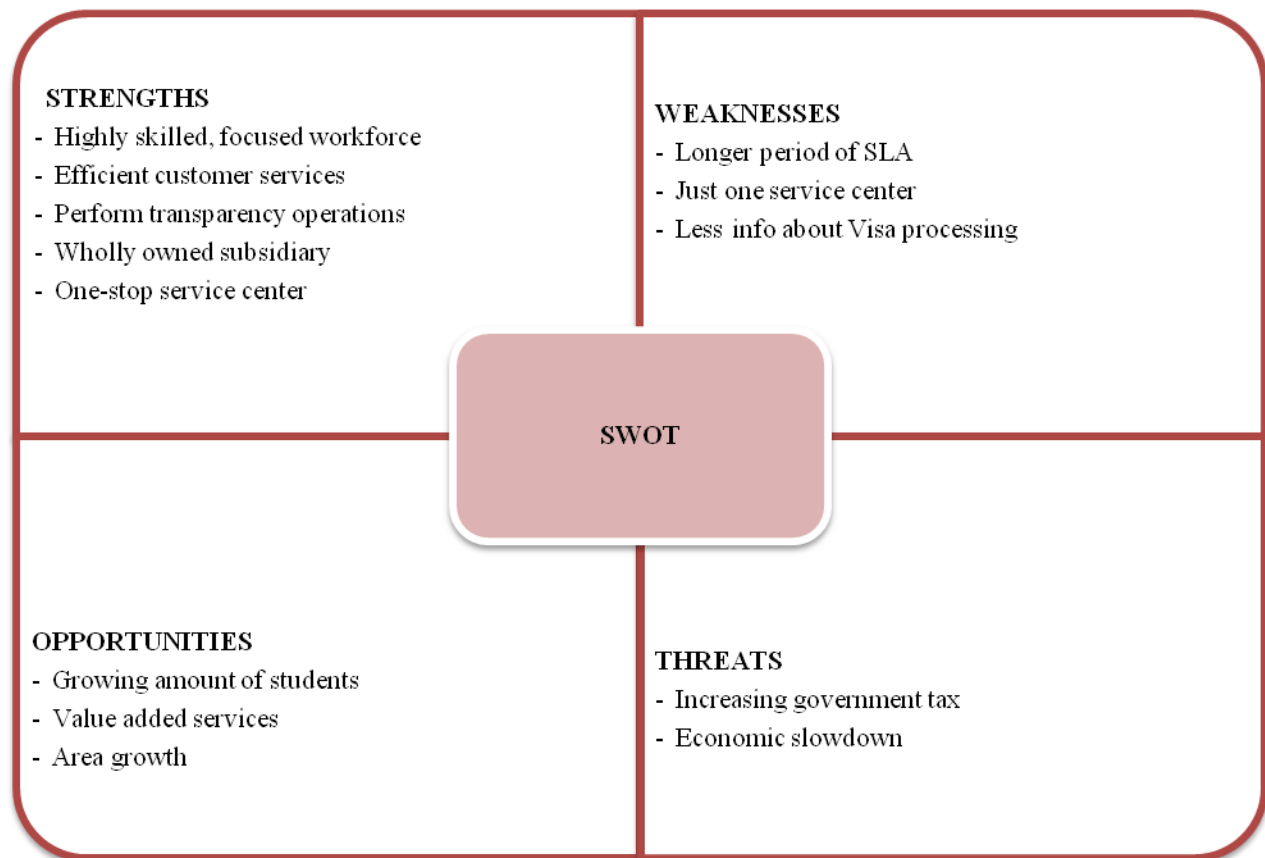


Figure 4: SWOT Analysis



2.1 Strength

Strength is about an edge or an element that could keep EMGS in the market. It is also defined as the positive peculiarity that EMGS has. EMGS has the highly skilled and focused workforce in the market. Ministry of Home Affairs, Malaysian Immigration Department, Ministry of Education and internal staffs always strive for the success of EMGS in adding value to the business in the internal components. On the other hand, EMGS market strength is also shows when they give importance to customer service and perform transparency operations in accommodating the students to keep track with their visa applications. EMGS also believes that customer service aspect is also a key to keep the revenue continuing. EMGS is a wholly owned subsidiary as the organization is completely inherits by Minister of Higher Education as it operates independently. These could speed up the execution of new strategic visa plans or also known as faster market penetration compare to normal subsidiary company whereby they have to wait for a longer time to get approval from further ventures to execute a new strategic plan. On the other hand, EMGS which is situated at Menara TA One, Kuala Lumpur is a one-stop service center at the KL city. These service center offers multitude services such as managing, processing, supporting on giving advices on foreign student visa. International students feel safe and accommodate with the services which will eventually be one of the strength of EMGS in the market.

