Visualizing Malaysian Historical Figure Biography in Animation

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ARTICLE INFO	ABSTRACT
      Keywords: 	The rise of digital media and entertainment had gradually become a part of the lifestyle among the Malaysian Gen Z. This abundance of digital contents was indeed enjoyable and giving them the availability for indefinite knowledge but most of them were deeply influenced by foreign influences. This subtle factor could bring a major significant to Malaysia's Gen Z to be submerge with outside influence and gradually neglecting their own culture and losing their identity. This drives them away from understanding and appreciating the values of Malaysian culture especially regarding their own history and origins. Therefore, this study will use a qualitative method through contextual and literature analysis to study the method of re-introducing Malaysian historical figures to the new generation through animation media application in motion graphic style. Findings from this study is significant in enlightening Gen Z, thus preserving Malaysian heritage through online as a new digital content.

1. Introduction

Dolot [1] acclaimed that the new generation were known with many terms such as i Generation, Gen Tech or Online Generation but they were most likely to be associated as Generation Z or Gen Z. According to Beresford Research, this generation consists of those who were born from the year 1997 until 2012, varies from the age of 26 until 11 years old. Gen Z was known as true digital natives due to their exposure to the internet, to social networks, and to mobile systems from the earliest youth. This environment eventually developed a hyper-cognitive generation that often collect and cross-referencing many sources of information while integrating virtual and offline experiences altogether [2]. Therefore, digital media or machine-readable format which include software, digital videos, images or web pages are a norm among them. However, if previously it acts as a means of communication, now digital media has branched out into entertainment sources. Due to human's nature are usually inclined to entertainment, the same goes to these new generation where their focus will be directed and easily influenced by the leading trends online which the foreigners or the western had most influence in.

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This is a global situation happening among Gen Z and even Malaysia is of no exception. Unfortunately, the digital entertainments that most of Gen Z are revolving themselves into are not reflecting either the nature of Malaysia's culture or its history. This will eventually make them subconsciously dismiss their own heritage and adapt to others, either through their behavior, way of speaking or the knowledge they consumed. Thus, we are in a desperate need of finding a new media method to revive the declining knowledge about Malaysia and sparking the interest of Gen Z. Thus, the reenactment of history through our historical figures could be the deciding factor to help educating the Gen Z of their local heritage while keeping them entertaining. Nonetheless, this can only be made possible if the visualization is interesting enough. Considering the Gen Z characteristics, it was confirmed that Malaysian Gen Z were visual learners [3]. They preferred active learning activities which are technologically inclined, and we can conclude that the learning process must be enjoyable and this ideal must be measured if we want to efficiently grasp their attention.

The lack of studies focusing on the use of motion graphics in Malaysian historical education is a significant gap that limits the potential of leveraging modern educational technologies for more effective learning. This issue can be discussed from several angles. While the use of motion graphics has been explored in various disciplines globally, its application in Malaysian historical education remains under-researched. Without adequate studies, educators lack evidence-based strategies to effectively integrate motion graphics into teaching Malaysian history, potentially resulting in outdated teaching methods. History in Malaysia is often taught through textbooks, static images, and lectures, which may fail to engage students, particularly in the digital age. Motion graphics can vividly represent Malaysia's rich history, such as the Malacca Sultanate, colonial eras, or the struggle for independence, by illustrating key events, characters, and cultural aspects dynamically. The lack of studies on the use of motion graphics in Malaysian historical education limits the development of innovative teaching methods that could revitalize the subject. As technology becomes increasingly integral to education, addressing this research gap is essential to modernize history teaching and preserve Malaysia's rich historical narratives for future generations.

Hence, history learning through animation media is the relevant approach to apply into since animation is now considered having a significant role in education as one of the learning media or tools in delivering of materials during the learning process [4]. For example, there are a noticeable increased number of educational contents made via animation that could be found online such as Crash Course, in a Nutshell- Kurzgesagt and many others which are getting well accepted nowadays. The effectiveness of these approach gave the possibility to apply Malaysia history through animation as a new educational approach for the Gen Z. For this study, the historical figure chosen to be visualized in animation is Tun Perak (see Figure 1).

