

# Using Animated Infographics to Educate Starters on the Saudi Labor and Workmen Law

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**Abstract:** The present study aims to educate starters to work on the Saudi Labor and Workmen Law and making a proposal to educate them by employing animated infographics. It also defines the quality of the animated infographics from the perspective of the target group to educate starters to work on the Saudi Labor and Workmen Law. Therefore, the authors selected and designed animated infographics using Vyond software of the most important articles in the implementing regulation of the Saudi Labor and Workmen Law from signing to terminating a work contract to educate the fresh graduates and starters in Saudi Arabia. They also developed and applied a questionnaire to (50) fresh graduates and starters to measure the feasibility of employing animated infographics in raising their awareness of the Saudi Labor and Workmen Law. The results showed that the animated infographic proved effective in raising the awareness of the participants of the Saudi Labor and Workmen Law. The authors recommended the need to employ animated infographics in educating starters on the developments of the Saudi Labor and Workmen Law to enhance learning. They also recommended that the field training supervisors should use the designed animated infographic in developing the programs of graduate qualification for the labor market.

**Keywords:** Animated infographics, Starters, Saudi Labor and Workmen Law.

## 1 Introduction

Islam has stressed the importance of work and established various concepts and bases related to work ethics, and interaction within the labor relations, including motivating the employer to pay the employees' wages on time, non-discrimination, equality, and stop fraud. Using a system to monitor the payment of wages in the private sector, the Ministry of Labor and Social Development currently organize labor relations. Saudi Arabia has always sought to develop the national economy and implement ambitious development projects in accordance with the Saudi Vision 2030. To meet the increasing demand for national manpower, Saudi Arabia has adopted some policies and actions to create job opportunities and develop human resources. It also acknowledges the international labor standards and develops the work environment and labor

relations, so the employer does not abuse power and the employee does not neglect job functions [1].

The Saudi Labor and Workmen Law ensures protection for both parties, provides an appropriate work environment for the women, prohibits gender-based discrimination in employment, and allows the employer to test the employee for a certain probation period that extended upon written consent by the employee. The Ministry of Labor and Social Development established primary and higher committees to resolve labor disputes according to the article (219) of the Saudi Labor and Workmen Law [1]. Saudi Arabia keeps pace with the latest developments in the World Trade Organization and updates its laws, especially the Labor and Workmen Law [2].

The labor market, labor nationalization, Saudization, and human resources development are highly vital in Saudi Arabia. They relate to many legislations, investment,

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wages, productivity, competitiveness, profitability, as well as the kind and level of workers. The Saudi Human Rights Commission highlights all issues related to employment [3]. Therefore, it stresses the need to educate the starters to work on the Saudi Labor and Workmen Law concerning rights and duties in the workplace.

Lately, significant technological transformations and developments have taken place in all spheres of life, affecting the resources, expression, design, and presentation of information. One of these developments is the animated infographic that effectively facilitates information and transfers complicated data and information into simple images and graphs to be easily understood and used in the labor market. It is defined as a visualization of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood [4]. It is a visualization of information, data, and knowledge to allow quick and practical presentation using technical and professional items, as well as illustrations, including maps, signs, symbols, images, and drawings [5]. Therefore, the authors argue that infographics helps present complicated information quickly and clearly and merge texts and drawings to facilitate the fun and attractive reception of texts.

Infographics were used for many items, such as visualization, data visualization, information design, and information architecture [6]. The terms was introduced by Peter Sullivan in the 1990s for the Sunday Times and was evolved online by using Adobe Flash animation to design various games and products in 2000 [7]. Using infographics is a good option to present information simply to be understood easily, reviewed quickly, and shared worldwide [5]. Infographics are used in many fields, including government, corporations, medicine, engineering, research, and development. They can be classified into five categories, namely cause and effect, chronological, quantitative, directional, and product infographics [8]. Based on presenting graphic information to readers [9], infographics are classified into three categories:

- a. Static infographics are static advertising, either printed or online.
- b. Motion infographics present information consequently and steadily (e.g., graphic animations and PowerPoint presentations) and include two sub-categories:
  - Shooting a normal video showing data and explanations in an animated graphic to show some facts and concepts
  - Designing data, illustrations, and information in a fully animated form, which requires a great deal of creativity and choosing expressive

movements to help have a fun and entertaining presentation, including the mini-content, which is a new type of visual data transformation, e.g., infographics, motion graphics and presentations, and using movements and infographics into small and short content- this the type is adopted in the present study.

- c. Interactive infographics present user-oriented information to engage the audience (e.g. on the web).

In sum, the most well-known types of infographics static and motion. Motion infographics are a motion representation that engage the user, as shown via some websites that utilize web techniques to explain something, such as using an infographic-based video to represent information [10]. They are a set of animated items (texts, symbols, etc.) with sound (voice comments, soundtracks, or sound effects) to illustrate a certain idea entertainingly. They undergo various steps (namely idea and scriptwriting, sound recordings, drawing scenes, movement and final production, and publication) [11]. Therefore, they are widely used via social media, media, and advertising because they present and share information attractively to all age groups [12].