2.2 Weakness

Weakness is referred as a factor of the EMGS's internal environment or factors that are still within control of EMGS. Weakness of EMGS in conquering the market normally capsulizes the inability of EMGS or a harmful factor which could collapse the entire organization if it's used against them. EMGS has a longer period of Service Level Agreement (SLA) whereby student has to wait almost a month and more to get their student visa done. SLA for Visa Approval Letter (VAL) is 14 working days excluding the student's time period to do pre VAL medical screening at their home country, travelling period to Malaysia, expiry date of the student's passport, endorsement supporting letter, time taken for sticker issuance and to do post VAL medical screening once they arrive Malaysia. These are the current market of EMGS right now. Moreover, the students who planned to pursue their tertiary education in Malaysia don't have the adequate amount of knowledge about Malaysian student visa processing. For instance, the student who applied for student visawill enter Malaysia using the tourist pass while their Visa Approval Letter (VAL) is still in the process. This is not the correct step to do because before attending the post medical screening in Malaysia, the student should obtain entry pass which only be given at the checkpoint in airport by the immigration officers. So students often get offended, confused and frustrated when the immigration officer's advice the students to leave the country and enter back with appropriate entry pass which would burden the student and consequently, the reputation of EMGS will be down. Moreover, the weakness of EMGS in the current market is the high employee turnover in as the employees leave the jobs relatively at a very high rate. EMGS have plenty of skilled employees, but the turnover amount is still the same in the market of 2015 until now, 2016 which will definitely effects the image of EMGS.

2.3 Opportunity

Opportunity is a compact of external factors that inspire, lead and encourage EMGS and make them be enriched in the market. It is also referred as external favorable situations which brings advantage to EMGS in the market. Growing amount of international student to pursue their tertiary education in Malaysia is one of the strongest opportunity EMGS in the current market. As everyone knows, EMGS's current market is obviously depends on the foreign students. There were 74,996 international students pursuing their studies in Malaysia. These had increase of 29.9% from year 2013. Malaysia is a tropical country so the international students love to continue their education here in Malaysia which consequently brings up EMGS's market shown in the following "Fig.5".

