



# Developing E-commerce skills Using Micro-Learning Reflecting Egypt's vision 2030

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## Abstract

E-commerce skills represent an inevitable requirement of the labor market that should be provided to commercial technical secondary education graduates. Such skills have created many job opportunities, reduced unemployment rates, doubled productivity rates, and played a vital role for its users in development field. micro-learning plays an crucial role in teaching and learning, as it has turned from prolonged learning to micro-learning, in which learning content is presented in small units as needed, and applying what is learned in small focused steps i.e., focused learning (3-5 minutes) per unit focusing on a single specific performance goal and followed by one or two short activities. Study tools included e-commerce skills list, skills test, and descriptive grading guide to measure students' acquisition of e-commerce skills. A single group quasi-experimental design was adopted with a pre post administration of the study tools. The study sample included (28) first grade commercial secondary school students. The results indicated the effectiveness of micro-learning in developing e-commerce skills.

**Keywords:** *E-Commerce Skills, Micro-Learning, Egypt Vision 2030, Commercial Secondary Education.*

## Introduction

E-commerce has supported many corporations; especially narrow scale ones, to establish a strong existence in the market through providing cheaper yet more efficient distribution channels for their products and services. TGT Target, for example, has accomplished its existence in the market through an online store that allows customers to buy goods including clothes, coffee makers, toothpaste and even children's toys

directly from home (Laudon& Trever, 2020, p. 10).

Fuller *et al*, (2021, p. 146-141) indicated that e-commerce emerged as a result of the increasing use of computers and advanced systems in banks and companies competing to use of the latest technologies in order to facilitate their customers' commercial processes saving customers' time and effort. In essence, E-commerce relies on the buying and selling several goods through the Internet.

E-commerce is a system that allows buying and selling goods, services and information via the Internet. It also provides electronic services that support benefits generation, e.g., enhancing demands for goods, services and information. Internet e-commerce promotes sales support operations and customer service. Hence, it might be described as an electronic market in which communication occurs among sellers e.g., suppliers, companies, or stores, mediators e.g., brokers and buyers. In such a market, products and services are supplied virtually or digitally for which payment is made in electronic money (Al-Balqasi, 2020, p. 95).

The researcher believes that there is no specific agreed upon definition of e-commerce, yet diverse and multiple definitions. Therefore, for the researcher, e-commerce represents "one of the commercial activities that are based on communicators' electronic interaction through electronic means acting as mediator for displaying, selling and distributing different goods and services using electronic payment systems.

E-commerce is importance for reducing product purchase cost, achieving greater benefits attainment, achieving better buyer service delivery, shopping speed and price comparison, accessing different markets, creating new jobs, and freedom from restrictions (Al-Attar, 2021, pp. 21-22).

Micro-learning is one of the recent trends in technology use in education. The eLearning Guild is an organization that takes great interest in e-learning environments organizing specialized conferences in the field. In its 2019 conference titled (Micro-learning and Training Summit), it made clear that the field is still in dire need for more research and studies to help draw a clearer picture of its educational contributions and the positive effects it would provide to the training environment components in general, and the trainer and trainee in particular (Abdel Hamid *et al.*, 2023, p. 261).

Khamis (2020, p. 356) accurately defined micro-learning as a short learning process, in

which the learner interacts with micro-learning content presented as a set of short sequential units that are indivisible into smaller units. It is also presented in short time intervals i.e., 3-5 minutes per unit focusing on a single specific performance goal and followed by one or two short activities.

Redondo *et al.* (2021, p. 3130) argue that although micro-learning delivery technologies can be used with all devices types, they should be used with portable devices (mobiles, tablets, etc.) being the most suitable for this new learning model i.e., micro-learning. This new learning model is a new research area seeking to explore new ways in response the growing need for lifelong learning or learning at the request of the learner.

Similarly, Yin *et al.*, (2021, p. 154) defined micro-learning as a set of relatively small learning units and activities that are usually completed in as short as ten minutes.

Micro-learning content building depends on providing short and focused educational clips led by students and guided by faculty members. Such building includes a set of principles that must be available: enhancing acquisition of basic skills such as: students flexibility and adaptability, ability to interact with daily rapid advanced learning environments, promoting creativity skills development, problem solving and competency management, and utilizing students' communication abilities to support their social performance, and reconstruct their knowledge during learning activities to improve them by providing students with personal communication methods and styles (Al-Gharib, 2021, p. 123).