Fig. 1. A scene from In a Nutshell- Kurzgesagt animation video [5]

The lack of studies focusing on the use of motion graphics in Malaysian historical education is a significant gap that limits the potential of leveraging modern educational technologies for more effective learning. This issue can be discussed from several angles.

1.2 The Importance of Historical Study

According to Seow [6], history refers as a knowledge of the past or a study of a past event. Whereas Carr [7], in his book, 'What is History?', associated the terms as a dialogue between an incident that happened in the future and the past. These definitions show how history despite being a matter of the past, they can still be studied as a source of information to the present us. These chains of past events eventually accommodated us in learning about our country's identity either through its systems, ideologies, governments, cultures and many more. Each country had their own unique historical background and the act of learning them still held the same importance, where the stories accumulated throughout history can be both inspiring and uplifting or be a warning to be reminded and learn from [8]. On the other hand, Nuttal [9] said that the function of history education is to pass on knowledge of the past as it was a method to encourage the development of cultural literacy – having the 'traditional literate knowledge, the information, attitudes, and assumptions' [10]. In conclusion, historical study was not something to be forgotten or shunned upon but instead a knowledge that must be cherished and well- preserved in both the present and the future.

1.2 The Chronicle of Tun Perak

Malaysia's long history began around the year 1400 AD in an era of the Sultanate of Malacca. Nevertheless, what stood out the most during this era is the fact on how historians believed that a particular historical figure was the reason for Malacca's long-standing glory. The figure in question was mostly known in history as Tun Perak, hence the subject matter of this research and the main character of the animation visualization for this study. In order to better capture his biography, a background study was included in this research which are shown as below;

1.2.1 Background

Tun Perak was recorded in history as Bendahara Seri Paduka Raja Tun Perak bin Tun Perpatih Serdang (Jawi: سڠ ڤرڤتيه تون بن ڤيراق تون راج ڤدوک سري بنداهارا) or Tun Perak for short. He was born in Malacca and came from a family of five members, which consist of his father named Tun Perpatih Serdang, an unnamed Mother, with him as the eldest son and his two siblings, a sister named Tun Kudu and his younger brother named Tun Perpatih Putih [11]. Tun Perak was apparently originated from the descent of Malacca's Bendahara as the position of the third Bendahara of Malacca was held by his birth-father, Tun Pepatih Serdang, and his cousin, Tun Ali, became the fourth Bendahara soon after [12]. Despite this, Tun Perak who was well-known as the fifth Bendahara of Malacca between 1456 - 1498 AD did not assume the position of a Bendahara first but instead has held various positions in administrations such as Penghulu Klang, Bentara Melaka and Prime Minister [11]. Tun Perak had proven his abilities numerous times throughout the decade of services under four different sultans which were Sultan Muzaffar Shah, Sultan Mansor Shah, Sultan Alauddin Riayat Shah and finally Sultan Mahmud Shah [13]. He later died due to old age in 1498 AD by leaving behind marvelous achievements and glory to Malacca which solidified him as one of the most significant figures in Malaysia's long history.

1.2.2 Features and appearances

The studies of Tun Perak by the researcher had accumulated into the findings of various information regarding his family background, services and accomplishments but not his actual features and appearances. The researcher speculated the reason why the visual representation of Tun Perak's portraits or illustrations were scarce were due to two reasoning. First, either they were lost during the colonization era which started after Malacca's sultan, Sultan Mahmud Shah suffers defeat to Portuguese in 1511 [13] or second, due to Islamic reasoning, as the drawings of living beings was prohibited in Islamic teachings especially if the drawing was made to bring forth arrogance. Due to this limitation, the visualization of Tun Perak will be taken inspiration from the contextual analysis of Malay people features and the Malay official attires. Through various illustrations and visualization of Tun Perak available in the internet and in journal articles.

