The Effect of Business Technology Strategy on Inward Export Performance in the Malaysian Higher Education Industry

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Abstract: Services export plays a significant role in the world economy and benefits businesses and countries. In the service sector, higher education service has become vital for countries’ economic sustainability. The flux of international students has created global business opportunities and trade networks. However, past studies have largely focused on exports within the manufacturing industry rather than service exports, particularly on the inward export service industry. Therefore, the present study was conducted to investigate the relationship between business technology strategy, cultural sensitivity, and export performance in the higher education service industry. Data were collected from directors of international offices of 137 Malaysian higher education institutions. PLS-SEM was used for data analysis using the SmartPLS 3.2.8 software. The findings reveal that business technology strategy is positively related to cultural sensitivity and inward export performance. Furthermore, the study found that business technology strategy mediates the relationship between cultural sensitivity and inward export performance. The findings can help researchers in understanding factors that influence the inward export performance of higher education institutions. Since business technology strategy plays a mediating role in the inward export performance of higher education, this study recommends that Malaysian higher education institutions (HEIs) are equipped with the latest education-related technologies in order to increase their internationalization performance.

Keywords: inward export performance; export performance; business technology strategy; cultural sensitivity; higher education; service industry

1. Introduction

Exporting has been regarded as a strategic activity at the firm, industry, and country levels [1]. In addition, export is also a source of demand, with significant implications for the economy and employment [2]. Nowadays, practitioners, policy makers, and academicians are becoming increasingly interested in determining the factors that influence export performance (EP) of firms in the service industry [3–5]. There are similarities and differences in the dimensions of EP between service and manufacturing companies. Therefore, determinants of EP in the manufacturing and service industry should be studied separately. However, most of the studies have been focusing on evaluating the factors in the manufacturing or mixed industries, and only a few have looked at the service industry [6].

A significant chunk of the research on service businesses has focused on outward export [7]. Several service industries, however, are domestically located or in the form of
inward export [8]. In higher education services, for example, international students need to go to the country where the educational institution is located. Therefore, the process of internationalization and the determinants for this type of export service are different from outward-focused export [9]. The use of media and educational technology has always been a part of distance education [10]. However, the current study argues that for such inward export as education, technology plays a more vital role than outward export. New technology lets students and institutions connect closely from afar to increase performance. E-learning tools play a critical role in planning, managing, and tracking the learning and teaching process [11]. E-learning service covers the gaps that a pandemic might cause for higher education institutions; however, e-learning is still at its early adoption stage in developing countries [12].

Likewise, factors such as cultural sensitivity (CS) can influence export performance. According to [13], CS does not only involve being open and respectful to cultural differences but also requires understanding the dynamics of other cultures. With regard to this, an adaptation to the local culture is an effective way for foreign students to increase their CS. Kauffmann (1992), Zorn (1996), and Ruddock and Turner (2007) [14–16] advocated that strategies should be developed to ensure that foreign students do not feel culturally uncomfortable when they study abroad. They argued that teachers, lecturers, and staff in charge of international students’ affairs should help students feel part of their new environment. At the same time, students need to know studying abroad is different from traveling as a tourist. Hence, CS can be a significant factor that influences higher education export.

Occasionally, people cannot afford to travel abroad in order to pursue their education. However, with the advancement of technology, a lot of researchers are looking into how computer technology can help with cross-cultural education. With technology, there is no need for learners to physically stay in the host country or to communicate face-to-face with the cross-cultural education provider [17]. For example, e-learning platforms or e-course platforms such as Coursera, Udemy, skillshare, learnWorlds, Teachable, and learnPress, etc., have provided opportunities for students to study online. A new report from the online learning platform Coursera shows that over 20 million new learners registered for courses in 2021, equal to the growth in the three years pre-pandemic [18]. Coursera’s online courses enrolled 21 million students in 2016, with the number predicted to increase by about 7 million per year over the next two years. Nonetheless, the switch to remote working as the pandemic struck led to a threefold increase in new registrations, with 71 million in 2020 and 92 million in 2021 [18]. Additionally, technology assists students in different ways. For instance, computer-aided translation (CAT) allows translating writings into different target languages [19]. CAT can help educators write texts in a second or foreign language, as well as correct grammatical and verbal errors [20].