The teamwork of infographic design include [13] [14]:

- An editor refines information to promote key points to be delivered to the audience.
- A data analyst summarizes, fuses, and classifies information logically to achieve safety and ease of delivery to the audience.
- A designer is a qualified person technically and creatively who creates infographics using available tools and programs.

The authors believe that one person may have the required skills to create infographics.

An infographic has many characteristics, such as providing complete meaning and information to the audience, providing updated information, providing adequate information to understand facts, using unique items (image, text, color, and sometimes sound) to prevent the deformation of facts, and combining many items [15]. It is effective in saving time because the eye can perceive a picture in less than (0.1 seconds) and does not require expensive software and tools but needs artistic and technical creativity [16]. Using infographics helps retrieve information six times easier than traditional texts [17]. For visual learning, the infographic mixes information with the official design to provide complex information easily and fast [18].

The information delivered using infographics include statistics, procedures, ideas, historical sequence, geographical description, relationships, and characters [18]. For the best

practices of infographics, set the purpose and priorities, namely appeal, comprehension, and retention [19]. According to [20] [21], a successful infographic follows a set of technical standards, such as simple design, good production, adequate use of lines, appropriate colors, using drawing and figures appropriately, and using and presenting texts attractively. The designer of a successful infographic should adhere to some principles, including having a one-topic infographic, an attention-getting title, content analysis, verifying the validity of information, crediting sources, following a sequence of information, choosing appropriate expressive shapes and symbols, attractive coloring, checking grammar and typos, and adding the copyright information in the lower part of the design [21].

There are five elements for the design and creation of infographics, i.e. the story, data, copy, design, and graphs, and charts [22]. Infographics should express the topic faithfully and honestly, relate to the objective, fit the target groups, include reliable information, and have an attractive design. Dai [23] reviewed the history of data visualization, development and emergence of the infographic, and its role as a highly active and effective tool in public relations known as public relationship infographic strategy. For marketing their products, the departments of public relations in big companies utilize this strategy for attractively marketing their products. The best practices of the infographic should include choosing the appropriate topic, being visually compelling, considering color psychology to improve the memory of clients and content retrieval rate, illustrate the idea, and have a more amusing and compelling infographic.

There are five stages of infographic design [21]:

- a. Study and analysis to define the needs, objectives, desired behavior, and accepted performance level
- b. Design (formulating objectives, content creation, as well as choosing lines, colors, shapes, items, and teamwork)
- c. Production (prototype, using graphic design software, and reviewing and checking the prototype)
- d. Evaluation by presenting the infographic to specialists to review content and items, followed by pilot testing, making constructive evaluation, and final application
- e. Publication and use

Because it fuses language and other items, the infographic draws the attention of the audience to the content and presents larger information simply, making it widely used in presenting and summarizing information [24]. It enhances the understanding of data by fulfilling five functions (i.e.,

enhancing understanding and learning, reducing the ratio of errors, achieving satisfaction, ease of retrieval, and effective presentation of data)[25]. Additionally, using infographics influences the audience due to facilitating information access, understanding, and retrieval [24] [26] [27] [28] [29] [30].

Because of its importance, several studies explored the use of infographics. For instance, Abu-Alela [31] analyzed using infographics on the website and official Facebook page of the Egyptian cabinet. The results showed the excellence of the quantitative content of infographics and the dominance of citizen-related topics highlighted by infographics. Kovalenko [15] showed the high impact of infographics on the ease of access and understanding of the Guardian's content regarding the refugee crises. Albatal [32] concluded statistically significant differences in the readability of infographics among university students. Abdelmaksoud [33] illustrated that infographics affected the audience, making them more active with the content. Moreover, good designs helped the audience perceive the information easily. Hussein [34] showed that the audience reported that using infographics improved the perception of events and latest information. Attia [35] demonstrated that using infographics excelled more than the traditional manner in helping the audience remember the content.

There are many benefits of using motion infographics, such as linking ideas logically and expressively, easy design and publication, raising public awareness, increasing sales, saving space, as well as saving time and effort [33] [36]. It can really benefit the contemporary user of digital media. Thus, educational institutions are highly recommended to use animated infographics for all groups that receive digital information and complicated statistics [37]. When the information presented to the target group is much, argues that animated infographics are the best choice [38]. They are increasingly used because of easy publication via electronic media. In presenting such information, the designer should avoid repetition and focus on the good planning of items, such as timing, movement, characters, colors, and language to attract the viewer and retain the learning effect longer. Therefore, the authors believe that animated infographics can be a solution to publishing information more effectively.