Ogange and Mishra (2021, p. 11-14) summarize the benefits of micro-learning: Easily accessible by all mobiles anytime and anywhere; shorter learning span, hence less effort for the learner increasing attention and motivation to learn; providing small structured regularly updated content, utilizing variety of tools and strategies to guarantee better learning: competitions, video clips,

linear drawings, animations, interactive games, etc.; satisfying learner's diverse needs including cognitive, emotional and skill ones; rapidly bridging individuals' information gaps. Added to that, the learner's freedom and reliance on self-directed learning supports learner autonomy and increases self-confidence. It also increases the learner's interaction with the learning content, its absorption, practice and retention. This also increases the ability to use the content individually or cooperatively, and also enhances learning and life interaction. Above all, micro-learning is potentially usable in electronic and blended learning environments, and is liable to be easily developed and updated.

Egypt's Vision 2030 represents an essential station in the comprehensive development process in Egypt, linking the present with the future and inspired by the achievements of the ancient Egyptian civilization, to adopt a clear development process for an advanced and prosperous country in which economic and social justice prevails and revives Egypt's historical role in regional leadership. Egypt's Vision 2030 consists of three dimensions (the economic dimension, the social dimension, the environmental dimension) and each dimension falls under several axes, the economic dimension includes the following axes (economic development, energy, knowledge, innovation and scientific research, transparency and efficiency). While the social dimension includes the following axes (social justice, health, education and training, culture), while the environmental dimension includes the following axes (environment, urban development) and the seventh axis is education and training the focus of the current research, and Egypt's Vision 2030 is an initiative launched by the Egyptian government in 2012 to start a strategic plan for comprehensive development in Egypt. It aims to provide education until 2030 and training for all with high quality without discrimination, within the framework of an institutional, efficient,

fair, sustainable and flexible system. And to be based on the learner and trainee who is able to think and mastered technically, technically and technologically, and also to contribute to building the integrated personality and unleashing its potential to the maximum extent of a citizen who is proud of himself, enlightened and creative, responsible, and feedable, respects differences, is proud of the history of his country, is passionate about building its future and is able to deal competitively with regional and global entities (Al-Rifai, 2020, p. 122).

Technical education in Egypt is one of the main tools to achieve comprehensive development programs, but it is considered the locomotive of development, and an important pillar of the education system, as it seeks in its various types to prepare the skilled workforce necessary to serve the economic and social development plans of the state, as it pours directly into the labor market, and the main problem that the education system, public and university, suffers from, is the abundance of information and the magnitude of the books taught by the learner, and demands to understand and absorb them, without benefit, and micro-learning is the appropriate solution to these The problem, as it is presented to learners in the form of short units, of 3-5 minutes, focused focusing on one concept or a specific skill, which facilitates learning for learners, and saves effort, time and money, so micro-learning is the future of learning worldwide, and by studying the current reality of commercial technical education courses, it was found that there is no knowledge and skills related to e-commerce necessary to develop the e-commerce skills necessary for a graduate of commercial technical secondary schools to meet the challenges and requirements of the labor market reflecting Egypt's vision 2030. The researcher believes that the current research is going in the same approach called for by Egypt's Vision 2030, as well as to overcome the challenges facing

technical education by providing high-quality education at the level of the teacher and curriculums and keeping pace with teaching and learning systems to international standards, this research is going in the same direction through the use of micro-learning, as it represents the future of teaching and learning in the world because of its advantages and benefits to the learner, as well as the current research also meets the vision of Egypt 2030 by providing education and training to all students anytime and anywhere; and also meets the requirements of the labor market as e-commerce has become an important requirement for all companies and institutions and represents an ideal solution to eliminate unemployment due to the multiple and diverse jobs it provides.

### **Problem**

The problem of the present study is stated as “The effectiveness of micro-learning in developing e-commerce skills among commercial secondary school students reflecting Egypt's Vision 2030”

### **Questions**

*The present study attempts to answer the following main question:*

“What is the effectiveness of micro-learning in developing e-commerce skills of commercial secondary school students reflecting Egypt's Vision 2030?”

