**Eurasian Studies in Business and Economics 22** *Series Editors:* Mehmet Huseyin Bilgin · Hakan Danis

Mehmet Huseyin Bilgin Hakan Danis Ender Demir Ghulam Mustafa *Editors* 

# Eurasian Business and Economics Perspectives

Proceedings of the 35th Eurasia Business and Economics Society Conference





### **Eurasian Studies in Business and Economics**

### Volume 22

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# Eurasian Business and Economics Perspectives

Proceedings of the 35th Eurasia Business and Economics Society Conference



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### **Preface**

This is the 22nd issue of the Springer's series **Eurasian Studies in Business and Economics**, which is the official book series of the Eurasia Business and Economics Society (EBES, www.ebesweb.org). This issue includes selected papers presented at the 35th EBES Conference—Rome that was held on April 7–9, 2021. The conference was organized jointly by the *Faculty of Economics, Sapienza University of Rome*, and the *Istanbul Economic Research Association*. Due to the COVID-19 pandemic, the conference presentation mode has been switched to online/virtual presentation only.

We are honored to have received top-tier papers from distinguished scholars from all over the world. We regret that we were unable to accept more papers. In the conference, 142 papers were presented and 302 colleagues from 48 countries attended the online conference. Dorothea Schäfer (Editor—Eurasian Economic Review (Scopus & ESCI)), Ngee Choon Chia (Co-Editor—Singapore Economic Review (SSCI)), and M. Kabir Hassan (Editor—International Journal of Islamic and Middle Eastern Finance and Management (SSCI)) joined the "Editor's Panel Session" on "How to publish in WoS journals."

In addition to publication opportunities in EBES journals (*Eurasian Business Review* and *Eurasian Economic Review*, which are also published by Springer), conference participants were given the opportunity to submit their full papers for this issue. Theoretical and empirical papers in the series cover diverse areas of business, economics, and finance from many different countries, providing a valuable opportunity to researchers, professionals, and students to catch up with the most recent studies in a diverse set of fields across many countries and regions.

The aim of the EBES conferences is to bring together scientists from business, finance, and economics fields, attract original research papers, and provide them with publication opportunities. Each issue of *the Eurasian Studies in Business and Economics* covers a wide variety of topics from business and economics and provides empirical results from many different countries and regions that are less investigated in the existing literature. All accepted papers for the issue went through a peer review process and benefited from the comments made during the conference

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as well. The current issue is entitled "Eurasian Business and Economics Perspectives" and covers fields such as entrepreneurship, human resources management, management, marketing, finance, growth and development, and regional studies.

Although the papers in this issue may provide empirical results for a specific country or regions, we believe that the readers would have an opportunity to catch up with the most recent studies in a diverse set of fields across many countries and regions and empirical support for the existing literature. In addition, the findings from these papers could be valid for similar economies or regions.

On behalf of the series editors, volume editors, and EBES officers, I would like to thank all the presenters, participants, board members, and keynote speakers, and we are looking forward to seeing you at the upcoming EBES conferences.

Best regards,

Istanbul, Turkey

**Ender Demir** 

### **Eurasia Business and Economics Society (EBES)**

*EBES* is a scholarly association for scholars involved in the practice and study of economics, finance, and business worldwide. EBES was founded in 2008 with the purpose of not only promoting academic research in the field of business and economics but also encouraging the intellectual development of scholars. In spite of the term "Eurasia," the scope should be understood in its broadest terms as having a global emphasis.

EBES aims to bring worldwide researchers and professionals together through organizing conferences and publishing academic journals and increase economics, finance, and business knowledge through academic discussions. Any scholar or professional interested in economics, finance, and business is welcome to attend EBES conferences. Since our first conference in 2009, around 14,439 colleagues from 99 countries have joined our conferences and 8047 academic papers have been presented. EBES has reached 2628 members from 87 countries.

