Research Article

VIEWFINDER: Smartphone Accessories for Solo Creators to Self-Monitoring During Video Recording for Social Media Content

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Abstract: *ViewFinder is a solution product as an additional accessory for a creator or solo designer of video content on social media. Nowadays, videos are easy to upload and download to social media sites that have become too many smartphone users to make it a new activity or career in the new media revolution now. The design of this additional accessory makes it easy for solo content creators to record themselves using the back of a smartphone camera, which we know is of better quality than using the front camera. This product uses a universal connection mount to connect to any existing tripod. Next, by placing the smartphone in the centre of the product, as the last step, the mirror is adjusted to get the correct direction of reflection from the screen to the user. With this product, users can easily use the back of the camera without worrying about the video while recording. Some features like slow-motion video and better quality not in the selfie camera (front) are solid reasons everyone should own this product. Almost everyone has a smartphone, so with this product, users do not have to invest their money to buy expensive cameras to create content that has good video quality.*

Keywords: Smartphone Accessories; Solo Creators; Self-Monitoring; Social Media Content; Content Creators.

1. INTRODUCTION

Several vital technological advances enabled the development of the smartphone. The exponential scaling and miniaturisation of MOSFETs down to sub-micron levels during the 1999s-the 2000s made it possible to build portable intelligent devices such as a smartphone. It is enabling the transition from analogue to faster digital wireless mobile networks. Other important enabling factors include the lithium-ion battery, an indispensable energy source that enables extended battery life.

A smartphone is a mobile phone that can do more than other phones. They work as a computer but are mobile devices small enough to fit in a user's hand uses include sending and receiving emails, text, photographs, and multimedia messages.

The modern smartphone has taken a long 26-year journey to reach us in 2018, and it has changed a lot along the way. It is an evolution that's taken the market by storm.

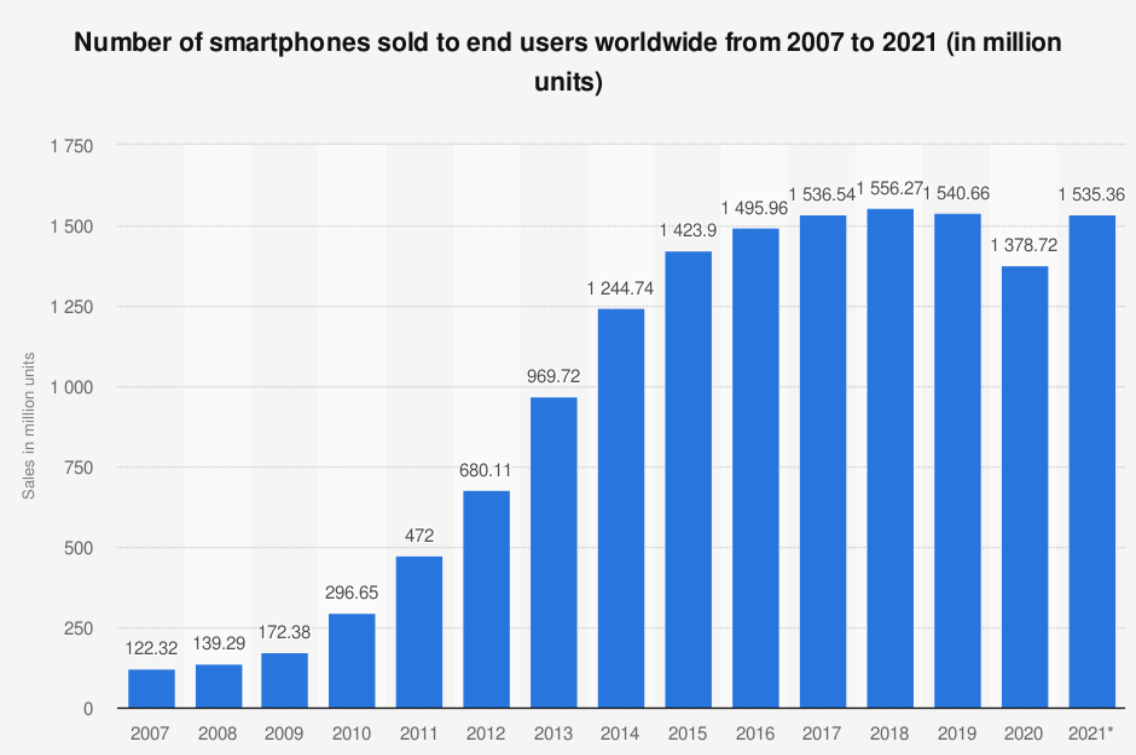

Figure 1. Number of Smartphones sold to end users worldwide from 2007 to 2021 (in a million units)

Starting with the history of the production of mobile phones towards smartphones itself, we know that there are many additional accessories for the needs and demands of users in daily routine. However, the primary reason for its existence is to communicate. In contrast, the accessories for the phone are considered a new product that needs to be designed to meet the needs of consumers.