The main question of the study is divided into the following sub-questions:

1. What are the e-commerce skills needed for commercial high school students reflecting Egypt's Vision 2030?
2. What is the current reality of e-commerce skills in commercial secondary education curriculums reflecting Egypt's Vision 2030?
3. What is the effectiveness of micro-learning in developing e-commerce skills among commercial secondary school students on the skills' level reflecting Egypt's Vision 2030?
4. What is the acquisition level of e-commerce skills by commercial high school students on the descriptive grading rubric after using micro-learning?

### **Significance**

**The present study is significant as it attempts to:**

1. Provides a list of e-commerce skills to be developed among commercial high school students.
2. Designing a micro-learning learning environment based on educational technology innovations and various digital activities to achieve e-commerce skills among commercial high school students.
3. The current study contributes to the field of commercial education teaching with a list of e-commerce skills to use in training learners to practice e-commerce successfully.

### **Tools**

To answer the questions of the present study, the following tools were prepared and submitted to a jury of commercial education curriculum and instruction, educational technology, and psychology specialists:

1. A test to measure students re e-commerce skills.
2. A descriptive grading guide to measure the acquisition of e-commerce skills.
3. Designing a micro-learning learning environment based on educational technology innovations and various digital activities to achieve e-commerce skills among commercial high school students.

### **Methodology**

The present study seeks to design a micro-learning learning environment based on educational technology innovations and digital activities and measure their effectiveness in developing e-commerce skills among commercial secondary school students reflecting Egypt's Vision 2030. The researcher adopted a mixed method research design utilizing quantitative and qualitative data collection and interpretation. The design included: Using descriptive methodology to prepare a list of e-commerce skills needed by commercial technical secondary schools students reflecting Egypt's Vision 2030,

using the literature; using the Job Analysis approach by analyzing jobs related to e-commerce using three methods (Office method, field method, jurors' method). Using the ethnographic methodology as represented by the case study method. Adopting a quasi-experimental design to identify the effectiveness of the independent variable i.e., micro-learning in developing e-commerce skills among commercial secondary school students reflecting Egypt's Vision 2030.

The present study relied on presenting micro-learning content using a variety of methods: electronic games, interactive videos, interactive, digital activities, interactive infographics, audio clips, educational blogs, educational platforms, and simple texts and images that would be available to students anytime and anywhere.

**The following table shows the experimental design of the study**

**Table (1)** Experimental Design of the study.

Pre-Assessment	Experiment	Post-Assessment
1-Skills test.	Micro-learning Experimental treatment	1- Skills test. 2-Descriptive rubric (grading guide).

**To answer the first sub-question: What are the e-commerce skills needed by commercial high school students reflecting Egypt's Vision 2030?**

The researcher prepared a list of e-commerce skills to identify the e-commerce skills that must be available for commercial technical secondary schools students reflecting Egypt's vision 2030 by determining the degree of importance of each skill. A preliminary list of e-commerce skills was prepared through the study and analysis of existing literature e-commerce skill and interviewing some academic specialists of e-commerce. The preliminary list was presented in the form of e-commerce skills of a questionnaire (Appendix 1)

The researcher prepared e-commerce skills of questionnaire through:

1. Categorizing e-commerce skills into two (2) main skills.
2. Classifying the two main skills into (101) sub-skills.
3. Enclosing an ascending grading scale that starts from unimportant through important.
4. The grading scale (0-4) is as follows:
  - Unimportant (0);
  - Somewhat important (1);
  - Important (2);
  - Very important (3);
  - Very important (4).
5. The jury members were asked to mark ( ✓ ) in front of each skill to determine its importance to commercial high school students. An example was given at the beginning of the questionnaire.
6. The questionnaire included an open question on "other skills and competencies" that jurors would like to add.

The main objective of the questionnaire is to collect data on e-commerce skills and then build a final list of skills that must be available to commercial technical secondary schools students, so the questionnaire was presented to a panel of jurors including a group of commercial curriculum and instruction faculty members, supervisors and teachers of commercial subjects, and e-commerce field workers.