1.2.3 Physical features of Malays

As a Malay historical figure, Tun Perak features must be taken as inspiration from the Malays. This obligation needs to be done to better suit his description and visual representation by being as closely resembling the original material. The description of the Malays had been descriptively mentioned by Wallace [14] in his book, On the Varieties of Man in the Malay Archipelago. In his writings, Wallace [14] described the Malays of typically having a light reddish-brown, with a more or less olive tint skin. Like the colour of cinnamon or half-roasted coffee. Their hair was also very constant, being invariably raven black hair and straight but upon observation, those with any lighter tint, or any wave or curl however was a rare sight. As they aged, their hair will gradually be turned into white like most elders. The faces of the Malays was a little broad and inclined to be flat; the forehead is rather rounded, the brows low, the eyes black and very slightly oblique; the nose is rather small, not prominent but straight and well-shaped, the apex a little rounded, the nostrils broad and slightly exposed; the cheek bones are rather prominent, the mouth large, the lips broad and well cut but not protruding, with the chin round and well-formed. In conclusion, he defined the Malays as of short stature, brown skinned, straight haired, beardless, and smooth. The example of Malays men features can be seen in Figure 2.

Fig. 2. Example of classic malay men

Other analysis from various illustrations and visualization of Tun Perak on the internet such as shown in Figure 3, usually appeared as an older, charismatic man with either short or shoulder length white or black hair. He was commonly drawn by having only a moustache or paired with a

beard. This in fact were a significant trait for the Malays who were Muslim and according to the Islamic belief, as explained in the Mufti of Federal Territory's Office website, keeping and maintaining beard was a sunnah of the beloved Prophet PBUH. Tun Perak was also of tanned or brown skin which was common among the Malay men of the era who most of their life had done field work and were also known as sailors.
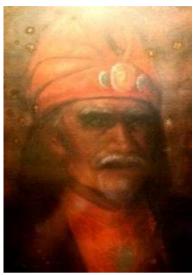

Fig. 3. An artist depiction of Tun Perak; photo taken at the Malacca Sultanate Palace Museum [15]

1.2.4 Costume of Bendahara

As written in the book titled *'Malay Annals'* by Leyden [25], a Bendahara was given their own respective clothing which differentiates them with the other existing officials such as Bentara or Laksamana. The description of a Bendahara costume was as mentioned; "If for a bandahara, of five pieces, placed in five platters, a coat, a cloth, a turban, a plaid and a waist- band…".Other than this description, the researcher had chosen the Pembesar costume as shown in Figure 4, as a visual reference to assist in the process of visualizing the character design of Tun Perak.

Fig. 4. Costume of Pembesar [16]

1.2.5 Accomplishment

Tun Perak had made various accomplishments throughout his careers, starting from his first administration post as Penghulu Klang to achieving his highest position as a Bendahara. Tun Perak was acknowledged for his brilliance in decision making and developing innovative strategies especially in defending Malacca from the threat of its rival, such as the Siamese. For this study, Tun Perak's biography will be introduced through one of his most mentioned accomplishment, inspired from the book Tokoh Agung Melayu [13], which was described as below;

1.2.5.1 A War Strategist: A Psychology Attack Against the Siamese

One of Tun Perak's many responsibilities as a Bendahara was to lead the Malacca Navy from the threat of the Siamese. Unfortunately, the greatness of the Siamese Navy was undeniable as Tun Perak soon realized that this fact could overwhelmed Malacca. Despite the risk, Tun Perak had come up with a psychological strategy to counter this possibility. He had taken advantage of the geography of the Batu Pahat beach, which situated on the opposite side of Malacca beach and instructed his men to place rows of torches there. The absurdity of this strategy had then led to the victory of Malacca since it was apparently a psychological attack to weaken the will of Siamese Navy. Once they had seen the brightly lit torches, it had created the feeling of doubt among them and soon created the assumption that the numbers of Malacca's army had already surpassed them. This situation had frightened the Siamese before they quickly went for a withdraw. Hence, crowning Malacca with victory for that time around. The Siamese Navy losses had given Malacca the golden opportunity to attack Pahang that was under the reign of Sri Dharmaraja. During the war in Pahang, Tun Perak had once again led the Navy fleet of Malacca which shown his ability to be in command.