Smartphone accessories is a design innovation with a new product approach for current and future market trends. Therefore, consumers need to realise the activities carried out and complete what is incomplete for daily life. With the state of technology coupled with the requirements and desires of smartphone users, regardless of age, these smartphone accessories need to be designed as a requirement for the activities to be carried out. These activities include career, social activities, teaching and learning and various factors. The design of this accessory is considered a necessity.

In addition, the problem of an activity must be identified as an excellent start to design new smartphone accessories according to its users. Other than being a need or desire, this product must interact with users when using it. Understanding the initial research process of designing these new products, including determining consumer needs. With this, the product design of this solution can be produced in visual and 3D development.

Nowadays, everyone wants to generate secondary income through social media platforms but does not want to invest in expensive equipment. Therefore, by using whatever they have, a mobile phone is used as a tool to record. Every smartphone nowadays has at least two cameras, one on the front and another on the phone's back. As we all know, the rear camera has better quality and has more

features than the front camera. Some features like slow-motion video and specially encoded high-definition quality not available in the selfie camera (front) are a solid reason everyone should own this additional accessory product. It is very tough to record video using a rear camera while monitoring the recording video feed is a particular problem to social media solo creators who only use smartphones as their recording tools.

While there are several accessory designs in this solution, there are shortcomings in the purpose and design produced. The existing design can only be used in landscape mode, not portrait mode. The existing design does not provide a suitable grip to hold the smartphone securely and requires various additional accessories to support its use. Mainly, the designs that come out focus on professional videographers only. Therefore, this Viewfinder smartphone accessory has the solution.

2. METHOD & MATERIAL

Viewfinder collected facts and reading sources through a literature review at the beginning of the design study. As shows in Figure 1, Product Solution Flow was created and mixed methodology was used to develop design solution. The types of smartphone accessories, careers and main activities of smartphones, and existing products for solo video content creators of social media sites are searched and analysed based on the findings. In designing this Viewfinder, a brainstorming method is used to determine the accessories that are a priority in the design as a solution product. Smartphone accessories and consumer careers are categorised by brainstorming and knowing when and where the accessories will be used.