To establish the reliability of the questionnaire, it was submitted to a sample that included: (15) commercial curriculum and instruction faculty members, supervisors and teachers of commercial subjects, and e-commerce field workers during the first week of August 2021, then it was collected. (25) days later it was resubmitted to the same sample. The correlation coefficient between the responses in both submissions was calculated using the statistical package SPSS V 21. The correlation coefficient was (0.9) which indicated the questionnaire reliability.

The questionnaire was submitted to a sample that included (20) commercial curriculum and instruction faculty members, supervisors and teachers of commercial subjects, and e-commerce field workers. Based on the jurors' suggestions, the researcher modified the questionnaire as was required. Table (2) represents jurors' suggestions.

**Table (2)** Example of jurors' suggestions

skills Ranking before modification	skills Ranking after modification
1/2: Identifies the importance of social networking in e-commerce.	1/2: Distinguish between the functions of different social networks.
1/3: Distinguish between the functions of different social networks.	1/3: Identifies the importance of social networking in e-commerce.

The degree of significance mean score for each skill was calculated and then the mean score percentage significance was determined. The results indicates an increasing percentages of the main and sub-skills list significance as any main skill was not less than (95%) and any sub-skill was not less than (90%). The jurors did not add any main or sub-skill to the list. This indicates that the list included all e-commerce skills. As a result, the e-commerce skills necessary for commercial secondary school students were identified reflecting Egypt's Vision 2030. The final list of e-commerce skills included (2) main skills and (101) sub-skills.

To answer the second question,

***What is the current reality of e-commerce skills in commercial secondary education curriculums reflecting Egypt's Vision 2030?***

***The Study:***

1- Analyzed the content of commercial education curriculums in commercial technical secondary schools to determine the included learning aspects related to the e-commerce skills:

**Analysis Sample:** Commercial education curriculums in commercial technical secondary schools, namely the marketing course for commercial technical secondary school students along three grades, after preparing a list of e-commerce skills reflecting Egypt's Vision 2030.

In this study, the list of knowledge and skills for marketing courses of commercial technical secondary school students in the three grades was used as an analysis tool of the unit. The knowledge list included (61) main knowledge and (232) sub-knowledge, and the skills list included (3) main skills and (9) sub-skills.

To ensure the analysis objectivity, the researcher analyzed the marketing courses for the three grades of commercial technical secondary education twice with a (25) days interval to reduce the results retention percentage of the first analysis. After completing the second analysis, the researcher calculated the reliability using (Holesty equation):

$$C.R = \frac{2M}{M1+M2}$$

Whereas:

- **C.R:** is the reliability equation.
- **M:** The agreed upon number of categories in the analyses.
- **M1:** The number of categories resulting from the first analysis.
- **M2:** The number of categories resulting from the second analysis.
- The following table illustrates the analyses findings.

**Table (3)** Content Analysis Results

Categories	First analysis	Second analysis	Agreed iterations in the analysis	Reliability
Knowledge	293	290	280	96%
Skills	12	10	10	91%
Total	305	302	290	96%

This result indicates that the content analysis has a high reliability score.

In order to verify the validity of the courses content analysis, another colleague [\[1\]](#) at the same time as the researcher analyzed the same content. Then the agreement coefficient

between the two analyses was calculated using the following equation:

$$\text{Agreement coefficient} = \frac{\text{Agreed on repetition}}{\text{Agreed on repetition} + \text{Points of difference}} \times 100$$

**Table (4)** Agreement and Difference Coefficient for Content Analysis

Analysis Categories	The first analysis by the researcher	The second analysis by another researcher	Agreed on repetition in both analyses	Points of difference	Factor of agreement
Knowledge	290	293	280	13	96%
Skills	10	11	10	1	91%
Total	302	296	290	14	95%

This table shows the content analysis has a high reliability degree. Analyzing the content of the above mentioned courses it is clear that: The marketing content for the three grades in commercial technical secondary schools does not include the e-commerce main skills that skills reflecting Egypt's Vision 2030: (the skill of building e-commerce websites via the web - the skill of building e-commerce websites via Social networks). In fact, the content is concerned with only one component, which is the cognitive but not the skills component. The marketing content for the three grades in commercial technical secondary schools includes some important indicators that achieve e-commerce skills reflecting Egypt's vision 2030 but never touched again when addressing the topic as shown in the marketing content for the second grade of commercial secondary school (hotel and tourism blog design). Based on the marketing courses content analysis, the commercial curriculums inadequacy and the lack of e-commerce skills are evident reflecting Egypt's Vision 2030.