1.3 Animation
1.3.1 Definition of animation

The latin word 'animationem' (nom. animatio) c.1590s was depicted as the origins for the terms of 'animation', meaning 'Action of imparting life', or 'A bestowing of life'. This interpretation was logical because animation was about replicating movements through the manipulation of still images which also acts as a medium for visual communications [7].

1.3.2 Animation and motion graphic

Animation is often being affiliated as a source of entertainment; a cartoon that brought laughter and humor to the audiences through its characters, storytelling and moral values. For example, these portrayals could be seen in animations such as Mickey Mouse by Disney Studios and Kampung Boy by Lacewood Studio, an animated series from Malaysia. However, according to Arnold [17] as mentioned in his book "Animation and The American Imagination: A Brief History" speculated that animation had not given much serious thought which made most common people often assimilated animation only as an entertainment. Nevertheless, over the course of years later, with the continuous development and advancement of new communication technologies in the 21st century: information technology, virtual environments and new media [18]. This eventually brought changes to the animation industry. First starting as an entertainment, now animation had been exploring into a more significant involvement in the education department.

The process of learning is now not limited to literature or class-oriented materials only, all due to the progressing technology. If previously education were meant to be learned in a formal environment or through the guidance of institutions and instructors, the world nowadays were exposed to unlimited knowledge readily accessible through the internet for anybody to use and learn either in the form of video, e-book, audio-book or even in animation format [19]. This research in particular will be highlighting the benefits of animation application as a new approach in creating a new online digital content for Malaysia history. It was even admitted by Mansor *et al.,* [20] that the benefits of using animation computers in today's world are apparent in many sectors. Not to mention, the Gen Z in Malaysia consisting of visual learners who preferred a learning style that consist of an active learning activity which are technological inclined [3].

1.3.3 Animation as learning media

Learning media is referred to the type of medias that contains message or information that has instructional purpose or learning purpose. Hence, by applying animation for educational purposes will eventually made them into a learning media or an instrument that elevated the learning process [12]. Furthermore, animation can help in presenting every idea in a vibrant and visually stimulating manner possible. For example, as shown in Figure 5, is a history animation educational video about The Chimu Rebels, published by TED-Ed on their YouTube Channel and approximately had gotten over 200,000 views in the span of three months. Thus, showing how supportive the online community in accepting animation as a learning media. In addition, it had been scientifically proven that, relative to oral memorizing, retaining information in memory for a long time is possible when a dynamically illustrated mechanism is used. These existing elements in animation can take boredom away while learning and thus resolve the restricted attention span or loss of focus [21] which is a common occurrence among Gen Z. Laksmi *et al.,* [22] mentioned that the benefits of using media in the learning process are : (1) Nurturing the interest in studying which given them the motivation to learn. (2) Giving the opportunity for better understanding about the learning material. (3) More variations in the learning method other than verbal communication.

Fig. 5. Recommendation of Tun Perak visualization [23]

1.3.4 Animation in Historical Study

Animation significantly enhances history learning outcomes compared to traditional methods by making historical content more engaging, relatable, and easier to understand. Here's how it specifically benefits history education (see Table 1):