Animated infographics do not require clicking the mouse or scrolling down [39], but the animated clip is watched only. They are an easy and natural means to access the user by using various educational styles to organize the information logically, while focusing on amusement, simplicity, and achieving user satisfaction. Darweesh and Addakhny [40] explored the two types of infographics (static/motion) via the

web and showed that using the features of infographics, such as images, symbols, good design, attractive colors, and short texts can encourage better learning. They recommended using infographics to overcome learners' problems, especially those related to certain patterns of learners.

Sabry [41] reported that the TPACK-based program using infographics proved effective in developing the skills of design and cognitive achievement among the intermediate stage teachers. It also developed the skills of visual generative thinking and mathematical communication among students. The author argued that using animated infographics made classroom interaction rely on modern methods based on student cooperation to raise their motivation. Salim [42] aimed to develop the skills of designing 3D digital learning objects among educational technology students using infographics. The study demonstrated the effectiveness of animated infographics in developing the achievement and performance of developing the skills of designing 3D digital learning objects among educational technology students.

Animated infographics have been used in television advertisements to deliver the message, simplify the information, and attract the receiver's attention. Accordingly, the advertisements affect the consumer to make the purchase decision or create a more effective mental image of the product. Simply, using animated infographics provide information to change the knowledge and attitude of the consumer because the message is presented in an attractive manner [43]. However, this technology is not limited to education and marketing. Kyra, Amy, Jacob, and Martin [44] used it to modify people's attitudes and beliefs toward driving through floodwaters. They reported that awareness using animated infographics proved more effective than traditional awareness campaigns. Additionally, animated infographics have been used in the field of Da'wah. In Malaysia, Rahim [39] developed a model of animated infographics for Da'wah dissemination with an application to the Prophet's Sunnah of eating and drinking. The author presented the animated infographics to experts of design and Islamic Da'wah and distributed a questionnaire to the target audience. The results illustrated the effectiveness of animated infographics in the comprehensive dissemination of Da'wah values.

The review of literature shows the importance of animated infographics because they attract the attention of the audience and can present information effectively. However, to the authors' knowledge, no study explored using animated infographics to educate starters to work on the Saudi Labor and Workmen Law. Therefore, they designed an animated infographic to educate starters to work on the Saudi Labor and

Workmen Law to be easily accessed by starters to work using modern technology.

## 2 Statement of the Problem

A survey of Human Resource Management showed that most of the female employees do not read the work contract. Moreover, the starters to work generally lack knowledge about the Saudi Labor and Workmen Law. The results of the survey showed that (52%) of the female starters to work find it difficult to review the Saudi Labor and Workmen Law, whereas (54%) of them find it difficult to understand some of its items. They all prefer to have the Law in a modern technological manner. Accordingly, they should be educated about the Saudi Labor and Workmen Law using a modern educational technique, namely the animated infographic. Infographics transform data and complicated concepts into drawings and shapes to be clearly and easily understood [45]. The authors adopted this technology to express much information in a small space and attract the audience because it is a means to promote understanding. Simply, using infographic aims to promote understanding of the most significant articles of the 245- article Labor and Workmen Law [1]. To the authors' knowledge, technology has not been used to present the Law. The authors believe that using the proposed infographic will help the participants receive and interact with information and build mental and visual models. Thus, it can promote understanding, retrieval, and visual thinking skills, including identifying, describing, discussing, comparing, and predicting events based on the visual shape.

The problem of the present study has been defined in the lack of awareness of the Saudi Labor and Workmen Law among the starters to work. Therefore, the animated infographic is used to educate them about the Law. The study raises the following questions:

1. What are the knowledge and information that the starters to work should have in Saudi Arabia?
2. What is the proposed awareness program for the starters to work in the Saudi Labor and Workmen Law through the animated infographic?
3. What is the quality of the animated infographic to educate the starters to work in the Saudi Labor and Workmen Law from the perspective of the target group?

## Objectives

The study aims to

- Educate the starters to work in the Saudi Labor and Workmen Law.
- Make a proposal to educate the starters to work in the Saudi Labor and Workmen Law using the animated infographic. This adds a new and modern dimension in a digital form to the study to fit the current technological era.
- Highlight the quality of animated infographic from the perspective of the target group to educate the starters to work in the Saudi Labor and Workmen Law.

## Significance

The present study is significant because

- It utilizes a modern technology to present the Labor and Workmen Law to educate the starters to work and respond to the modern trends calling for using technological innovations.
- It is a response to the modern orientations to technological environments to create an attractive, rich, and awareness-raising environment.
- It includes important information about the Labor and Workmen Law for the starters to work.
- The results may encourage the officials of the Ministry of Labor and Social Development in designing and publishing the articles of the Law.
- The study adopts a new technological innovation to raise the awareness of the starters to work.
- It covers an important topic, i.e. the rights and duties of the Labor and Workmen Law, supervised by educational technology specialists and reviewed by experts.

### Limitations

*Human and spatial limitations:* Graduates of universities in Saudi Arabia.

*Temporal limitations:* The first semester of 2019-2020.

*Objective limitations:* The usefulness of using an animated infographic to educate the starters to work on articles (74, 75, 77, 80, and 81) of the Saudi Labor and Workmen Law.