Since 2011, EBES has been publishing two journals. One of those journals, *Eurasian Business Review—EABR*, is in the fields of industrial organization, innovation, and management science, and the other one, *Eurasian Economic Review—EAER*, is in the fields of applied macroeconomics and finance. Both journals are published quarterly by *Springer* and indexed in *Scopus*. In addition, EAER is indexed in the *Emerging Sources Citation Index (Clarivate Analytics)*, and EABR is indexed in the *Social Science Citation Index (SSCI)* with an impact factor of **3.5** as of 2020.

Furthermore, since 2014 Springer has started to publish a new conference proceedings series (Eurasian Studies in Business and Economics) which includes selected papers from the EBES conferences. The series has been indexed by SCOPUS. In addition, the 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, and 25th (Vol. 2) EBES Conference Proceedings have already been accepted for inclusion in the Conference Proceedings Citation Index—Social Science & Humanities (CPCI-SSH). Other conference proceedings are in progress.

We look forward to seeing you at our forthcoming conferences. We very much welcome your comments and suggestions in order to improve our future events. Our success is only possible with your valuable feedback and support!

With my very best wishes,

Klaus F. Zimmermann President

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# Part I Eurasian Business Perspectives: Entrepreneurship

### Hawkers' Attitude on Environmentally Friendly Food Packaging Practices in Night Market



Nur Dalila Binti Mat Yusoff, Hamrila Binti Abdul Latip, Norizan Binti Jaafar, Noor Raihani Binti Zainol, and Nurul Izyan Mat Daud

Abstract The issue of food packaging waste has become an environmental concern in the society, particularly among food hawkers. Since food packaging waste ranks the highest contributor to waste; thus, environmentally friendly food packaging (EFFP) has been introduced in the market to ensure good management practices among food hawkers and subsequently reduce environmental pollution. This study aimed to examine the effect of attitude (perceived benefits confidence, perceived risks, and environmental knowledge) on the intention to use environmental-friendly food packaging among food hawkers in Malaysia. This study adopted cross-sectional studies and collected quantitative data from 320 food hawkers. The Structural Equation Modeling was further applied to test the related hypotheses using IBM-AMOS (Analysis of a Moment Structure). The findings reveal that attitude (perceived benefits confidence, perceived risks, and environmental knowledge) had significant effect on the intention to use environmentally friendly food packaging.

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The policymakers such as the government or non-government organizations should focus on the promotions and campaigns to raise the awareness of environmentally friendly food packaging among food hawkers in Malaysia.

**Keywords** Eco-Friendly · Food Packaging · Night market · Pollution

### 1 Introduction

The issues of safety awareness regarding food packaging are not something new or unique in the food industry. Food packaging has, for some time, been heatedly debated as the cause of significant problems in developing and developed nations concerning ecological degradation as well as its contribution to chronic illnesses. According to Rahimi and García (2017), there is a considerable amount of food packaging that is not recyclable as it mostly uses polystyrene plastic petroleum. In other words, the material contains the harmful elements of expanded polystyrene (EPS) as can be found in consumer packagings such as egg cartons, disposable cups, plastic trays, cutleries, disposable or take away containers, and dairy product containers (Jayaraman et al., 2011; Zhu et al., 2018; Christensen et al., 2019). In developing countries, packaging waste management has also become a major concern since food packaging consumption has increased over time and significantly contributed to environmental degradation, which resulted from polystyrene and plastic wastage. Besides, it is estimated that non-organic products will take at least 500 hundred years to decompose completely (Giménez et al., 2016). According to the International Agency for Research on Cancer, non-organic food packaging contains carcinogens and styrene that can cause chronic diseases such as cancer when these agents contaminate food (Lyon, 1995). As such, this has supported the need to undertake swift actions towards encouraging sustainable packaging or green packaging in promoting a sustainable environment and good health behavior.

A further prevailing issue is related to food packaging costs. Globally, every country bears the cost of managing wastage produced by food packaging in the sense that the larger the volume of wastage, the higher the cost that the country must incur. For example, in 2018, more than 103 million tons of food waste were produced in the US, which is related to the urban wastage category (Cooper, 2020). Similarly, in Malaysia, studies have found that 24% of wastage in this country also consists of food waste that includes food packaging (Economic Planning Unit, 2006). The food waste that includes food packaging is used in small business activities such as street hawkers and night market food sellers. In addition, Malaysia that the highest proportion of waste disposal is generated from municipal solid waste at 64%, followed by industrial waste and commercial waste at 25% and 8% each, respectively (Jayaraman et al., 2011).