Furthermore, people of various cultures can interact with each other thanks to the use of computer technology [21]. With respect to this, a computer-supported collaborative learning environment can provide authentic learning material on demand or assist in exchanging information among learners that facilitate knowledge acquisition from individuals with different cultural backgrounds [17]. Thus, technology and online communication have become vital for learning especially during the COVID-19 pandemic and can increase the performance of educational institutions.

It is worthy to note that a pillar of the United Nations 2030 Agenda for Sustainable Development is quality education. It seeks to ensure that all students have access to high-quality education and promote opportunities for lifelong learning [22]. The learning and teaching process should be effective. Technology can facilitate the removal of ambiguity of cultural sensitivity and enhance the process of learning and teaching performance. Therefore, the objective of this paper was to examine the effect of cultural sensitivity mediated by business technology strategy on the inward export performance of Malaysian higher education services.
2. Literature Review

2.1. Malaysian Higher Education: An Overview

International students generate international business opportunities and world trade connections; they help nations become diplomatic allies and promote foreign policy interests [23]. Malaysia is one of the important education exporting countries [24]. Malaysia is expected to become the hub of education in the region. Based on the data of [25], the number of foreign students enrolled in public and private HEIs increased from 27,872 in 2002 to 70,000 in 2007, then increased to 86,919 in 2010. Malaysia’s higher education institutions attracted 114,653 international students in 2015, around 133,860 international students in 2017 [26], and 1,325,699 international students in 2019 [27]. This figure was expected to increase to 200,000 by 2020 [25]; however, it has not been achieved.

Malaysian HEIs are expected to fulfill their target of 250,000 students by 2025 [28]. These international students come from different parts of the world. Most of the foreign students come from Southeast Asia, the Middle East, Middle Asia, Africa, and Latin America. Leading countries are countries such as Bangladesh followed by China, Nigeria, Indonesia, Yemen, Pakistan, Libya, Iraq, Sudan, and Iran [29]. In the Malaysia Education Blueprint 2015–2025 [30], digital literacy was highlighted as one of the priorities. In order to improve teaching, learning, and research outcomes in Malaysian universities, university authorities have provided ICT equipment to universities in the west and east [31]. Hence, Malaysian universities in the east intend to become research institutions (such as the University of Malaysia Sarawak and the University of Malaysia Sabah). Currently, the University of Malaya is one of the best research universities in west Malaysia [31]. Similarly, Malaysian public universities have noted the impact of social media on collaborative learning and engagement [32].

2.2. Export Performance

International sales are commonly used to define a firm’s export performance [33–36]. Previous studies have found that firm capabilities, characteristics, environmental factors, and managerial skills affect export performance [37–39] However, most of these studies have been conducted in the case of manufacturing or mixed industries. According to Chen, Sousa, and He (2016) and Lejpras (2019) [5,6], there is a need to measure export performance in non-manufacturing industries.

Barney (2015) [40] stated that unique goods and factors that generate a firm’s competitive advantage can be determinants for export performance. Similarly, Ferreras-Méndez and Alegre (2019) [41] endorsed the role of internal factors on export performance. In other words, the capabilities of a firm are essential for survival and effective performance [42]. Singh and Mahmood (2014) [43] mentioned that the capability factors and availability of resources can increase the export performance in different departments of the firm. Asaad, Melewar, and Cohen (2015) and Melikyan (2018) [44,45] investigated several factors that impact HE inward export performance. However, the effect of technology strategy on export performance has not been investigated. In summary, studies based on the resource-based view (RBV) [40] generally support that the internal factor of the company can increase inward export performance.