### Definition of Terms

*Infographic:* It is the art of transforming complicated data, information, and concepts into easily understood figures and drawings [21]. It is procedurally defined as a modern technology to present rigid information and concepts via social networks in the form of figures and drawings that integrate easiness, speed, amusement, and learning retention of presenting and delivering the information to the audience.

*Animated infographic:* It is a visual presentation of information and data that merges animated words, drawings, and figures systematically and concisely [20]. It is procedurally defined as an animated visual presentation of some information and data in the Saudi Labor and Workmen Law using words, drawings, and figures systematically and concisely.

*Starters to work:* They are procedurally defined as the Saudi female university graduates who seek job opportunities in Saudi Arabia.

*Labor and Workmen Law:* It is a set of legal rules that organize individual and group relations concerning paid employment [2].

### Methodology

#### Method:

The authors adopted the analytical descriptive approach to describe the phenomenon, collect data using a questionnaire to evaluate the awareness of the starters to work on the Saudi Labor and Workmen Law through the animated infographic, and analyze these data [46].

#### Population:

The population comprised all graduates and starters to work in Saudi Arabia.

#### Sampling:

The sample consisted of (50) randomly selected graduates and starters to work in Riyadh. The designed animated infographic was shared with them via WhatsApp.

#### Tools

To achieve the study objectives, the authors adopted two tools.

1. Animated infographic to educate starters to work on the Saudi Labor and Workmen Law

The authors designed this infographic after reviewing the relevant literature.

2. A questionnaire to identify the usefulness of using an animated infographic to educate starters to work on the Saudi Labor and Workmen Law.

The authors developed the questionnaire, illustrated its measurement method and formulation, and used a five-point Likert scale (strongly agree, agree, undecided, disagree, and strongly disagree). The questionnaire comprised (27) items. To verify the validity of the questionnaire, it was presented to some reviewers and experts on educational technology to identify the appropriateness, clarity, and accurate wording of the items. The authors considered the suggestions and made the required modifications. The internal validity was calculated using the Pearson Correlation Coefficient between the items and the total score of the questionnaire, as shown in Table (1).

Table (1) illustrates that the correlation coefficients between the items and the total score of the questionnaire are statistically significant at the level of (0.05). They ranged [.552- .926], showing the internal validity of the tool. The reliability of the questionnaire was verified using Cronbach's alpha that scored (0.978). Thus, the tool is highly reliable. Concerning the statistical methods, the study adopted descriptive statistics, using frequencies, percentages, arithmetic means, and standard deviations. The range of the five-point scale is shown in Table (2).

**Table 1:** The Pearson Correlation Coefficient between the items and the total score of the questionnaire.

Item	Correlation coefficient	Item	Correlation coefficient	Item	Correlation coefficient
1	.640**	10	.822**	19	.835**
2	.748**	11	.833**	20	.752**
3	.709**	12	.788**	21	.914**
4	.552**	13	.844**	22	.865**
5	.803**	14	.737**	23	.926**
6	.911**	15	.855**	24	.661**
7	.692**	16	.848**	25	.848**
8	.790**	17	.896**	26	.830**
9	.875**	18	.818**	27	.870**

**Table 2:** Range of the means of the participants' responses based on the agreement.

Agreement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Range	1- 1.79	1.80- 2.59	2.60- 3.39	3.40- 4.19	4.20- 5

### 3 Results and Discussion

To answer the first question, the implementing regulation of the Saudi Labor and Workmen Law was reviewed, and the most important rights and duties were defined according to the results of the pilot questionnaire distributed to the starters to work and the experience of one of the authors in human resources management. These rights and duties are based on articles (74, 75, 77, 80, and 81) of the regulation and the payroll account of remuneration and leaves.

To answer the second question, the authors reviewed the relevant literature of designing animated infographics and many online models to define the strengths and weaknesses of designing the animated infographics. They designed an animated infographic covering all required information for the starters from signing to terminating a work contract using Vyond software. They also used cartoon characters that fit the Saudi environment and some illustration symbols to facilitate the presentation and delivery of the information, as follows:

#### I. Analysis included

1. Analysis of the target group and the need for the animated infographic:

The need to the animated infographic was analyzed based on the results of a pilot online questionnaire (via Google Forms) to define the problem and level of the starters from different universities to work in the Labor and Workmen Law in Saudi Arabia and to collect the data of the study and examine their features. It comprised personal information (Section One), i.e. name (optional), age, and employment status (job-seeker or on-job), whereas Section Two covered the following questions:

- Have you ever read the Saudi Labor and Workmen Law?
  - Is it difficult to read the Saudi Labor and Workmen Law?
  - Have you had a job?
  - Do you find it difficult to understand some items of the Law in its current form? Have you had work problems (in case of being on-job)?
  - Have you reviewed a work contract?
  - Do you prefer having the Law in a modern technological form?
2. Analysis of the topics of the animated infographic:

The topics of the animated infographic were analyzed to achieve the general objective, i.e. reviewing the implementing regulation of the Saudi Labor and Workmen

Law and defining the most important information for the starters to work (articles 74, 75, 77, 80, and 81).