Even though many countries have widely practiced recycling to reduce environmental degradation caused by plastic and polystyrene, the activity of recycling has its own set of challenges, which opposingly may cause significant environmental pollution problems (Yue et al., 2010; Yue et al., 2011; Yue et al., 2016; Heidbreder

et al., 2019). Accordingly, the rapid movement towards producing environmentally friendly food packaging (EFFP) has become an important agenda item for business practitioners and policymakers alike as one of the measures to ensure environmental sustainability. Previous research has proven that sustainable packaging shows promise in leading towards sustainable development (Svanes et al., 2010; Verghese et al., 2015; Steenis et al., 2017). As such, the development and application of sustainable packaging have been recognized as one of the measures for achieving this outcome. Over the past two decades, there have been a vast number of campaigns to minimize or reduce the impacts caused by packaging on the environment through various media channels with approval in certain countries' legislation (Svanes et al. 2010; Lindh et al., 2016). Therefore, this study aims to examine the effect of attitude (perceived benefits confidence, perceived risks, and environmental knowledge) on the intention to use environmental-friendly food packaging among food hawkers in Malaysia. The following are the subsection that will explain for this study, including literature review and hypothesis development, research methodology, findings, discussion and implication and conclusion.

### 2 Literature Review and Hypothesis Development

In this section, the researcher will discuss the attitude of hawkers towards EFFP as a vital factor within the field of social psychology as well as addressing a few general issues before interpreting, predicting, and understanding people's behavior accordingly. As such, this section focuses on attitude include perceived benefits confidence, perceived risks, and environmental knowledge, and EFFP.

### 2.1 Perceived Benefits Confidence (PBC)

Social psychologists have defined attitudes diversely. For example, learned predispositions to respond in a consistently favorable or unfavorable way towards a given object, person, or event as mentioned by Fishbein and Ajzen (1975). The definition offers three components towards understanding the concept: (1) attitudes can be learned, (2) attitudes should be constant, and (3) attitudes are involved with positive and negative responses. Based on this definition, Fishbein and Ajzen (1975) also mentioned that attitude can be learned and developed through enjoying things that are important in individuals' life with others, either with family members as they grow up or through the people around them. Besides, general knowledge of environmental issues is not only able to influence a person's attitude towards practicing pro-environmental behavior, but it can also make people have a strong attitude where they are expected to be relatively resistant to change. Thus, under the premises of perceived benefits confidence, the following hypothesis is suggested:

H1. Perceived Benefits Confidence has a positive effect on Environmentally Friendly Food Packaging

### 2.2 Perceived Risks (PR)

Another observation in the formation of attitude where attitude can be developed when people become increasingly conversant with an idea. For example, when people think about certain things that they are unfamiliar with or have little experience with, they tend to think in factual ways, and this is known as "descriptive believe" (Escario et al., 2020). On the other hand, if people become more familiar with certain ideas, things, or objects, they tend to make inferences about them as well as other aspects and this is known as "inferential beliefs" regarding the target object. Therefore, before developing an attitude, "inferential beliefs" must first be evaluated. Besides, the frequent exposure of an individual to environmental issues can increase his or her understanding of the environment (Joshi & Rahman, 2015). As such, this could lead to a positive attitude towards green purchase behavior and green consumption (Joshi & Rahman, 2015; Nguyen et al., 2018). By considering the previous theoretical and empirical findings, the following hypothesis is postulated:

H2. Perceived Risks has a positive effect on Environmentally Friendly Food Packaging