Table 1
Benefits of animation in historical study

Benefits	Traditional Methods	Animations Impact
1. Bringing Historical Events to Life	Textbooks and lectures often describe events in a static and abstract way, relying on imagination.	Animations recreate historical events, showing movements, interactions, and emotional contexts. For example, an animated depiction of the French Revolution can vividly portray the storming of the Bastille, making it more real and memorable.
2. Simplifying Complex Timeline	Students often find it challenging to follow chronological events, especially when multiple events occur simultaneously across different regions.	Animated timelines visually demonstrate the progression of events, highlight overlaps, and show cause-effect relationships, helping learners grasp the big picture with clarity.
3. Humanizing Historical Figures	Historical figures are often presented as static portraits or text descriptions, making them seem distant and impersonal	Animated characters can show these figures as relatable, dynamic individuals. For instance, animating Tun Perak can help students connect emotionally to his words and context.
4. Gamified Learning and Interactivity	Traditional assessments may feel rigid and uninspiring.	Interactive animations and gamified experiences allow students to "participate" in history, such as making decisions during a historical battle simulation, which reinforces learning through active engagement.
5. Recreating Lost Worlds	Descriptions of ancient civilizations or extinct cultures often rely on imagination and sparse archaeological evidence.	Animations can reconstruct these worlds, from the bustling streets of ancient Malacca, allowing students to virtually experience these settings.

Animation enhances history learning by making it immersive, interactive, and emotionally engaging. While traditional methods provide depth and structure, animations make historical events tangible and captivating, leading to better retention and understanding. Combining both approaches can significantly enrich history education.

2. Methodology

This study adopted qualitative approach by using literature review and contextual document analysis method. This method was found suitable to be applied because in contextual analysis, the used information and data are meant as a clarification for the character of main parts of the research objects, and how those can be delimited and described more precisely [24]. Using a

qualitative approach that integrates literature review and contextual document analysis to explore the visualization of Malaysian historical figure biographies in animation offers a rich framework for investigating this niche. Here's how these methods can be effectively utilized:

2.1 Research Objectives

The primary goal is to understand:

i) How Malaysian historical figures have been represented visually and narratively in educational media.
ii) The potential of animation as a medium to present their biographies more engagingly and accurately.
iii) Gaps in current visual narratives or historical portrayals.

2.2 Literature Review

The literature review forms the foundation by synthesizing existing knowledge on:

i) Animation in Historical Education: Explore global and local studies on the use of animation for teaching history, focusing on its role in simplifying narratives, engaging learners, and enhancing retention.
ii) Representation of Historical Figures: Analyse how biographies of historical figures are traditionally conveyed (e.g., through textbooks, documentaries, or oral storytelling) and the challenges in maintaining accuracy and relatability.
iii) Malaysian Historical Context: Review literature on Malaysian history education and how figures like local heroes (e.g., Tun Perak) are portrayed, particularly in visual media.

2.3 Contextual Document Analysis

This method involves systematically analyzing existing materials to assess how Malaysian historical figures are visualized and narrated. Steps:

i) Identify Sources: Collect relevant documents, including:
    a) Educational materials (e.g., textbooks, curriculum guides).
    b) Existing animations or visual content featuring Malaysian historical figures.
    c) Historical documents, biographies, and artifacts for cross-referencing accuracy.
    d) Government publications on history education policies.

ii) Analyse content for:
    a) Visual Style: How are the figures visually represented? Are they idealized, caricatured, or realistic?
    b) Narrative Techniques: What stories are told about these figures? Are they focused on achievements, personal struggles, or cultural impact?
    c) Educational Value: How effectively do these materials engage and educate learners?
    d) Cultural and Ethical Considerations: Ensuring respect for cultural sensitivities while making the content universally appealing.

e) Target Audience Needs: Addressing the expectations of modern learners, particularly digital natives, through engaging visuals and narratives.

This research used two physical books, academic journal, articles and websites as the main source with the first book is entitled as 50 IKON BANGSA by Chamil [12] published by media global matrix and the second book, Tokoh Agung Melayu, a note collection of Effendy *et al.,* [13], published by Patriots Publication. Both materials were used as references for Tun Perak biography in the literature review section. By using this qualitative framework, the study not only deepens academic insights but also provides practical guidelines for visualizing Malaysian historical biographies in animation.