### 3. Task analysis:

Rephrasing the items of articles (74, 75, 77, 80, and 81) in the form of knowledge and skills as video clips supported with images, texts, and audio clips to illustrate all articles.

## II. Design included

### 1. Formulating the general objective of the animated infographic:

The general objective of the animated infographic of the present study was to educate the starters to work on the Saudi Labor and Workmen Law by employing modern digital technology, i.e. the animated infographic.

### 2. Formulating the action objectives of the animated infographic:

- Educate the starter to work on the most important contents of the work contract.
  - Educate the starter to work on probation extension and time.
  - Educate the starter to work on job duties.
  - Educate the starter to work on terminating the work contract pursuant to Article 74 of the Saudi Labor and Workmen Law.
  - Educate the starter to work on the cases of terminating the work contract by the employer without receiving remuneration.
  - Educate the starter to work on the cases of leaving work without notice.
  - Educate the starter to work on identifying and calculating public holidays and sick leaves.
- ### 3. Defining the strategy to be applied when reading the animated infographic:

It is self-learning. It was selected to generalize benefits and consider individual differences. To put it differently, each starter to work can read the articles any time and in the way she likes. The animated infographic was sent to a sample via e-mail and WhatsApp. Then, the questionnaire was shared online via Google Forms to the sample to define the usefulness of the animated infographic in educating the starters to work on the Saudi Labor and Workmen Law.

### 4. Content design:

The scenario of the defined content was designed on a paper, the method of presenting the content was defined, digital objects that fit the Saudi environment were selected, Saudi-like characters were selected, the logical sequence of the presentation was set, and the items of achieving the target educational objectives were selected. Moreover, the items were organized, type and time of movement were set, and the phrases of the audio recordings were selected and set for speed and size, so the user can use them easily. In

this step, various educational media were considered, including texts, animated and static images, sounds, as well as sound and motion effects to fit the level and attitude of the starters to work.

### 5. Content organization:

The content was distributed to infographics and organized to be produced.

## III. Development included

1. The planned multimedia objects were modified and stored. The digital objects were written using a writing system by merging some ready-made slides and assistance. Moreover, the data of the formative evaluation synchronized with the design were collected. The draft of the animated infographic was created by inserting the content (the defined articles) into the animated infographic via [www.powtoon.com](http://www.powtoon.com). The free version and open slides were used. The major problem was the lack of characters in the Saudi costumes. Seven slides were created. After starting work, the authors found a limited number of free slides. Thus, they used another software that covers all requirements of Saudi-like characters and slides with multiple choices.
2. They used Vyond software. It contains cartoon characters that fit the Saudi environment and some illustration symbols to facilitate the delivery and presentation of the information, as follows:
  - Characters and title of the design

Before applying the animated infographic, it was presented to the students of the higher diploma in e-learning at Princess Nourah bint Abdulrahman University numbered (22) for testing soundness, clarity, and validity of the product and being void of operation errors before presenting the final product to reviewers. Being an educational technology specialist, one of the authors gave feed back and some modifications were made to images, symbols, motions, sound, and distributing information to more slides. Then, the final animated infographic was produced with a link to be applied to the participants.

## IV. Implementation

The animated infographic was applied to the participants using a link.

## V. Evaluation

1. Formative evaluation: It was done before testing the final animated infographic by the students of a higher diploma in e-learning at Princess Nourah bint Abdulrahman University and one of the authors (an educational technology specialist).
2. Summative evaluation: It was done after testing the animated infographic by applying a questionnaire on the

Type	Animated Drawings and Objects
The main character in a Saudi costume	
The employer in a Saudi costume	
The slogan of the Ministry of Labor and Social Development from the official website- the main reference of the project	
Articles of the Saudi Labor and Workmen Law used in the infographic	



- An animated slide of the items of the work contract with a set of animated icons and audio.