### 2.3 Environmental Knowledge (EK)

Attitude towards the implementation of environmentally friendly products is associated with the knowledge of environmental issues (Bazoche et al., 2015). Hence, in this study, environmental knowledge plays an important role in impacting the attitude of hawkers towards EFFP. Consumers that are knowledgeable about the current environmental condition will also develop a positive attitude towards their behavior to implement EFFP. However, developing an attitude towards things or objects that we know nothing about should be avoided. As such, this study is only limited to environmental knowledge as one of the dimensions in measuring attitude relative to the hawkers towards EFFP implementation in their businesses. Generally, attitudes are relevant for understanding and predicting the social behavior of consumers nowadays in pursuing various advantages while facing a level of risk in a decision purchase (Kim et al., 2008). In line with the previous studies, this study hypothesizes the following:

H3. Environmental Knowledge has a positive effect on Environmentally Friendly Food Packaging

# 2.4 Intention to Use Environmentally Friendly Food Packaging (EFFP)

Initially, the term "intention to use" was usually associated with an act of behavior resulting from the pre-thought of humans (Gopi & Ramayah, 2007). The word "intention" can vary in many ways and intention can be used to describe an action that may or may not occur in the future or the present. Besides, intention eventuates depending on the characteristics of the individual. In the millennium era, the literature review on intention has become more refined with the addition of various elements into its term, such as a combination of behaviors from the intention's outcome, revisiting intention (Park et al., 2020), understanding and predicting intention. However, the literature nowadays highly discusses the intention to use towards understanding its true meaning in society towards using a product or service concerning technology (Agrebi & Jallais, 2015; Gan & Li, 2018).

### 3 Research Methodology

The population of this study includes hawkers operating in night markets in Kelantan. To collect quantitative data, 320 respondents was participated in the survey. This study adopted the cross-sectional design and distributed quantitative data from hawkers in night markets in Kelantan. The data collection process began with identifying the locations and operations of the night markets in Kelantan. Subsequently, the researcher distributed the questionnaires to the potential respondents for data collection purposes and the sampling method for the study was then determined. This study was employed a simple random sampling method to select the respondents to ensure that all sub-groups in the population had an equal chance to be selected. A 10-point Likert-scale was used to determine the level of agreement among the respondents (Aziz et al., 2016). For reliability, Cronbach's alpha values are above the value of 0.6 (Afthanorhan et al., 2019). Structural equation modeling (SEM) was used using the Analysis of Moments Structures (AMOS) software version 21.0. SEM is a second-generation method of statistical analysis developed to cater for limitations in the traditional ordinary least square regression, especially when dealing with latent constructs in a model (Aziz et al., 2016). The AMOS software was used to perform the confirmatory factor analysis (CFA) to validate the measurement model of a construct and to test the hypotheses in the path model.

### 4 Findings

### 4.1 Demographic Profile

The data were collected from 320 hawkers in Kelantan with a total of 54.7% male and 45.3% female. The male respondents marginally dominated the total number of respondents in this survey, along with the number of respondents aged between 20 and 29 years (36.3%) and followed by those aged between 30 and 39 years (28.8%). Surprisingly, it was found that some hawkers aged above 50 years (6.6%) are still actively operating hawker businesses for a living when the businesses could have been passed down to their children or appointing other workers to run the businesses for them instead of operating the businesses themselves.

In terms of creed or race of the respondents who operate their businesses in Kelantan, it is evident that Malay dominates the number of respondents in this survey with 96.3% while 2.8% of the respondents are Chinese and the remaining include others, such as the Siamese that live as part of the Kelantan community. With regard to the monthly income generated by hawkers, it was revealed from the survey that most of the respondents earn about USD723 and below with 60%, while 29.4% of them earn between USD723 and USD1446. It was also found that 3.7% of the respondents earn about USD523 or above per month from their hawker businesses. In view of this, food hawkers could gain greater income than the typical low-income rate in Malaysia.

Interestingly, another determinant used to depict the use of EFFP among food hawkers is the business length of the food hawkers in the sense that the longer the business has been in operations, the more reluctant the food hawkers are towards changing their behavior and simultaneously their business operations. Overall, 85% of the respondents who are less likely to use EFFP have operated their businesses for a year or more, while 15% of the respondents' businesses have been in operations for less than a year. Meanwhile, in terms of location, 28.4% of the respondents operate their businesses in Tumpat, whereas 16.3% of the respondents' businesses are based in Kota Bharu. This suggests that EFFP is mostly used in proximity to the town or urban areas compared to the outskirts or rural areas. Briefly, the awareness level among food hawkers regarding EFFP usage is deemed reasonably modest.

