

1. INTRODUCTION

Social media is a medium on the internet that allows users to represent themselves and interact, work together, share, and communicate with other users to form virtual social bonds [1]. It can be seen that social media has been used in a variety of contexts, including communities, organizations, and businesses. Social media has also been used for a variety of purposes, including learning media [2], entertainment media, and business media [3]. Images, videos, audio, and text may be shared through social media. With social media, it may be easier to share and distribute information, so it makes sense for universities to have social media accounts [4].

Instagram is one of the most popular social media platforms, particularly among adolescents [5]. We may interact and exchange information through posts on Instagram. User engagement refers to the quality of the user experience that highlights the positive elements of engaging with an online program and, in particular, the desire to use that application more often and for more extended periods [6], therefore, we can learn about user reactions and interactions from a post through user engagement.

To evaluate user engagement, we can use post context and content. Context features are information that can be used to identify the entity's behavior [7], while content features are qualitative content (such as verbal and visual) in the form of objective and quantitative data [8]. A study has revealed that by focusing on post context and content, we can increase user engagement [9]. Therefore, institutions that have social media account need to comprehend user engagement level to enhance its connection with public.

In this research, a quantitative analysis of social media user engagement on University Instagram posts was performed. Engagement is measured based on the number of likes and comments, where the number of likes indicates the level of interest and the number of comments suggests the level of verbal interaction [9]. Engagement analysis was performed by using a dataset that contains context feature data (such as hours, days, and months) and content feature data (such as the description and the image posted) from each Instagram post on the University's account, the number of likes and comments are used as the target. We applied Least Absolute Shrinkage and Selection Operator (LASSO) method to determine the important features that influence user engagement on social media post. The objective of LASSO is to select the variables and regression coefficients that lead to a model with the smallest prediction error [10]. The model will provide information about how to get the most out of their social media activities, make relevant and exciting posts based on feature content and context, and positively interact with other social media users.