Empirically, the measurement of export performance can be classified into objective measures and subjective measures [46]. Subjective measures are based on respondents’ perceptions and self-examination [47,48], and objective measures look at financial results on sales, profitability, and growth [47,49]. According to Safari and Saleh (2020) [39], both subjective and objective measures are effective methods for evaluating export performance. Sichtmann et al. (2011) [4], for instance, evaluated export performance based on subjective measures using dimensions such as strategic export performance, satisfaction with an export project, and financial export performance. Inward export performance was measured by managers’ subjective assessments in the current paper. The same measures of export performance were also applied in the case of inward export.
2.3. Business Technology Strategy and Export Performance

In today’s competitive market, businesses should proactively use business technology to connect with their customers [50,51]. On this point, La et al. (2005) and Grönroos (1999) [52,53] stated that technological advancement is one of the critical factors for export performance success in the service sector. There are proactive (aggressive) and reactive types of technology [54]. However, businesses that use proactive technology are considered more innovative [55] and make much new wealth [56].

Previous studies have found that export performance is significantly influenced by business capabilities in leveraging technologies [57–59]. However, Zou and Stan (1998) [60] revealed that there is no absolute relationship between the level of business technology and export performance. Filatotchev et al. (2009) and Chen et al. (2016) [6,61] argued that export managers should focus more on developing innovation capabilities in technology-intensive industries, which will lead them to be able to compete in international markets.

Higher education systems have experienced a continuous process of change through technology [62–64]. Many education service providers have used a proactive method to reach the market using innovations and education-oriented technologies [51,65]. Countries such as Australia, Canada, South Africa, and Brazil are leading in digital higher education [10].

In this regard, technology could significantly improve the inward export of higher education. Audio conferencing, video conferencing, internet calling services, e-learning, and the Zoom application are examples of prominent platforms for connecting institutions and students. Furthermore, John, Walford, and Purayidathil (2022) [66] revealed that social media has a significant influence on the attitude formation and decision making of international students. Thus, technological capability strategies and proactive approaches are the core capabilities of higher education institutions.

2.4. Cultural Sensitivity and Export Performance

Cultural differences have been identified as a key barrier to professional services exports worldwide. This is because the service sector normally involves a large amount of personal contact between service workers and clients. Studies have found that cultures can have a significant influence on service quality evaluation [67] and service success [68]. Therefore, cultural problems such as language barriers, staff cultural awareness, dissimilarities, and socio-cultural differences are important in the service industry [69].

International students provide opportunities for local students, professors, and faculty members to develop skills in working with various cultural and social backgrounds [70,71]. Nevertheless, foreign students face challenges such as different living conditions, food, learning style, language, and unfamiliar living environments. According to [72], an international student’s life outside the classroom can be critical to their success. Stress, anxiety, and depression can be exacerbated by culture shock and social isolation [72].

Likewise, Arday (2018) [73] argued that the lack of cultural sensitivity in the UK’s higher education does not allow students to have open discussions because of fear of further discrimination. Due to this, higher education institutions should be ready to fulfill students’ cultural needs. Sichtmann and von Selasinsky (2010) [74] argued that a higher level of cross-cultural skills among service employees might lead to better relationships, hence increasing the number of customers in the export market. Consequently, this study developed the research question to test how cultural sensitivity influences inward export performance in the Malaysian higher education service industry.

2.5. Mediating Effect of Business Technology Strategy

Cultural sensitivity is becoming a more important goal for both scholars and administrators [75]. There is a growing demand for communicating with people from various cultural backgrounds and living happily with them. Technology can connect people and expose them to a wider range of culturally diverse people. In a study in the tourism context, connection to technology was considered a link between cultural interactions [76]. Myers
and Myers (2017) [77] determined that students can develop cultural sensitivity through the use of social media technology. There is a need to consider technology providing assistance for international students and its influence on the export performance of education institutions.

Computer communication and telecollaborative projects are effective platforms for students to communicate with people from dissimilar cultures [21,78]. Previous studies showed that intercultural projects using technology communication normally ended with enjoyment feelings [79]. In addition, computer-based digital technologies can also improve the export performance of higher education by positively influencing other educational processes such as marketing, registration, and assisting students from different cultures. Therefore, with the availability of high-quality and reliable technological-based communication tools, the role of BTS can facilitate removing some ambiguity in cultural sensitivity.