3. Analysis & Findings

This is the data analysis and findings of the study gathered by the researcher in regards of the chosen topic. A qualitative approach through a literature review and document analysis is the method used in this research. The outcomes of these findings will be a summation of the historical chosen, Tun Perak, including his background, accomplishment and other necessary details needed for this study. In addition, a study of animation will also be included as additional content in regards of its definition, importance and potential as Malaysia's new educational approach.

Table 2 underscore the unique characteristics of Gen Z, highlighting their digital nativity, pragmatic decision-making, and preference for interactive, technology-driven learning environments. Understanding these traits is crucial for educators, employers, and marketers aiming to effectively engage with this emerging generation. Generation Z, often referred to as Gen Z, encompasses individuals born from the late 1990s to the early 2010s, making them approximately 11 to 26 years old as of 2025. This cohort is characterized by their deep integration with digital technology, having grown up with the internet, social networks, and mobile systems. This exposure has fostered a generation adept at multitasking, frequently collecting and cross-referencing information from various sources, and seamlessly blending virtual and offline experiences. In Malaysia, Gen Z is predominantly composed of visual learners who favour active, technology-infused learning methods. They thrive in environments that incorporate digital tools and interactive activities, reflecting their comfort with technology and preference for engaging, hands-on educational experiences.

Table 2
Definition of Generation Z

Scholar/Reference	Significance
Dolot [1]	The new generation were known with many terms such as i Generation, Gen Tech or Online Generation but they were most likely to be associated as Generation Z or Gen Z.
Beresford Research	Gen Z consists of those who were born from the year 1997until 2012 which varies from the age of 26 until 11 years old.
Francis and Fernanda [2]	Gen Z was known as true digital natives due to their exposure to the internet, to social networks, and to mobile systems from the earliest youth. This environment eventuallydeveloped a hyper-cognitive generation that often collecting and cross-referencing many sources of information while integrating virtual and offline experiences altogether.
Azman *et al.,* [3]	Gen Z in Malaysia are consisting of visual learners who preferreda learning style that consist of an active learning activity which are technological inclined.

Table 3 shows the concept of history that has been interpreted in various ways by scholars over time. Two notable perspectives are presented by Seow [6] and Carr [7]. Seow [6] defines history as the knowledge of the past or the study of past events. This perspective emphasizes history as a factual recounting of events, focusing on understanding what happened in the past. According to Carr [7], historians select certain facts from the multitude of events that have occurred, influenced by the standards and concerns of their own time. This selection process means that historical facts are not objective truths but are shaped by the historian's perspective and context. Carr [7] argues that understanding history involves recognizing this interplay between the past and the historian's interpretation, highlighting that our understanding of history is continually evolving as we engage with it.

Table 3
Definition of history

Scholar/Reference	Significance
Seow [6]	A knowledge of the past or a study of a past event.
Carr [7]	A dialogue between an incident that happened in the futureand the past.

Table 4 discussed on the importance of learning history for understanding our country's identity, including its systems, ideologies, governments, and cultures. The narratives accumulated through history can be both inspiring and cautionary, offering valuable lessons that inform our present and future decisions. Nuttall [9] explores the purpose of studying history, noting that it involves passing on knowledge of the past to encourage the development of cultural literacy. These insights collectively underscore the importance of historical study in shaping our identity, learning from past experiences, and fostering a well-rounded understanding of the world.

Table 4
Importance of historical study

Scholar/Reference	Significance
Nord [8]	Accommodated us in learning about our country's identity either through its systems, ideologies, governments, cultures and many more. The stories accumulated throughout history can be both inspiring and uplifting or be a warning to be reminded of and learn from.
Nutta [9]	Is to pass on knowledge of the past as it was a method to encourage the development of cultural literacy – having the 'traditional literate knowledge, the information, attitudes, and assumptions [10].

Table 5 shows the historical background and biography of Tun Perak, his family members occupation and the Sultan's he served back then during Malacca Sultanate History.

