

**Universiti Teknologi MARA**

**ANALYSING THE DYNAMICS OF  
ONLINE MARKETING VIA  
INSTAGRAM HASHTAG USING  
SUSCEPTIBLE-INFECTED-  
RECOVERED MODEL**


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**Report submitted in fulfillment of the requirements  
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## **STUDENT'S DECLARATION**

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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## ABSTRACT

Instagram hashtags can be very helpful for introducing a new product, promotion, or anything related to the products where it links customers to the Instagram account page. However, there has been some concern whether the marketers know how an Instagram hashtag can successfully help towards the virality of product in online marketing. This small-scale study has been conducted to investigate the dynamics of online marketing via Instagram hashtag using the Susceptible-Infected-Recovered model. The susceptible represents the number of Instagram users, the infected signifies the Instagram users who like, view and use the hashtag related to the products. The recovered characterizes the Instagram users who like, view but not use the hashtag related to the product. Three products owned by famous Malaysian Instagrammers with the trending Instagram hashtag had been collected from their official Instagram page. The results reveal that the initial number of followers who view and share information about the product also affects the virality of the products. Besides, the product will be viral quickly if the number of likes and views of the product is high.

**Keywords:** Instagram, hashtags, product, customers, online marketing, virality

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