Based on the review of the above literature, a conceptual framework for the study is proposed as shown in Figure 1. It provides insights into the study of determinants that affect the inward export performance of Malaysian higher education institutions. The model shows that cultural sensitivity has direct and indirect impacts on inward export performance through business technology strategy. To achieve the research objectives, three hypotheses were developed:

**H1.** There is a significant relationship between cultural sensitivity and the inward export performance of the Malaysian higher education service industry.

**H2.** There is a significant association between business technology strategy and the inward export performance of the Malaysian higher education service industry.

**H3.** Business technology strategy significantly mediates the relationship between cultural sensitivity and the inward export performance of the Malaysian higher education service industry.

### 3. Materials and Methods

#### 3.1. Instrument Development

The main purpose of this cross-sectional study was to examine direct and indirect effects of business technology strategy on the inward export performance of higher educational institutions in Malaysia. The study covered all five types of higher education institutions all over Malaysia: public university, private university, private university college, private college, and foreign university branch. All types of institutions are active in HE internationalization. The unit sample of the study consisted of the associate directors working at the international student divisions of the institutions. Malaysia was chosen for this study since it is a developing country that provides a considerable research setting to determine various antecedents of export performance. Although higher education is constantly globalized, few studies in non-Western countries evaluated higher education establishments [80]. Moreover, higher education is a critical industry in Malaysia, and the ministry of education in Malaysia aspired to increase the enrolment in higher education and become the hub of education [81].

The scales employed in this study were adopted from prior studied validated scales (see Appendix A). The data gathering process was carried out in 2019. Gpower analysis
was used to figure out the study’s sample size [82]. Using alpha 0.05, power of 0.95, effect size f² 0.15, and three predictors, the minimum sample size required for the study was 74. However, the study managed to gather a total of 137 completed questionnaires for the final analysis. The current research adapted questions from several previous studies to measure the respective constructs. Appendix A provides details of the questions together with their sources. The study also compared the early and late responses to check on the non-response bias issue. The first 70% of the returned questionnaires were considered early, and the last 30% of responses were classified as late. According to [83], there is no difference between early and late responses if the $p$-Value is larger than 0.05. The results from the t-test show there is no non-response bias problem in this study.

3.2. Data Analysis

In order to answer the research objectives, the data gathered through questionnaires were analyzed descriptively and inferentially. The SPSS software was used to calculate descriptive statistics such as the mean, percentage, and standard deviation of the demographic factors. Meanwhile, structural equation modeling (SEM) SmartPLS 3.2.8. was used for inferential analysis. Specifically, PLS-SEM was used to analyze the measurement and structural models. The measurement model is used to validate the items’ and constructs’ discriminant and convergent validity, while the structural model is used to validate the hypothesized relationships in the research model [84].

4. Results

4.1. Demographic Profiles of the Respondents

Table 1 shows the demographic profiles of the respondents involved in this study. In brief, out of 137 respondents, 30 were females and 107 males, and most respondents had 6 to 10 years of international working experience. Only 13.1% had less than 5 years of working experience. This indicates that the study respondents had sufficient knowledge about the subject, which may reduce the common method bias [85]. Further, when deciding to enter export markets, investigating resource commitments, and developing marketing strategies, international experience can be extremely beneficial [86,87]. Based on the total number of employees, the sample of the study consisted of respondents from both large and small-sized institutions. While with respect to the type of the institutions, the study encompassed 15 public universities, 32 private universities, 20 private university colleges, 69 private colleges, and 1 foreign branch campus.

Table 1. Demographic profiles.

| Variable                                  | Category          | Frequency (n) | Percent (%) |
|-------------------------------------------|-------------------|---------------|-------------|
| Gender of the respondent                  | Female            | 30            | 21.9        |
|                                           | Male              | 107           | 78.1        |
| International experience of the respondent| Less than 5 years | 18            | 13.1        |
|                                           | 6–10 years        | 63            | 46.0        |
|                                           | 11–20 years       | 40            | 29.2        |
|                                           | More than 21 years| 16            | 11.7        |
|                                           | Less than 400     | 92            | 67.2        |
|                                           | 401–800           | 8             | 5.8         |
|                                           | 801–1200          | 6             | 4.4         |
|                                           | 1201–1600         | 13            | 9.5         |
|                                           | More than 1600    | 18            | 13.1        |
|                                           | Public university | 15            | 10.9        |
| Total number of employees in the institutions| Private university | 32          | 23.4        |
|                                           | Private university college | 20 | 14.6 |
|                                           | Private college   | 69            | 50.4        |
|                                           | Foreign university branch | 1 | 0.7 |
4.2. Descriptive Statistics and Correlation Analysis

