ABSTRACT

The advancement of telecommunications technology aided by mobile devices has become

one of the driving forces behind the growth of social media in this digital era. The evolution

of social media became more intricate when internet access became easier and faster. Social

media plays a crucial role in transforming how people interact, share information, and build

relationships. Social media users not only share stories but also have the right to actively

participate in each post by providing responses such as comments, sharing, and liking the

posts. The development of social media will continue, driven by technological advancements

and the increasing needs of users. The utilization of Artificial Intelligence (AI) and Robotic

Process Automation (RPA) serves as a solution to meet the needs of social media users.

The integration of AI and RPA technology is an effort to increase the efficiency of

content creation by finding out what trends are happening. This program is called Auto

Generated Content (AGC). AGC can be defined as the process of creating content that is

done automatically without human intervention. This can be done with the help of AI video

creation tools from Woxo.tech which has an aspect ratio of 9:16, AI image creation tools

from Leonardo.AI and UiPath RPA software which makes the automation process repeatable

and makes human work easier. AGC can be used in various types of media such as text,

images and videos. AGC can also be used in blog creation.

The AGC program automatically generates videos and images by browsing the latest

trending information as content topics. This content is uploaded to social media such as

TikTok, Instagram, Facebook, and Twitter via UiPath, using a web scraping process. After

uploading, likes, comments, and views are monitored. Social Media Optimization (SMO)

techniques are also applied by using relevant hashtags. The system operates with a loading

time of 10 minutes, and the generated content gets an average of 1,970 viewers on first

viewing, with 71 likes and 5 comments. The feedback received has exceeded the ideal targets

of 50 likes, 1500 views, and 3 comments. Thus, the developed system has met the

established expectations.

Keywords: RPA, AI, AGC, SMO, Web Scraping

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