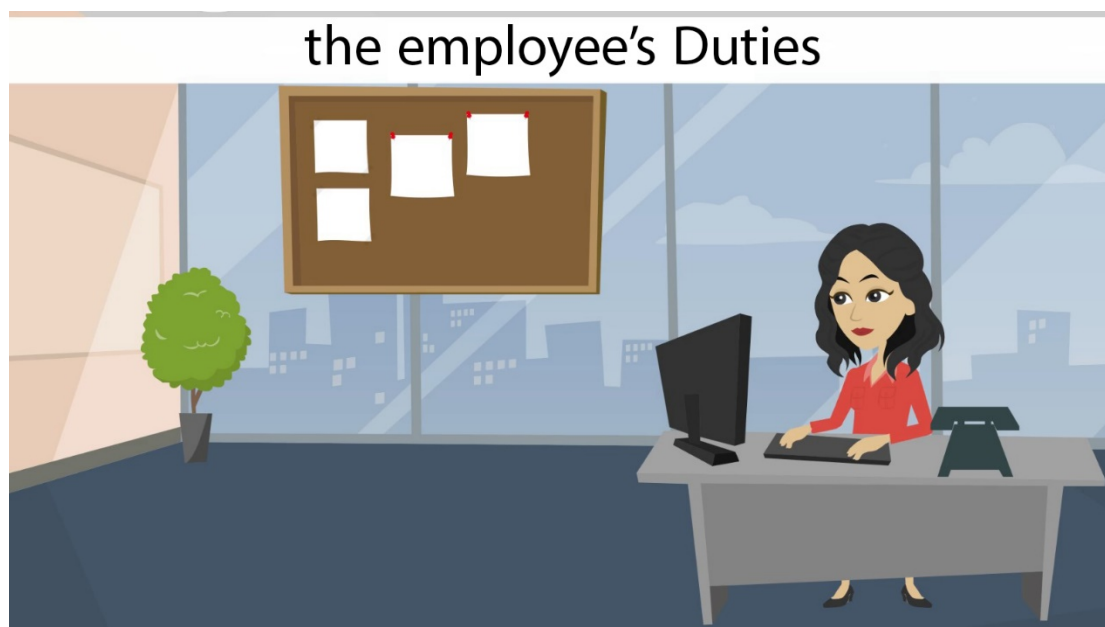
**Fig.1:** Items of the work contract.

- An animated slide of probation period with a set of animated icons and audio.



**Fig. 2:** Probation period.

- An animated slide of the employee's duties with a set of animated icons and audio



**Fig.3:** Employee's duties.

- An animated slide of the working hours with a set of animated icons and audio



**Fig.4:** Working hours.

- An animated slide of the public holidays with a set of animated icons and audio



**Fig. 5:** Public holidays

- An animated slide of the sick leaves with a set of animated icons and audio



**Fig.6:** Sick leaves.

- An animated slide of the leaves of the working woman with a set of animated icons and audio.



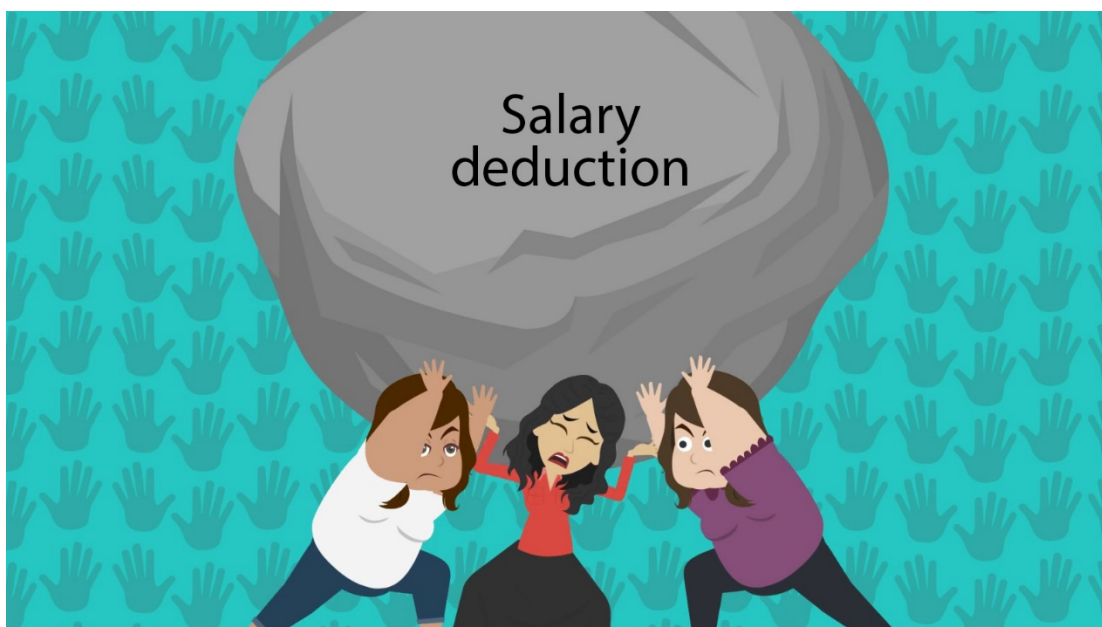
**Fig.7:** Leaves of the working woman.

- An animated slide of the rights of the working woman with a set of animated icons and audio.



**Fig.8:** Rights of the working woman.

- An animated slide of salary deduction with a set of animated icons and audio.



**Fig. 9:** Salary deduction

- An animated slide of the termination of the work contract with a set of animated icons and audio.



**Fig.10:** Termination of the work contract.

- An animated slide of the termination of the work contract without remuneration with a set of animated icons and audio.