Table 2 presents the descriptive statistics and the results from the correlation analysis. All constructs were measured using a 5-point Likert scale. For IEP, the scale included “1 = very unsatisfied”, “2 = unsatisfied”, “3 = moderately satisfied”, “4 = satisfied”, and “5 = very satisfied”. IEP was assessed using five items with a mean score of these items 3.56. Six items were used to evaluate CS. The items were measured using a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”. The mean score for the items is 3.59. BTS, which consisted of four items, was also measured using a 5-point Likert scale from “strongly disagree” to “strongly agree”. The mean score for BTS is 3.51. The findings show that the mean scores of CS, BTS, and IEP are slightly above the midpoint of scale (3). Meanwhile, the findings from the correlation analysis reveal that CS, BTS, and IEP are positively and moderately correlated with each other.

Table 2. Descriptive statistics and correlation coefficients.

| Constructs | Mean | SD  | Correlation Coefficient | CS  | BTS |
|------------|------|-----|--------------------------|-----|-----|
| IEP        | 3.53 | 0.51| 1                        |     |     |
| CS         | 3.58 | 0.69| 0.66                     | 1   |     |
| BTS        | 3.46 | 0.61| 0.65                     | 0.62| 1   |

4.3. Common Method Variance

Since the data were self-reported from the perspective of the same category of respondents (i.e., associate director of international student department), common method variance (CMV) was a concern. Therefore, in this study, the common method variance of the Harman single-factor test was used to safeguard the results. The result reveals that a single factor explained only about 28% of the variance, which is less than the minimum 50% threshold. According to [87], the variance for each factor should not exceed 50%. Hence, CMV is not an issue in this research.

4.4. Assessment of the Measurement Model

In this study, the measurement model was verified through confirmatory factor analysis (CFA) (Figure 2). The results show that the factor loading for all items is higher than the minimum threshold of 0.70 suggested by [88]. Meanwhile, the internal consistency reliability of the constructs was assessed through Cronbach’s alpha and composite reliability procedures. The findings show that the values of Cronbach’s alpha and composite reliabilities are higher than the minimum threshold of 0.70 (Table 3). Hence, the items and latent constructs of the study are reliable. In addition, the convergent validity of the constructs was assessed by calculating their average variance extracted (AVE). According to Fornell and Larcker (1981) and Hair et al. (2017) [89,90], a construct is convergently valid if its AVE is greater than 0.50. The test results in Table 3 show that the AVE for all constructs is greater than the required value of 0.50 indicating that all constructs of the study are convergently valid.

Figure 2. Measurement model.
Furthermore, the discriminant validity of the variables of the study was assessed by using Fornell and Larcker’s (1981) criterion (Table 4). According to Fornell and Larcker (1981) [89], a construct is discriminately valid if the square root of AVE of a construct is greater than the construct’s correlation with other variables of the study. The results of the paper illustrate that the construct AVE’s square root was greater than the correlations of the construct with other variables of the study.

Table 4. Fornell–Larcker criterion.

|     | BTS | CS   | IEP  |
|-----|-----|------|------|
| BTS | 0.799 |      |      |
| CS  | 0.627 | 0.770|      |
| IEP | 0.651 | 0.666| 0.726|

In addition, the discriminant validity of the model was measured by estimating the heterotrait-monotrait ratio of correlations or HTMT tests (Henseler, Ringle, & Sarstedt, 2015) [91]. The HTMT is defined as the average of the item correlations across constructs, relative to the (geometric) average correlations of items measuring the same construct [91]. When HTMT values are high, discriminant validity issues arise [84]. According to Henseler et al. (2015) [91], an HTMT value of 0.90 or less is indicative of discriminant validity. In this study, the results (Table 5) reveal that the values of HTMT are less than the minimum threshold of 0.90, indicating that the variables of the study are reliable and valid.