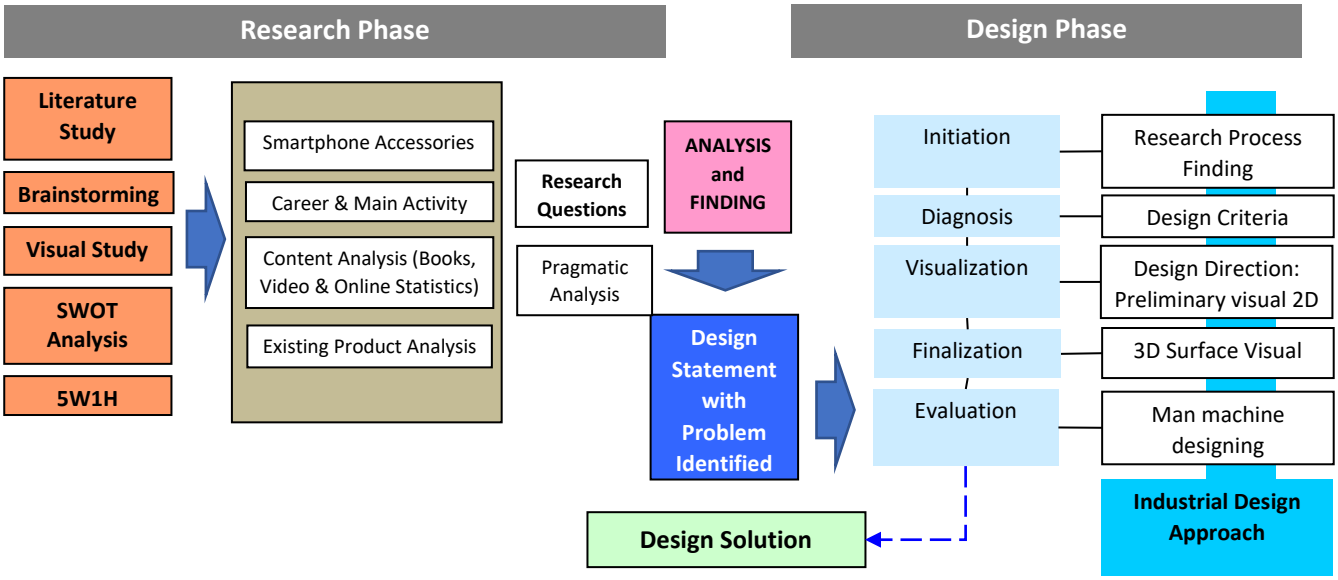

Figure 2. Product Solution Flow

To address the objectives of the study, the research questions were identified by placing the research questions focused on solutions to existing problems. Furthermore, the ways to use, how the excellent grip concept applies, how to carry, and what systems and features are appropriate to put into this Viewfinder design are identified. In addition, the position and distance of the mirror reflection are also studied analysis pragmatically.

In identifying media site content creators as users, situation comparisons were compared by the 5W1H method. Problems were also identified based on the use of the smartphone itself with a

SWOT analysis study. After identifying appropriate careers and activities, based on the findings of the problem, the observation method was made directly to the solo creators of social media content based on the reach objectives in designing.

Methods through visual observations, videos and items designed for relevant studies were made in identifying problems. Online searches, books, and online statistical references containing information related to smartphone users as solo creators of social media video content were also identified.

Through all these methods, design problems and objectives are identified in a Design Concept with statement. Among the problems found from solo creators of social media video content is the difficulty of seeing the phone screen while recording the rear camera. Indirectly also, the difficulty of ensuring self-positioning in the frame of the recording screen. The position of the rear camera of each smartphone is also unequal and unbalanced as well as the difficulty of light control for recording. Existing products are only available for landscape mode, are not supplied with a suitable handgrip, and only focus on professional photographers.

Analysis of existing products is also done analytically to identify problems more clearly and can be proposed in terms of product positioning. Thus, the design concept is translated into visual and sketch designs and proposed in 3D. Pragmatic analysis is made to understand materials, mechanisms, and essential features for the design concept.

3. FINDINGS

Conceptually, Viewfinder is designed for solo creators to monitor themselves during video recording for social media content. Through identified problems as well as design objectives, Viewfinder is designed with minimalist criteria, sleek and user-friendly design, and is explicitly aimed at solo creators of video content for social media sites. The design considerations of this accessory are safe to use, easy to use, lightweight and affordable.

The visualisation is presented in a rendering drawing through the development of ideas from concept to idea development in the initial sketch to the final development sketch. The Viewfinder design is also revealed in a 3D concept. The final drawing is manually in the Mock-up. The technical drawing is developed to present the final concept to represent the model's appearance.

Figure 3. Manual Rendering & MockUp (Final Design)

Moreover, product application panels in sketch and 3D visualisation were also created to ensure practical use. This is more appropriate to see the advantage features over this Viewfinder product. The Viewfinder also comes in an attractive colour variant and aesthetically shows that it is user-friendly for users to choose their favourite colour.

Figure 4. 3D Visual Product Usage & Colour Proposal

4. DISCUSSION

In line with the conceptual design of the solution product, Viewfinder achieves its objective to be used for those who make self-recording and as a solo creator of video content for upload on social media sites. The Viewfinder offers usage features for landscape and portrait shooting modes using the smartphone's rear camera as a simple accessories concept and concise and user-friendly accessory. Even this accessory can be fitted with a universal handle as it has universal screw holes for all handle accessories. It is also easy to operate, emphasizing self-monitoring for self-recording positions. As an additional accessory to smartphone users, Viewfinder encourages users to explore new content creator.

Figure 5: 3D Visual in User Mode & Packaging Display

5. CONCLUSION

The Viewfinder is a concept solution product as an essential additional accessory for a creator or solo designer to monitor self-recording for uploading video content on social media. Smartphone accessories are now an essential product in problem-solving and even support the creation of better-quality work. The accessories designed must be suitable for the activities and tools used, especially the user. Solo video content creators can use Viewfinder as an additional tool and support for self-made recording production. With the features available for problem-solving and the design objectives, Viewfinder is very precise to use and should be owned by all smartphone users.

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