### 4.2 Reliability

Table 1 below displays the results for reliability analysis (Cronbach Alpha). As suggested by Hair et al. (2017), the appropriate values for Cronbach Alpha (CA) should be more than 0.70. The greater the value of CA, the greater the reliability and validity levels of the constructs to be tested. As such, all constructs in this study are accepted, as the values for CA are higher than the suggested value. Specifically, the range value of CA is between 0.877 and 0.892.

	Table	1	Reliability	analy	sis
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Variables	Cronbach's alpha
Perceived benefits belief	0.877
Perceived risks	0.885
Environmental knowledge	0.892
Intention to use EFFP	0.888

Source: Authors own study

Table 2 Correlations

		Mean_IU	Mean_PBC	Mean_PR	Mean_EK
Mean_IU	Pearson Correlation	1	0.455*	0.480*	0.508*
	Sig. (2-tailed)		0.000	0.000	0.000
	N	320	320	320	320
Mean_PBC	Pearson Correlation	0.455*	1	0.868*	0.875*
	Sig. (2-tailed)	0.000		0.000	0.000
	N	320	320	320	320
Mean_PR	Pearson Correlation	0.480*	0.868*	1	0.860*
	Sig. (2-tailed)	0.000	0.000		0.000
	N	320	320	320	320
Mean_EK	Pearson Correlation	0.508*	0.875*	0.860*	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	320	320	320	320

Source: Authors own study

### 4.3 Pearson Correlation Analysis

Table 2 shows the Pearson's Correlation coefficients. Results showed that all three dimensions of attitudes (PBC, PR, and EK) have a significant positive relationship towards IU since the *P*-value was 0.000 indicates the significant value for the analysis where it is lower than the alpha root, which is 0.01. The correlation coefficients between PBC and IU is 0.455, PR and IU is 0.48, EK and IU is 0.508 has positive correlation.

### 4.4 Structural Model for Variables

In this section, the regression analysis for all three dimensions of attitudes (PBC, PR, and EK) towards intention to use EFFP (IU) was conducted. Table 3 shows the regression analysis of PBC with respect to IU. The coefficient of determination is the square of correlation coefficient ( $R^2$ ) that measures the proportion of variation in dependent variables described by the independent variable. The coefficient of determination is expressed as a percentage. Hence,  $R^2 = 0.207$  means that 20.7%

<sup>\*</sup>Correlation is significant at the 0.01 level (2-tailed)

Table 3 Model summary (H1)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.455 <sup>a</sup>	0.207	0.205	0.69819

Source: Authors own study

<sup>a</sup>Predictors: (Constant), Mean\_PBC

Table 4 ANOVA<sup>a</sup> (H1)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.556	1	40.556	83.195	.000 <sup>b</sup>
	Residual	155.017	318	0.487		
	Total	195.573	319			

Source: Authors own study <sup>a</sup>Dependent Variable: Mean\_IU <sup>b</sup>Predictors: (Constant), Mean\_PBC

Table 5 Coefficients<sup>a</sup> (H1)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	3.779	0.236		15.981	0.000
	Mean_PBC	0.450	0.049	0.455	9.121	0.000

Source: Authors own study <sup>a</sup>Dependent Variable: Mean\_IU

**Table 6** Model summary (H2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.480 <sup>a</sup>	0.230	0.228	0.68795

Source: Authors own study <sup>a</sup>Predictors: (Constant), Mean\_PR

of the total variation in IU is explained by PBC as presented in Table 3. The model is a good fit (p-value = 0.000) since the p-value is less than 0.001, as illustrated in Table 4 as well as Table 5.

The regression analysis of PR with respect to IU was analyzed. Table 6 shows that that  $R^2 = 0.230$  means that 23% of the total variation in IU is explained by PR. The model is a good fit (p-value = 0.000) since the p-value is less than 0.001, as illustrated in Table 7 as well as Table 8.