Table 5. Heterotrait-monotrait ratio (HTMT).

|     | BTS | CS  | IEP |
|-----|-----|-----|-----|
| BTS |     | 0.734| 0.768|
| CS  | 0.788|     |     |

4.5. Assessment of the Structural Model

The structural model shows and describes the relationships between latent constructs of the study. The relationship between the latent construct of the structural model is assessed by estimating the model’s explanatory power, the model’s effect size, and the significance of the path coefficient. In this study, the model’s explanatory power was measured by calculating the coefficient of determination or (R2) of the model. The results of the study reveal that the model has sufficient explanatory power and explains about 53.4% variance in the IEP and 39.3% of variance in CS. The effect size was also evaluated by estimating the f2 of the model. According to [84, 92], small, medium, and large f2 effect sizes are represented by values greater than 0.02, 0.15, and 0.35. The results show that the effect size of the BTS on CS was large (0.646) and medium on IEP (0.193). The effect size of CS on IEP was also medium (0.235).

After assessing the model’s explanatory power and effect size, the path coefficient of the model was estimated using the bootstrapping procedure as recommended by Preacher and Hayes (2008) [93]. In this study, the bootstrapping procedure was conducted using 5000 re-samples. The results of the bootstrapping (Figure 3) reveal that the effect of CS and BTS on IEP is positive and significant; hence, H1 and H2 are supported. Statistics in Table 6...
also show that there is a positive relationship between CS and IEP through the mediating effect of BTS; hence, H3 is also supported.

Figure 3. Structural model based on bootstrapping.

Table 6. Direct and indirect effects of relative path.

| Path                        | β    | SE   | T Value | p-Values |
|-----------------------------|------|------|---------|----------|
| BTS -> IEP                  | 0.385| 0.386| 5.314   | 0.000    |
| CS -> BTS                   | 0.627| 0.630| 11.847  | 0.000    |
| CS -> IEP                   | 0.425| 0.429| 6.270   | 0.000    |
| Mediating Effect of Relative Path | 0.241| 0.056| 4.300   | 0.000    |

5. Discussion

The objective of the study was to examine the antecedents of IEP in higher education institutions in Malaysia. There are three main findings of this study. First, the results show that CS positively affects the IEP of Malaysian higher education institutions. This is consistent with previous research on the links between CS and EP by Bloemer, Pluymaekers, and Odekerken (2013) [94]. The results are also commensurate with previous research by Sichtmann and von Selasinsky (2010) [74] and Stoian et al. (2011) [95] that noted higher levels of employees’ cross-cultural ability can lead to the growth and rise in the number of customers in the export market. Factors such as CS sensitivity can be much more vital in inward export than outward (Bianchi, 2010; Bianchi, 2011) [96,97].

Secondly, BTS also significantly influenced IEP. The outcomes are in line with Kunz and Hogreve (2011), Ostrom et al. (2010), and Erumban and Das (2016) [98–100] who found that technology can increase productivity and the IEP of the service sector. Therefore, higher education institutions need to find reliable communication tools and superior academic experience and promote usage of technology in their system. Finally, this study found that BTS played a mediating role in the relationship between CS and IEP. This finding concurs with the work of [21] that found computer communication is useful for students from a different culture. The finding from this study reveals that some factors such as technology can facilitate the ambiguity of increasing CS toward international students. Educational technology service means facilitating learning and improving performance by using and managing proper technological processes and resources. It consists of e-learning platforms, digital tools and media, and information and communication tools.

Inward exports such as higher education service contribute to the economic growth of the host country [101]. International students contribute to the domestic economy via their tuition fees and living payments [70]. Equally, higher education institutions can generate revenue from the enrolment of international students and also develop cultural and scholarly diversity in their institutions [101–103].