**In order to validate the following hypothesis:** There are no statistically significant differences at the ( $\leq 0.01$ ) level between the mean scores of the experimental group students on the pre- and post-administrations of the e-commerce skills test, the researcher designed a test consisting of (2) performance situations with a total of (10) items, the total test score is (40) marks. In addition, as the researcher provided a list of e-commerce skills such as (Google My Business-Connect with Your Customers), creating a Google AdSense blog). Using SPSS v.2), the researcher used the Paired-Samples T-Test to identify the difference between the two measurements, the Eta Square Scale "

" to determine the effect of the independent variable on the dependent variable.

The researcher prepared a descriptive grading guide (rubric) to assess students' e-commerce skills performance. The guide was based on the criteria of qualitative assessment tools preparation. A qualitative and quantitative evaluation scale was used. Since the current study methodology belongs to mixed method design, the guide was designed after qualitatively describing the performance level of each skill. The description of each level was accurate, taking into account the differences between the levels on the evaluation scale.

To check the validity of the guide to measure e-commerce skills, it was presented to a group a group of commercial curriculum and instruction faculty members, supervisors, and teachers of commercial subjects. In addition, the researcher administered the tool to eight achievement electronic portfolio during the implementation of the skill of creating a Google AdSense blog. 15 days later, it was re-administered to the same group but on the skill of Google My Business-Connect with Your Customers. Using SPSS v 21, the correlation coefficient was calculated and was 0.85, which is an acceptable level for the tool's validity.

**Appendix (2)** shows an example of a descriptive grading guide

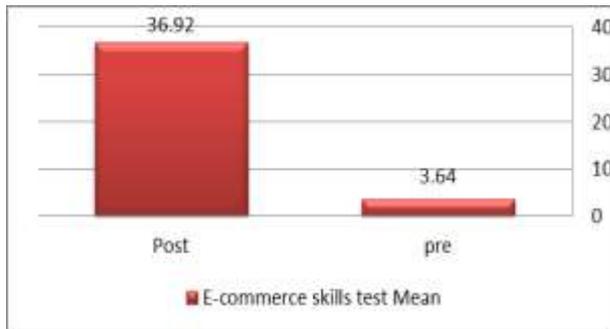
## Results

The overall results of the present study indicate the effectiveness of using micro-learning in developing e-commerce skills, as is shown in the following tables:

**Table (6)** Significant Statistical Differences of the experimental Group mean Scores on the Pre- and Post-Measurements on the E-Commerce Skills Total Test

Administration	means	SD	Degree of freedom	T-value	Level of significance	ETA " $\eta^2$ "	D value	Effect size
Pre	3.64	1.52	27	94.54	0.01	0.99	36.39	significant
Post	36.92	2.12						

The following graph shows the increasing mean scores of the experimental group in favor of the post administration on the e-commerce skills total test.



**Figure (1):** Graphical representation of the experimental group students' mean scores in the pre- and post-administrations of the total e-commerce skills test:

**Table (8)** Administration Results of the Descriptive Grading Guide: Total Weight (Points), Percentage, and Final General Level of Skills:

N	E-Commerce Skills	N	Performance Level			Total Weight	Perc Percentage	Final Skill Level
			Basic 1	Skilled 2	Advanced 3			
1	building websites via Social Networks	28	41	43	442	1411	92%	Excellent
2	building e-commerce websites via the web		1	12	149	412	95%	Excellent
			42	55	591	1949	93%	Excellent
Final Evaluation Of E.Commerce Skills Level By Relative Weight( :93%) Final Level ( Excellent)								

## Discussion

Comparing the experimental group students' mean scores on the pre- and post-administrations of the e-commerce skills test indicates that the post-mean scores are higher than the pre- mean scores, that the (T) value is statistically significant at the(0.01) significance level of the total e-commerce skills. Therefore the hypothesis of the study was accepted.