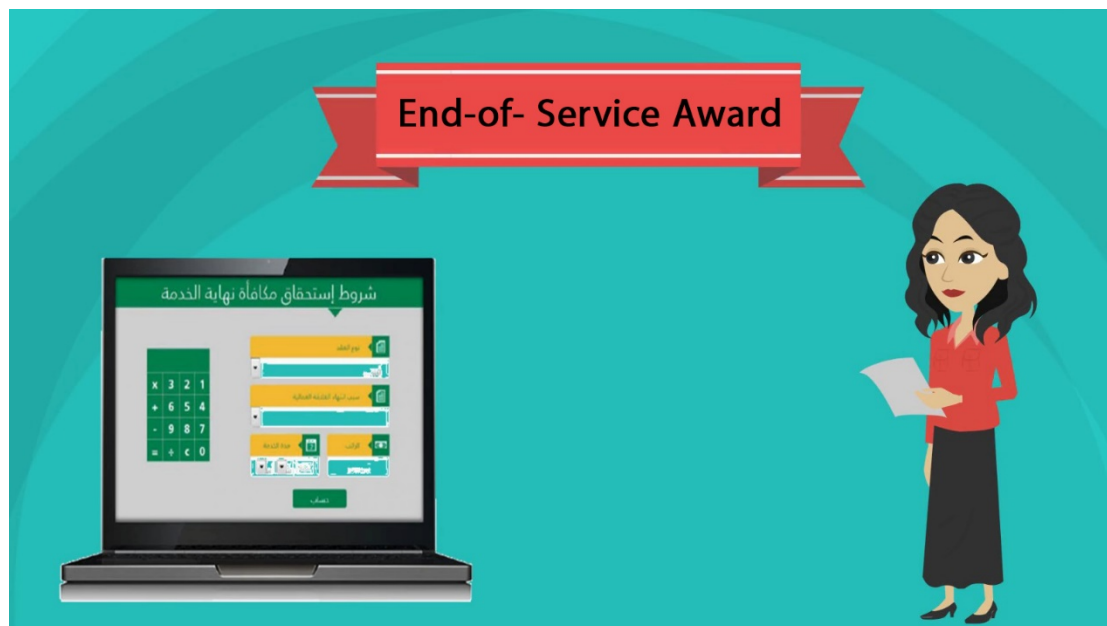
**Fig.11:** Termination of the work contract without remuneration.

- An animated slide of leaving work without notice with a set of animated icons and audio.



**Fig.12:** Leaving work without notice

- An animated slide of the end-of-service award with a set of animated icons and audio.



**Fig.13:** End-of-service award.

- An animated slide of seeking further information with a set of animated icons and audio



**Fig.14:** For further information.

usefulness of the animated infographic in educating the starters to work on the Saudi Labor and Workmen Law. A five-pointed Likert scale of the means of responses was used to show agreement. Additionally, a group of educational technology specialists at Princess Nourah bint Abdulrahman University reviewed the animated

infographic, gave it an excellent score, and nominated it as one of the best-implemented projects.

To answer the third question, data were analyzed using frequencies, percentages, arithmetic means, and standard deviations of each item and the total questionnaire.

**Table 3:** Frequencies, percentages, arithmetic means, and standard deviations of the responses.

No.	Item		Strongly disagree	Disagree	Undecided	Agree	Strongly agree	Arithmetic mean	Standard deviation	Rank
1	It includes the necessary information.	F	0	0	5	13	35	4.57	0.67	3
		%	0	0	9.4	24.5	66			
2	It helps understand the implementing regulation of the Saudi Labor and Workmen Law clearly.	F	0	1	3	15	34	4.55	0.70	5
		%	0	1.9	5.7	28.3	64.2			
3	It cites the source of information.	F	0	2	5	13	33	4.45	0.82	13
		%	0	3.8	9.4	24.5	62.3			
4	The illustration figures and symbols fit the Saudi environment.	F	0	0	9	12	32	4.43	0.77	15
		%	0	0	17	22.6	60.4			
5	The content is appropriate for the target audience (starters to work).	F	0	1	6	13	33	4.47	0.77	11
		%	0	1.9	11.3	24.5	62.3			
6	Various illustration figures and symbols are used.	F	0	2	4	17	30	4.42	0.80	18
		%	0	3.8	7.5	32.1	56.6			
7	The wording is concise.	F	0	0	3	19	31	4.53	0.61	7
		%	0	0	5.7	35.8	58.5			
8	The final product is new.	F	0	2	4	17	30	4.38	0.79	20
		%	0	3.8	7.5	32.1	56.6			
9	The colors and sounds are coherent to maintain design unity.	F	0	2	6	16	29	4.36	0.83	22
		%	0	3.8	11.3	30.2	54.7			
10	It displays the idea logically and sequentially.	F	0	0	4	12	37	4.62	0.63	1
		%	0	0	7.5	22.6	69.8			
11	It illustrates the relationship between the items, illustration symbols, and shapes.	F	0	1	6	14	32	4.45	0.77	13
		%	0	1.9	11.3	26.4	60.4			
12	It displays information and data untraditionally.	F	1	1	4	9	38	4.55	0.87	5
		%	1.9	1.9	7.5	17	71.7			