Table 5
Background of Tun Perak

Scholar/Reference	Topic	Significance
Ali and Abdul [11]	Name	Bendahara Seri Paduka Raja Tun Perak bin Tun Perpatih Serdang.
	Born	Malacca
	Died	1498 AD
	Family Members	Father: Tun Perpatih Serdang Mother: N/A Sister: Tun Kudu Brother: Tun Perpatih Putih
	Duration of services as Bendahara	From 1456 - 1498 AD
	Occupation	Held various positions in administrations such as Penghulu Klang, Bentara Melaka and Prime Minister.
	Sultans that Tun Perak served	Sultan Muzaffar Shah Sultan Mansor Shah Sultan Alauddin Riayat Shah Sultan Mahmud Shah.
Chamil [7]	Descent of Malacca's Bendahara	The position of the third Bendahara of Malacca was held by his birth-father, Tun Pepatih Serdang, and his cousin, Tun Ali, was the fourth Bendahara.

Table 6 described on Wallace [14] work, a prominent 19th-century naturalist and explorer, conducted extensive studies in the Malay Archipelago between 1854 and 1862. In his 1863 paper, "On the Physical Geography of the Malay Archipelago," Wallace [14] provides detailed observations on the physical characteristics of the Malay people. He notes that Malays typically have light reddish-brown skin with an olive tint, akin to the colour of cinnamon or half-roasted coffee. Their hair is predominantly raven black and straight, with instances of lighter shades or waves being rare.

Table 6
Physical features of the Malays

Scholar/Reference	Topic	Significance
Wallace [14]	Skin	A light reddish-brown, with a more or less olive tint skin. Similar to the colour of cinnamon or half-roasted coffee.
	Hair	Very constant, being invariably raven black hair and straight but upon observation, those with any lighter tint,or any wave or curl however was a rare sight.
	Facial features	. Face: A little broad and inclined tobe flat . Forehead: Rounded . Eyebrows: Low . Eyes: Black and very slightly oblique . Nose: Small, not prominent but straight and well-shaped, the apex alittle rounded, the nostrils broad andslightly exposed . Cheek bones: Rather prominent . Mouth: Large . Lips: Broad and well cut but notprotruding . Chin: Round and well-formed
Mufti of Federal Territory's Office	Beard	Keeping and maintaining beard was a sunnah of the beloved Prophet PBUH.

Tables 7 and 8 elaborate on Tun Perak's attire and his accomplishment. Tun Perak was a Bendahara therefore he usually wore; a coat, a cloth, a turban, a plaid and a waistband. Tun Perak was a distinguished military strategist and statesman during the early 15th century, significantly contributing to the establishment and expansion of the Malacca Sultanate. Tun Perak's legacy as a war strategist is marked by his successful military campaigns, strategic territorial expansions, and diplomatic initiatives, all of which played a crucial role in shaping the history and prominence of the Malacca Sultanate.

Table 7
Tun Perak's attires

Scholar/Reference	Significance
Leyden [25]	A Bendahara wore; a coat, a cloth, a turban, a plaid and awaist-band.

Table 8
Tun Perak's accomplishment

Scholar/Reference	Significance
Effendy *et al.,* [13]	A War Strategist: A Psychology Attack Against the Siamese i) Tun Perak's responsibilities as a Bendahara was to lead theMalacca Navy from the threat of the Siamese. ii) He come up with a psychological strategy to counter the Siamese Navy's numbers by instructed his men to place rows of torches on the opposite side of Malacca beach. iii) The psychological attack weakens the will of Siamese Navyto proceed their march and soon withdraw. iv) The Siamese Navy losses had given Malacca the golden opportunity to attack Pahang that was under the reign of SriDharmaraja.

Table 9 and Table 10 discussed the definition and benefits of animation. Animation is a filmmaking technique that involves creating moving images by displaying a sequence of individual frames or images in rapid succession. In essence, animation is a versatile and powerful medium that combines art and technology to inform, entertain, and connect with audiences worldwide.