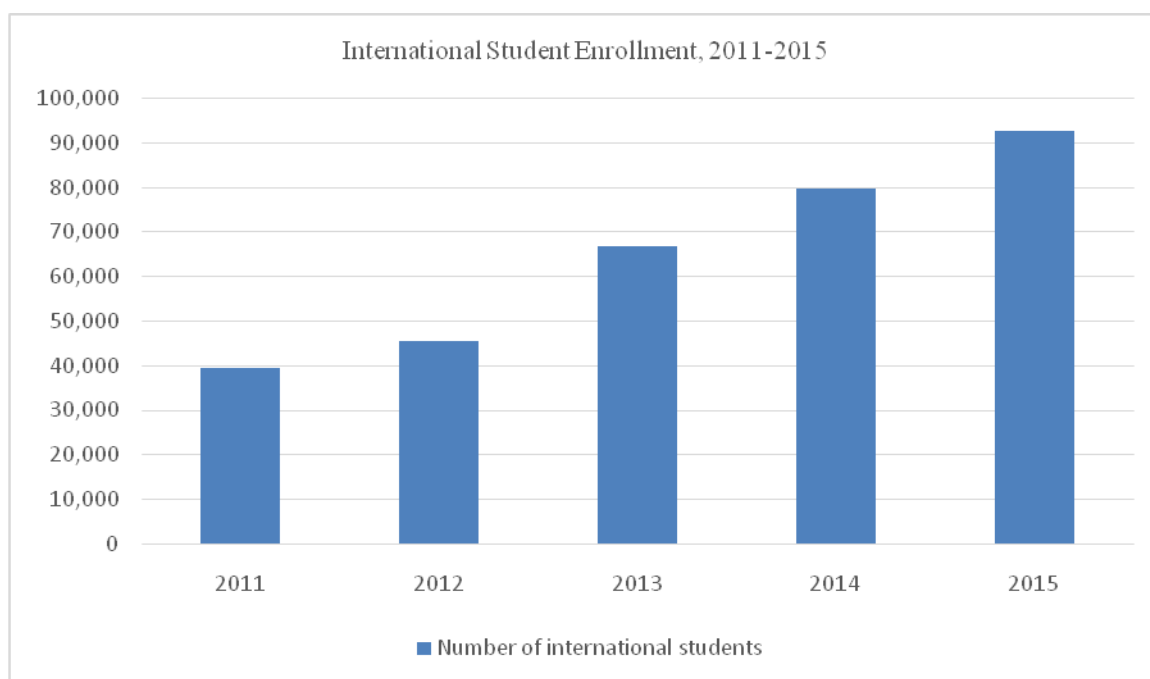


Figure 5: International student enrollment

On the other hand, additional services offered by the EMGS could also aid them in developing their market. Endorsement letters, courier services, mobile apps and has an efficient front desk whereby the students could just walk in for any enquiry. Apart from that, the area growth is also another favorable situation which enhances EMGS's market. Malaysia has been selected as the most peaceful country in South East Asia which are separated by 1,030km of South China Sea with 13 states where Malay, Chinese, Indian, Ibans, Kadazans and other ethnic groups live in harmony (EMGS, 2016). The international students are often attracted to the affordable cost of living, paradise for food, and various holiday attractions, stable and save environment as well as broadband of communications in Malaysia. These favorable situations had been an opportunity for EMGS to propagate and arise in the market.



2.4 Threats

Threat referred as an external factor that could possibly collapse the whole business of EMGS. It is a negative situation which could unfavorable affects EMGS. These threats have the potential to damage the company and bring down the entire organization. EMGS's threat in the market would be the Malaysia's income tax issues. The tax is directly levied by the government on income. Thus the increasing government tax eventually affects the visa payment rates and brings the price wars between the international students. The students are requested to pay medical screening fee, health insurance fee and i-Kad fee which are inclusive of 6% GST. Eventually, it make the students to think twice before pursuing their studies in Malaysia and this is the biggest threat for EMGS from expanding their market. On the other hand, Malaysia's economic slowdown could also reduce the demand of international students to study here in Malaysia. A study conducted by Moody's Investors Service, shows that the Malaysia's Gross Domestic Product (GDP) is expected to increase by 4% to 5% this year. Unfortunately, the GDP growth rate slows down to 4.4% in 2016. This brings a negative approach for the student as they afraid the foreign currency rate may increase or decrease anytime.

III IT POSITION'S IN EMGS

3.1 Technical assistant

The technical assistant in EMGS maintains the computer networks and systems. They would be the first person the employee or the staffs find for when they have issues or modulation on certain IT areas. For instance, forgotten ID or password, student's logging password reset, employee's password resets, website loading and web script issues as well as malware and email issues. Moreover, the technical assistant also solves technical problems which could be face to face or through phone. Technical assistant regular basis work at EMGS is to run on or troubleshoot system or network base problems and diagnose the solution. They as well prepare procedural documentation, IT progress reports and provide support to the superior. Consequently, they should keep up and establish a better working environment with the students and as well as the other computer expertise who works together in EMGS. Technical this expertise has the ability to think logically and to focus on workload by prioritizing which work to do first and last. They identify the computer problems either hardware or software and gives out valuable solutions to fix the problems.

3.2 Web designer / developer

Web designer or developer is another IT related job in EMGS. These web designers design, code, modify and update the official EMGS website from time to time. These expert use HTML, CSS, and JavaScript and JQuery practices in customizing the EMGS's official website visionary. These designers update the portals and official website of EMGS by keeping it up to date not only in terms of information but also in term of latest layouts and designs in a motive to attract the readers whom would be the international students. They have mastered themselves in graphic designing and computer programming. These web designers in EMGS also work along with the team leaders,



development managers and as well as department coordinators. On the other hand, the web designers are also responsible in producing, building, cultivating and tracking the official website. In case, if there is any editing needed to be done or to maintain the software documentation, these web designers are the proper authority to do so. They also integrate data from multiple database and back end services.

3.3 System Security Manager

System Security Manager would be the next IT related job in EMGS. These managers secure EMGS's internal information by sketching out, integrating, implementing and enforcing security controls, procedures and policies. System security operational objectives are achieved by committing information and suggesting strategic reviews, formulate action plans, prepare and execute production for better productivity, ensure good quality, better customer service standards, solve critical problems, finalize the auditing, identify trending's, improve systems and work out the changes. System security managers in EMGS preserve availability, integrity and confidentiality of EMGS with these applicable rules, regulations, procedures and policies. On the other hand, these managers also protects the computer assets by developing efficient security strategies to avoid the information breaches as the whole computer system in EMGS contains the sensitive and personal information of the international students who hand over their private and confidential details to EMGS in order for their students pass or student visa to be processed. So, System Security Managers at EMGS are the most expertise employees in the information security policies.