The results of the descriptive grading guide indicate:

1- Analysis of all administration results of the main and sub-skills indicates that both are acceptable in form and substance. The results were:

- The highest level of a main skill performance level was for the skill of building e-commerce websites via the web (=95%) excellent.
- The highest a sub-skill performance level was for the skill "Facebook" (=100%).
- The overall performance level was excellent (-93%). This is an advanced performance level of e-commerce skills. This result is consistent with the results of (El-Sayed, 2022), (Taman and Toony, 2020), (Tony, 2019), and (Zaghloul, 2013).

**Based on the literature and related studies result, the present results can be attributed to:**

- Using a micro-learning based environment in presenting e-commerce skills attractively and interestingly i.e., using electronic games, interactive videos, interactive digital activities, interactive infographics, audio clips, educational blogs, educational platforms, simple texts and images.
- Students' positive and effective participation among themselves and with the researcher and their constant interaction during the course administration.
- Continuous formative assessment of students.

## Recommendations

**Based on the results of the present study, the researcher recommends:**

- inevitability of adding an e-commerce course to commercial secondary education courses and to develop courses that contribute to the preparation of a highly qualified graduate conforming to the labor market prerequisites
- Stimulating and sustaining the use of micro-learning in the teaching and learning processes.

3. Shifting and developing courses teaching and learning methods from the traditional ones to all forms and types of e-learning use.

### Conclusion

Micro-learning is the future of education as the student can no longer read large amount of information. In addition, what could be said in fifty could be said attentively in ten minutes. This is the reason Twitter limits its messages to 140 characters. A traditional or e-learning session usually lasts for an hour or two dealing with a whole chapter. Thus, if a student studies five courses per day, it means he is required to read and understand five chapters a day. Yet, nowadays the student can no longer do so. Hence, Micro-learning is a inevitability imposed by the nature of this age.

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## APPENDICES

### Appendix (1) Initial List Of E-Commerce Skills

Main skill	Sub-skill
<b>1- The skill of building e-commerce sites via social networks</b>	1/1: Defines the concept of social networks.
	1/2: Identifies the importance of social networking sites in e-commerce.
	1/3: Distinguish functions of different social networks.
	1/4: Defines the concept of marketing through social networks.
	1/5: Identifies the importance of social media marketing in business promotion.
	1/6: Explains the questions to ask before launching the marketing plan.
	1/1: Creates a Facebook page for his company.
	1/2: Applies the criteria of a successful publication to Facebook
	1/9: Distinguish between different Facebook marketing tools.
	1/10: Marketing through pages. Facebook
	1/11: Designs an ad on. Facebook
	1/12: Defines the advantages of advertising. Facebook
	1/13: Distinguish between different types of ads on. Facebook
	1/14: Specifies the appropriate audience on. Facebook
	1/15: Sets the appropriate advertising budget on. Facebook
	1/16: Creates a page for his company on LinkedIn
	1/11: Defines the benefits of LinkedIn pages for businesses.
	1/12: Applies LinkedIn Business Page Management Tips and Best Practices.
	1/19: Promotes his company via LinkedIn via LinkedIn groups.
	1/20: Defines the benefits of LinkedIn groups.
	1/21: Applies Best Engagement Tips to LinkedIn Groups.
	1/22: Distinguish between important tools for more effective marketing on LinkedIn.
	1/23: Creates an account for his company on Instagram.

1/24: Applies success keys to Instagram.
1/25: Defines Instagram marketing strategy.
1/26: Applies factors to ensure successful content on Instagram.
1/21: Markets his company's products via Instagram.
1/22: Sets the perfect timing and number of engagements on Instagram.
1/29: Shares Instagram account posts on Facebook.
1/30: Posting ads on Instagram.
1/31: Creates an account for his company on Twitter
1/32: Posted via Twitter
1/33: Explains the meaning of email marketing.
1/34: Identifies the advantages of email marketing.
1/35: Creates an email account.
1/36: Creates its mailing list.
1/31: Prepares a new mailing list.
1/32: Email is used for marketing.
1/39: Creates a Snapchat account.
1/40: Creates a story on Snapchat.
1/41: Defines the marketing strategy on Snapchat.
1/42: Determines the impact of Snapchat on marketing and advertising.
1/43: Posting ads for their products on Snapchat.
1/44: Defines the concept of mobile marketing.
1/45: Comes up with the advantages of mobile marketing.
1/46: Distinguish between different mobile advertising styles.
1/41: Differentiates between different forms of mobile marketing.
1/42: Creates an account for his company on Telegram
1/49: Creates a channel on. Telegram
1/50: Defines the advantages of creating a channel on Telegram in e-marketing.
1/51: promotes his company on the Telegram channel.
1/52: Creates an account on WhatsApp.