13	It shows information smoothly to facilitate difficult information.	F	0	1	5	14	33	4.49	0.75	9
		%	0	1.9	9.4	26.4	62.3			
14	It is a modern method that fits the present era of information presentation.	F	0	0	5	12	36	4.58	0.66	2
		%	0	0	9.4	22.6	67.9			
		%	0	1.9	11.3	24.5	62.3			
15	It helps read the information on the Law fast.	F	0	1	6	13	33	4.47	0.77	11
		%	0	1.9	11.3	24.5	62.3			
16	It changes the textual context of the Law to an interesting visual, digital, and narrative form.	F	0	1	5	10	37	4.57	0.75	3
		%	0	1.9	9.4	18.9	69.8			
17	It links the visual design and narrative story clearly.	F	0	2	5	14	32	4.43	0.82	15
		%	0	3.8	9.4	26.4	60.4			
18	It focuses on the visual more than the written items.	F	1	3	8	12	29	4.23	1.03	27
		%	1.9	5.7	15.1	22.6	54.7			
19	It meets the needs of the target group (starters to work).	F	0	1	5	13	34	4.51	0.75	8
		%	0	1.9	9.4	24.5	64.2			
20	The items, illustrations, and symbols are distributed in a comfortable manner.	F	1	1	9	12	30	4.30	0.95	25
		%	1.9	1.9	17	22.6	56.6			
21	The items of the digital story are presented logically and hierarchically.	F	0	1	7	14	31	4.42	0.80	18
		%	0	1.9	13.2	26.4	58.5			
22	It is well-drafted.	F	0	1	6	15	31	4.43	0.77	15
		%	0	1.9	11.3	28.3	58.5			
23	The illustration figures, images, and symbols are attractive.	F	0	2	7	14	30	4.36	0.86	22
		%	0	3.8	13.2	26.4	56.6			
24	The sequence of information varies (horizontal, circular, square, and hierarchical).	F	0	0	11	15	27	4.30	0.80	25
		%	0	0	20.8	28.3	50.9			
25	The information is appropriate and simple.	F	1	0	8	15	29	4.34	0.88	24
		%	1.9	0	15.1	28.3	54.7			
26	The colors are appropriate and attractive.	F	0	2	6	15	30	4.38	0.84	20
		%	0	3.8	11.3	28.3	56.6			
27	The questionnaire is clear and simple.	F	0	2	6	15	30	4.49	0.80	9
		%	0	3.8	11.3	28.3	56.6			
	Total							4.45		

Table (3) shows that the means of responses ranged from (4.23) to (4.62) and rated strongly agree. The total mean of the questionnaire scored (4.45) and rated strongly agree. "It displays the idea logically and sequentially" was ranked first with an arithmetic mean of (4.62) and rated strongly agree. "It is a modern method that fits the present era of information presentation" was ranked second with an arithmetic mean of (4.58) and rated strongly agree. "It includes the necessary information" and "it changes the textual context of the Law to an interesting visual, digital, and narrative form" were ranked third with an arithmetic mean of (4.57) and rated strongly agree. "It focuses on the visual more than the written items" was ranked last with an arithmetic mean of (4.23) and rated strongly agree.

The authors argue that these findings are due to many reasons. For example, the design of the infographic attractively integrated the text and visualization for the target audience to motivate their motor-visual memory. These findings match Al-Shua'ibi [47] that showed the effectiveness of infographic-based training in improving motor-visual memory among kindergarten children in Makkah and Sabry [41] that the animated infographic presents information logically and distinctively to promote understanding. They agree with Ishak and Mohamed [48] that showed that the animated infographic proved effective in facilitating the difficult information and promoting learning. They also agree with the results of [38][39][43][50][51] that reported the effectiveness of infographic in visual communication, developing learning, and enhancing achievement. To the authors' knowledge, no study addressed using the animated infographic in educating the starters to work on the Saudi Labor and Workmen Law.

## Conclusions

The Saudi Labor and Workmen Law has undergone various stages of development to fit the latest worldwide developments, especially in the World Trade Organization. Senior statesmen pay considerable attention to its impact on the national economy and development. The authors have been motivated to educate the starters to work on this Law to equip them with the necessary knowledge about their work duties and rights using the animated infographic. Accordingly, the authors could present the required information easily and fast to facilitate learning and enhance its effectiveness. The study concluded the effectiveness of the animated infographic from the perspective of the participants in educating the starters to Work on the Saudi Labor and Workmen Law.

## Recommendations

The study recommends using the animated infographic to educate the starters to work on the latest updates of the Saudi Labor and Workmen Law. It can be used in education to facilitate and enhance learning. The designed animated infographic can also help the supervisors of training run qualification programs for fresh graduates. Moreover, the study recommends conducting further studies on the educational infographic designs and linking them to the latest updates of the labor market.

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## Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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