3.4 Systems risk

System risk is an important aspect for an organization because it has a possibility or higher degree of negative repercussion to an organization. It can also be defined as instable system. Consequently, system risks have a cascading effect that bankrupts or ruins the entire system of an organization. Not only risks the system but it also has ability to threaten the whole organization and bring down the entire financial system or market. The risks could be within the system itself rather than a result of a disastrous event. The proper authority should be aware and must be clearly able to predict the system risk and definitely should decide a correct path to overcome this issue as it is a legal requirement that each organization should do to identify the hazard and prevent it. The data is the devices could be retrieved and mishandled by anyone with just simple recovery tools. Leaving data open to the public is considered as a vulnerability to the hacker and they might misuse it for their own purposes. Each organization should emphasize on proper disposal of data's in the media as we all doesn't want it to be end up in the hacker's hand. Strong password or encryption is adequate to protect the information during the disposal act. Fewer injuries lead to fewer costs. Happy employees lead to decreased turnover and training costs. Fewer incidents lead to a lesser chance of lawsuits, fines or penalties from labor boards. You get the picture. The cost of conducting a risk assessment and investing in making changes to the workplace are minimal when compared to the costs of the situations just mentioned [3].



3.5 System Security

System security refers to the procedures and methodologies in keeping an information classified, personal and affirming its confidentiality. System security is also popularly known as INFOSEC. System security prevents any unauthorized user from accessing an integrated system or referred as access control. An (operating) system is responsible for controlling access to system resources, which will include sensitive data. The system must therefore include a certain amount of protection for such data, and must in turn control access to those parts of the system that administer this protection. System security is concerned with all aspects of these arrangements [4]. The respective organization should be aware system security issue such as advantages of having a secured system and a view on security breached acts. Each organization should decide a correct path to overcome and to protect the confidentiality of the information on the system as it is a legal requirement that each organization should do to identify the hazard and prevent it.

System security breaches happen in many places daily to keep count on. The need of having a secured network is increasing drastically. With a proper system security network an organization could also perform well as the process aid in protecting their personal data of clients or customers on the network. A good and strong system security could keep track and checks on unauthorized access time to time as the authority people are aware of logins and logout activities over the network. Accumulating, loading, posting, encrypting, searching and removing data are example of activities done daily by the users or either the staffs. Consequently, a secured system is compulsory. A secured system will always help in protecting information that is shared to other computer over the network. In a working environment, the employees should be restricted and excluded from letting them know the administrative privileges as the attacker could be everywhere. Always remember most security breached issues occur from inside jobs. A recent survey by the Ponemon Institute found that 62% of 1,371 end users said they had access to company data that they probably shouldn't see [5]. In this case, a good and efficient system security is important so that the employee is only provided with the general information of the company by segregating the workers and the admins and cancels their availability or level to access certain information by giving a unique user ID and password to access data pertaining to them. Moreover, a conducive and potential system security could always protect an organization from cyber-attacks. Hacking is attempted by injecting or spreading harmful virus or spyware such as the Trojan horse from the internet over an organization's network to hamper the sensitive data. There are many hackers out there hiding behind a monitor who are experts in these attacks. So, the system security should be there to protect the network from the virus attacks.

There is a lot of security breaches happens everyday in Malaysia as well as other countries. Example, The government in Petaling Jaya, Malaysia is bracing itself against likely cyber-attacks that are expected a couple of days prior to National Day on 29 August. Following a video threat by Anonymous Malaysia, the government's Administrative Modernization and Management Planning Unit (Mampu) issued instructions to different ministries, government departments and agencies to strengthen their website security. The IT departments of these entities are



being advised to monitor activities between now and 30 August for possible attacks. Several IT companies have been placed on standby to monitor their websites and servers in the event of an attack.

3.6 System Recovery

System recovery technically able the users to restore the computer's data to its previous state without even losing single information. Consequently, allows an organization to retrograde the computer stage to its original form or previous point in time. System files, Registry, Settings and installed applications could be recovered easily using the system recovery method. Rebuilding a computer system so that the operating system may be reinstalled and the important information in the system could be saved and recovered as it supports continuity of business. System Restore periodically creates automatic restores points, called "system checkpoints" that protect data from unexpected problems. The utility also allows the user to create manual restore points before making any significant changes to the system, such as installing new programs or making changes to the registry[6]. An organization should have a powerful, efficacious and effective form of system recovery whereby it should be able to have single unified image-based solution which recovers both the physical and virtual machines, backs up server, desktops and laptops without ruining the yield of the user as well as it should provide fast, extensible and constant form of data or system recovery.