	1/53: He creates a WhatsApp group to promote his company.
	1/54: Identifies the importance of WhatsApp.
	1/55: Identifies the advantages of WhatsApp marketing.
	1/56: Marketed to his company via WhatsApp.
	1/51: Creates a YouTube account for their company .
	1/52: Creates a YouTube channel.
	1/59: Identifies the advantages of creating a YouTube channel in e-marketing.
	1/60: Promotes his company on the YouTube channel.
<b>2- The skill of building e-commerce websites via the web</b>	2/1: Defines the requirements for building e-commerce websites.
	2/2: Finds the human requirements necessary to build e-commerce websites.
	2/3: Distinguish between simple modularity and multi-level architecture for e-commerce websites.
	2/4: Finds out the importance of devices and equipment for e-commerce sites.
	2/5: Determines how devices and equipment are selected for e-commerce sites.
	2/6: Recognizes the importance of maintaining the system of e-commerce sites.
	2/1: Creates an AdSense Google blog account.
	2/2: Markets his company on the AdSense Google blog .
	2/9: Posts ads on the AdSense Google blog.
	2/10: Posts videos on the AdSense Google blog.
	2/11: Turns on monthly earnings on the AdSense Google blog.
	2/12: Creates an account on Google My Business- Connect with Your Customers
	2/13: Adds business to Google Search and Maps ".
	2/14: Type the name of the business in Google My Business-Connect with Your Customers.
	2/15: Selects the business category on Google My Business-Connect with Your Customers.
	2/16: Locates the business on the map.
2/11: Determines how the service is provided to customers outside or within the geographical location.	

	2/12: Adds contact details and shows them to customers.
	2/19: Adds an event and promotions to the business.
	2/20: Adds products, photos, and promotional videos for the business.
	2/21: Creates a blog on Blogger.
	2/22: Adds ads for their business on the blog.
	2/23: Adds links to various social media accounts on the blog.
	2/24: Posted on the blog using e-mail.
	2/25: Links the blog to your AdSense Google account.
	2/26: Creates an account on the platform.
	2/21: Adds ads for their business on the blog.
	2/22: Adds links to various social media accounts on the blog.
	2/29: Clarifies the concept of total costs of ownership.
	2/30: Calculates total costs of ownership.
	2/31: Identifies the optimal alternative to the communication technology system.
	2/32: Defines the concept of website hosting
	2/33: Prepare a brief history of website hosting
	2/34: Distinguish between different types of website hosting
	2/35: Finds the best WordPress hosting for his online store
	2/36: WordPress is installed on a hosting site to create a website store
	2/31: Distinguish between different WordPress themes that support online stores
	2/32: Install different WordPress themes within WordPress for the website store
	2/39: Modifies the appearance of the online store for store visitors
	2/40: Adds additional plugins in online stores
	2/41: The online store is converted into an application on Google Play

## Appendix (2) E.COMMERCE DESCRIPTIVE GRADING GUIDE

N	SKILLS	PERFORMANCE LEVEL		
		BASIC (1)	SKILLED (2)	ADVANCED (3)
1	<b>E.MAIL Gmail</b>	- Log in to the Gmail website, print the company's name and second name, choose the username, print the password, print the company's phone number, and enter the characters shown in the designated space box.	- Log in to the Gmail website, print the company name and second name, choose the username, print the password, print the company's phone number, enter the characters shown in the designated space box, and choose the country in which the company is located.	- Log in to the Gmail website, print the company's name and second name, choose the username, print the password, print the company's phone number, enter the characters shown in the designated space box, choose the country where the company is located, read the terms of service and privacy policy, enter the icons shown in the space designated for it, and click on continue.
<b>FINAL RESULTS:</b> <b>Not as expected – less than (65%) (weak)</b> <b>Basic (65%) to (75%) (good)</b> <b>Advanced (75%) to (85%) (very good)</b> <b>Ideal (85%) and up (Excellent)</b> <b>Level by relative weight (.....)</b> <b>Final evaluation (.....)</b>				