The regression analysis of EK with respect to IU was analyzed. Table 9 shows that that  $R^2 = 0.258$  means that 25.8% of the total variation in IU is explained by EK. The model is a good fit (p-value = 0.000) since the p-value is less than 0.001, as illustrated in Table 10 as well as Table 11.

**Table 7** ANOVA<sup>a</sup> (H2)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.073	1	45.073	95.239	.000 <sup>b</sup>
	Residual	150.499	318	0.473		
	Total	195.573	319			

Source: Authors own study <sup>a</sup>Dependent Variable: Mean\_IU <sup>b</sup>Predictors: (Constant), Mean\_PR

**Table 8** Coefficients<sup>a</sup> (H2)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	3.319	0.268		12.389	0.000
	Mean_PR	0.471	0.048	0.480	9.759	0.000

Source: authors own study <sup>a</sup>Dependent Variable: Mean\_IU

Table 9 Model summary (H3)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.508 <sup>a</sup>	0.258	0.256	0.67537

Source: Authors own study <sup>a</sup>Predictors: (Constant), Mean\_EK

**Table 10** ANOVA<sup>a</sup> (H3)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.527	1	50.527	110.777	.000b
	Residual	145.046	318	0.456		
	Total	195.573	319			

Source: Authors own study <sup>a</sup>Dependent Variable: Mean\_IU <sup>b</sup>Predictors: (Constant), Mean\_EK

**Table 11** Coefficients<sup>a</sup> (H3)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	3.375	0.243		13.865	0.000
	Mean_EK	0.446	0.042	0.508	10.525	0.000

Source: Authors own study <sup>a</sup>Dependent Variable: Mean\_IU

### 5 Discussion and Implication

This study aimed to determine the effects of attitude on environmentally friendly food packaging among hawkers in Kelantan. The hypothesis evaluated the effects of PBC, PR, and EK on intention to use EFFP. The finding of the study supports the argument that PBC, PR, and EK have a significant effect on EFFP. The results of this study support the research that there is an influence between PBC, PR, and EK towards the intention to use green products (Kusuma & Handayani, 2018; Aman et al., 2012; Chen et al., 2012). In view of this, the value of  $R^2 = 0.51$  or 51% of the intention to use EFFP is explained by attitude (Perceived Benefits Confidence, Perceived Risks, Environmental Knowledge) among hawkers in Kelantan. Based on the research findings, several implications relevant to certain stakeholders have been addressed. This can be seen from the arising issues concerning the growth of sustainable development and sustainable practices towards conserving the environment for future generations in addition to the balanced economic, social, and environmental growth and development through the environmental behavior towards green products such as EFFP. The implementation of the proposed model in this study could help compensate the factors that influence intention as well as the effects of EFFP. The reason is that the functionality of the EFFP model would be beneficial for the government through financial benefits and sustainable development as well as by promoting the government's image with respect to green products and environmental sustainability. In this context, the government plays a critical role as the policy implementer and with such a role; the government would have absolute power to foster the implementation of this model.

### 6 Conclusion

This study was conducted based on the problems observed among food hawkers relative to EFFP implementation. At present, the Malaysian government has introduced roles and policies to prohibit the use of plastic and polystyrene (non-environmentally friendly materials) for food packaging due to their adverse effects on human health and environmental sustainability. However, the use of non-EFFP is still widely used, and this has contributed to the vast amount of waste generated in Malaysia with 38,142 tons per day in 2018 compared to 19,000 tons in 2005. Such a situation is believed to occur due to the challenges in changing people's behavior and mindset of using non-EFFP products. Notwithstanding, this issue is neither new nor unique since it has been highlighted on many occasions at the local and national levels within Malaysia, despite the numerous awareness campaigns undertaken by the nation. As such, the increment in waste generation from food packaging remains unabated even though policies and regulations have been introduced. Apart from that, uncontrollable waste management among food hawkers is also due to the ineffective approach that has failed to suit the demographic of local residents.

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## Part II Eurasian Business Perspectives: Human Resources Management and Education