Potential customers will always look for information about an organization to build their crucial trust or first impression on an organization before accepting their services. As everyone knows, an organization should have a solid reputation in order to gain the customer's conviction especially when they are working online. Customers preferred to have assurance and secured services as they don't not want their personal data's to be exposed. According to a survey conducted by Dimensional Research, 90 percent of respondents who recalled reading online reviews claimed that positive online reviews influenced buying decisions, while 86 percent said buying decisions were influenced by negative online reviews [7]. Organization definitely wants their customers to trust them as it is important to expand their services worldwide and it is also contribute the company's future. It wouldn't be that comfortable for the customers when they come across articles or negative testimonials saying that the company had data loss or have some security issues previously. To avoid this repercussion, data or system recovery is among the best solution to prevent data loss and to gain customers credence and also an important part in the organization's success to the future of the company. Not only gaining the customer's trust, but the data or system recovery could also make your organization more robust. It can strengthen your organization not only against large-scale problems it can also help make smaller problems that might have caused continuity interruptions to become moot, through detailed planning.



IV CONCLUSION

Organizations in our era of globalization are very susceptible. Simple overlook on the market might actually threaten the entire organization. This study had clearly determined the concept of trustworthiness of a firm in the ICT solution for the e-commerce environment. EMGS market analyses through SWOT analysis had clearly examined the strengths, weaknesses, opportunities and threats of the organization in determining where the current market is and where is it going. Using the analysis, authors could predict and suggests EMGS to improvement the environment in terms to decreasing the service level agreement as it burdens the students the most and also advised to come up with incentive programs that could provide the international students in the clear understanding flow diagram of the international student visa process from the day 1 they apply through online until they enter Malaysia with a valid entry. Always remember by making the customers a priority and provide additional loyalty programs to retain the existing customer in terms of solving threats during the economic downturn.

On the other hand, Porter's Five Forces model had aided much in the analysis of the EMGS's future business strategy. Students are the possible buyers of EMGS as the organization only processes student visa applications. It is advisable to also increase the buyers by accepting the services in the process of dependent pass as it also a part of the visa processing for the postgraduate students whom has the intention to bring in their family members into Malaysia using the dependent pass services which is now initially processed by the Malaysia Immigration department. Furthermore, it is very essential for EMGS identify the system risk, security, recovery in order to protect the customer's personal data by using the cloud services. EMGS's current back up and protection services is satisfying as they use Fortigate and Acronis True Image to back up and secure their clients personal and important data to gain customer's trust and to be the greatest leader in the market.

V ACKNOWLEDGMENT

The authors would like to share gratitude to Mr Umapathy Eaganathan, Lecturer in Computing, Asia Pacific University, Malaysia also Miss Angel Aron for her constant support and motivation helped us to participate in this International Conference and also for journal publication.

REFERENCES

- [1] EMGS (2016) Education Malaysia global services. Available at: <http://educationmalaysia.gov.my/> (Accessed: 8 September 2016).
- [2] Using SWOT analysis to develop a marketing strategy (2016) in Available at: <http://www.businessdictionary.com/article/632/using-swot-analysis-to-develop-a-marketing-strategy/> (Accessed: 8 September 2016).



- [3] Lindsavisight (2016) Available at: <http://i-sight.com/resources/benefits-of-workplace-risk-assessments/> (Accessed: 8 September 2016).
- [4] Encyclopedia (2004) System security. Available at: <http://www.encyclopedia.com/doc/1O11-systemsecurity.html> (Accessed: 8 September 2016).
- [5] Hamblen, M. (2016) Despite billions spent on cybersecurity, companies aren't truly safe from hacks. Available at: <http://www.computerworld.com/article/3110270/security/despite-billions-spent-on-cybersecurity-companies-arent-truly-safe-from-hacks.html> (Accessed: 8 September 2016).
- [6] Posted and Rouse, M. (2005) What is system restore? - definition from WhatIs.Com. Available at: <http://searchwindowsserver.techtarget.com/definition/System-Restore> (Accessed: 8 September 2016).
- [7] Gesenhues, A. (2013) Survey: 90% of customers say buying decisions are influenced by online reviews. Available at: <http://marketingland.com/survey-customers-more-frustrated-by-how-long-it-takes-to-resolve-a-customer-service-issue-than-the-resolution-38756> (Accessed: 8 September 2016).