This study can help managers in the field of international business and international marketing to understand how institutions can increase inward exports. These research
results can serve as a guide for future researchers who aim to study higher education issues in other developing countries and as a reliable reference guide to business practitioners in higher education focused on export activities, specifically Malaysian higher education institutions. Having technology such as an innovative way of teaching can increase the enrollment of international students. Technology strategies such as learning and teaching platforms increase the excellent image of the higher education institutions, which can enhance the enrollment of international students. HEIs can use e-learning strategy to avoid losing international students.

6. Limitations and Further Research

The current study was conducted in a Malaysian context. Future researchers can assess the same model in different countries to generalize our findings to a larger population. In addition, future studies are encouraged to expand the theoretical model by testing the other institutions’ capabilities in the higher education industry. There is a potential for future studies to test the impact of different kinds of modern technology such as e-learning systems and adoption of technology in education export performance.

Furthermore, education is a key component of the sustainability and the future quality of human life. Scholars are encouraged to test how technology can increase education for sustainable development via factors such as learners’ behavior.

In addition, managers were the only respondents in this study, and this research was developed from a managerial viewpoint. Some concepts used in this study (i.e., technology strategy) can be evaluated if the respondents are international students. Consequently, it is called for future research using student responses to test the link between students’ perceptions and universities’ export performance activities.

7. Conclusions

In conclusion, nowadays, higher education institutions are facing new technological challenges. Aggressive use of technology can solve some cross-cultural limitations and hence increase the IEP of the higher education industry. Technology provides a great opportunity to promote both distance education and the performance of on-campus education. Since business technology strategy plays a mediating role in the IEP of higher education, Malaysian higher education institutions should be equipped with the latest learning technologies in education in order to increase their internationalization performance. Further, education plays a key role in sustainable development [104]. Education for sustainable development (ESD) can be supported with technologies. As Malaysia aims to be the hub of education, it is a good opportunity for Malaysian higher education policy makers to consider ESD to enjoy sustained peace, prosperity, and quality of life in the export of higher education.

Lastly, the future of the world is being shaped by communication, collaboration, and innovation, all of which depend on technology. However, regarding education, the authors agree with [10] that argued “e-learning” is not superior to face-to-face learning. Using digital media in teaching and learning always has advantages and disadvantages. Depending on the time and distance, international students and institutions can get a lot of benefits from transforming learning and teaching with digital technology. Nevertheless, it is impossible to have real-time, face-to-face conversations online.

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Appendix A

Table A1. Constructs and questions.

| Constructs                                      | Adapted Questions                                                                 | References |
|------------------------------------------------|-----------------------------------------------------------------------------------|------------|
| Inward Export Performance (IEP)                | IEP1. Your institution’s market share of international students.                  | [105–107]  |
|                                                | IEP2. Your institution’s market growth of international students.                  |            |
|                                                | IEP3. Your institution’s income generated from international students’ enrolment. |            |
|                                                | IEP4. Your institution’s profitability from international students’ enrolment.     |            |
|                                                | IEP5. Your institution’s new country market penetration of international students. |            |
| To what extent do you agree or disagree with your institution’s understanding on cultural differences? (Strongly disagree- Strongly agree) | CS1. Our institution is aware of the differences in educational system among countries. | [94]       |
|                                                | CS2. Our institution often attempts to adapt to the education system among international students. |            |
|                                                | CS3. The staff at the institution are aware of the different norms of communication between countries. |            |
|                                                | CS4. Our institution is familiar with international students’ legal and economic environment. |            |
|                                                | CS5. Some staff members speak the language of international students or try to learn it. |            |
|                                                | CS6. Our institution knows a lot about the culture of international students.       |            |
| To what extent do you agree with your institution’s pursuit of aggressive technological strategy? (Strongly disagree- Strongly agree) | BTS1. Our institution has a long tradition of being the first to try new methods and technologies. | [54]       |
|                                                | BTS2. Our institution spends more resources on technologies than others in the industry in developing new service. |            |
|                                                | BTS3. Our institution actively recruits the best technical personnel                |            |
|                                                | BTS4. Our institution keeps abreast of the latest technological developments.       |            |

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