Table 9
Definition of animation

Scholar/Reference	Significance
Wells [26]	The latin word 'animationem' (nom. animatio) c.1590s was depicted as the origins for the terms of 'animation', meaning 'Action of imparting life', or 'A bestowing of life'.

Table 10
Benefits of animation

Scholar/Reference	Significance
Mansor *et al.,* [20]	The benefits of using animation computers in today's world is apparent in many sectors.
Laksmi *et al.,* [22]	i) Applying animation for educational purposes will eventually made them into a learning media or an instrument that elevated the learning process ii) Nurturing the interest in studying which given them the motivation to learn. iii) Giving the opportunity for better understanding about the learning material. iv) More variations in the learning method other than verbal communication.
Jeetha and Krishna [21]	Animation can take boredom away while learning and thus resolve the restricted attention span or loss of focus.
Jagoda [27]	A percentage of 40% of people respond better to visual information over plain text, and animation is a great way to motivate and appeals to students and general people.

Tables 11, 12, and 13 describes motion graphics and their benefits. Motion graphics is a form of graphic design that combines animated visual elements such as text, shapes, and icons to convey information or tell a story. Unlike traditional animation, which often focuses on storytelling and character development, motion graphics emphasizes the movement of visual elements to communicate messages effectively. Incorporating motion graphics into content strategy can significantly enhance communication, engagement, and brand recognition, making them a valuable tool in modern digital marketing and design.

Table 11
Definition of motion graphic animation

Scholar/Reference	Significance
Schlittler [28]	Motion graphics animation or typographical animation wereused by entertainment industries for decades such as in movies and television shows for promotional purposes.
Sunny [29]	Computer-generated graphics in creating animated videos with sound and voice over.

Table 12

Definition of motion graphic explainer animation

Scholar/Reference	Significance
Piehole [30]	An educational or informative video that use professionalstyle of animated video with moving graphics or also known as info graphic videos.

Table 13

Benefits of motion graphic animation

Scholar/Reference	Significance
Rias [31]	Motion graphic implementation can keep the viewers' interest especially when the learning material demands visualmovements.

Table 14 discussed on the study titled "Motion Graphic Animation Video as Alternative Learning Media" by Lanto Ningrayati Amali, Nurtianingrat Zees, and Sitti Suhada (2020) investigates the efficacy of using motion graphic animation videos as a medium for teaching Indonesian history. The integration of motion graphic animation videos in teaching Indonesian history effectively enhances student engagement and learning achievements. The positive feedback from media experts, material experts, and students supports the suitability of this medium for educational purposes. The study suggests that incorporating such animated videos can be a valuable alternative learning tool in history education.

Table 14

Case study: 'Motion Graphic Animation Video as Alternative Learning Media'

Scholar/Reference	Significance
Amali *et al.,* [32]	i) The Indonesian history subject was used as the subject matter for the motion graphic animation to evaluate the difference between the test result between the students whoapplied the learning media and the one who do not.
	ii) This experiment was carried out in SMK Negeri 1 SuwanaBone Bolango regency, Gorontalo, Indonesia.
	iii) The average pretest score before the implementation of the learning media is 57.60, while the average post test score after the motion graphic animation video learning media implementation is 79.20.
	iv) This in fact solidified the usefulness of a motion graphic animated video being implemented in history subject.

4. Conclusions

It is undeniable that as the world keeps on advancing, preserving our culture and history will definitely be challenging if we who lives in the present did not be up front in protecting it. Using the availability of technology to the fullest gave us the opportunity of giving our heritage a new introduction to our new generation. Thus, the data and findings of this study is significant as a guiding principle and reference for future studies in solidifying local heritage in the use of motion graphic animation as an option for educational approach for the Gen Z.

This study is also concluded with a recommended visualization of Tun Perak by the researcher, which is shown in Figure 5. This visualization was done in a motion graphic animation style according to the studies done on Tun Perak. These illustrations can be used as a reference for further studies.

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