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Recording Transaction Data Using Enterprise Resource Planning System and Exposure Data Analytics on Social Media at "Buruma Café and Bistro"

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Abstract - *This study aims to record transaction data and review the exposure of promotional data on social media at Buruma Café and Bistro. The research uses a descriptive quantitative method consisting of two main activities. The first activity involves implementing an Enterprise Resource Planning (ERP) system using Odoo.com to record 20 transaction notes from 2023, utilizing the Sales, Point of Sales, Accounting, Purchase, Inventory, and Manufacturing features. The second activity focuses on product promotion through Instagram and TikTok by selecting Buruma Café and Bistro products, creating 30–60 second photos and videos as promotional materials, and adding captions for each post. Exposure data were collected from both platforms, and manual sentiment analysis was conducted on user comments. The results show that Buruma's transaction data recording was well-executed, Osaki Kani Maki was the most popular product on Instagram, and TikTok provided better exposure for product promotion compared to Instagram.*

Keywords - Enterprise Resource Planning (ERP), Transaction Data, Social Media Analytics, Promotion Exposure, Buruma Café and Bistro

1. Introduction

Enterprise Resource Planning (ERP) System is an enterprise information system designed to integrate and optimize business processes and transactions within an enterprise. ERP is an industry-driven concept and system, and is universally accepted by the industry as a practical solution to achieve an integrated enterprise information system [1]. One of the ERP applications that can be used opensource is Odoo. Odoo is an integrated business software platform (ERP - Enterprise Resource Planning) that provides a wide range of applications to help the management and operations of a company efficiently. Odoo (formerly known as OpenERP) is designed to integrate various aspects of a business, including sales management, accounting, production, human resources, warehouse, marketing, customer service, and others, into one integrated system [2].

Social media marketing (SMM) is a marketing strategy that uses social media platforms to build relationships with audiences and promote products or services. It involves creating creative content, sharing information, and interacting directly with audiences through various social media platforms [3]. Some social media platforms provide features to convert data on consumer interactions with social media content. Examples of this feature are Facebook Analytics and Instagram Insights [4].

Buruma Café and Bistro is a unique destination with a combination of restaurant, bar and bistro ambience all in one environment. Buruma with its attractive interior design and welcoming atmosphere creates an ideal space for casual gatherings or large celebrations, presenting an exquisite culinary experience that is the ultimate choice for enjoying delicious dishes, refreshing drinks and precious moments with business colleagues or family. Buruma offers a satisfying culinary experience specializing in traditional Thai and Japanese dishes. Buruma has implemented an Enterprise Resource Planning (ERP) System but there are problems, namely recording transaction data that has not been covered properly. In addition, Buruma has not run promotions using social media effectively. Therefore, the purpose of this assignment is to record transaction data and to review the exposure of promotional data on social media at Buruma Café and Bistro.

2. Methods

This task uses a descriptive quantitative method consisting of two main activities, namely the implementation of an ERP System using Odoo.com to record transaction data for 20 notes in 2023, and product promotion through Instagram and Tiktok. The first task starts with creating an Odoo account, then the specified features are Sales, Point of Sales, Accounting, Purchase, Inventory, and Manufacturing. The second activity begins with the selection of products in Buruma Café and Bistro. Then,

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pictures and videos with a duration of 30-60 seconds were taken as promotional material on Instagram and Tiktok. Captions are also included in each post. Finally, data collection is carried out regarding exposure on each social media and if there are comments on the post, a sentiment analysis will be carried out manually on the comments.

3. Results and Discussion

3.1. Recording Transaction Data Buruma Café and Bistro

Enterprise Resource Planning (ERP) System is a system that integrates all aspects of a company's business, from planning to resource management. This system can help companies to improve the efficiency and effectiveness of their operations [5]. The process of creating an Odoo.com account is as follows:

1) Go to https://odoo.com/

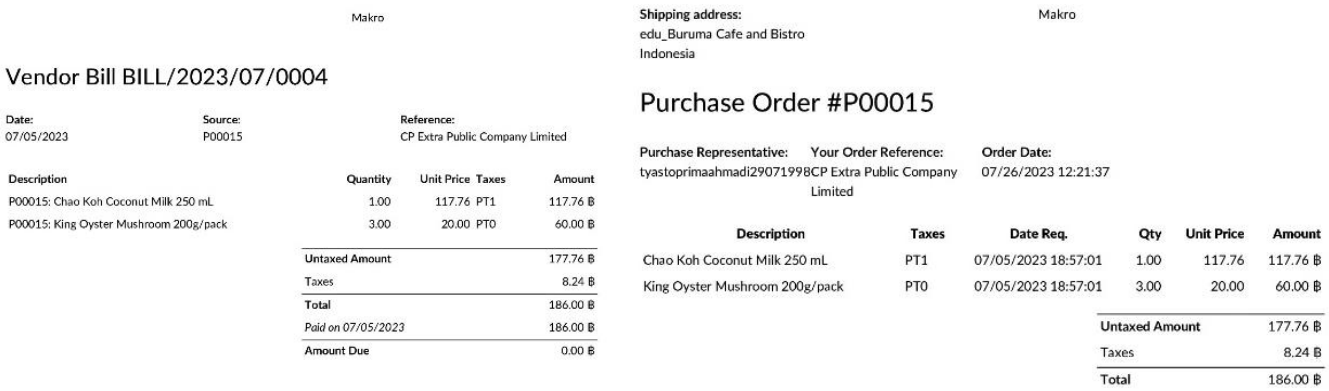
2) Click 'Try it Free' then select the features you want to use (in the case study of Buruma Café & Bistro, the features used are Sales, Point of Sales, Accounting, Purchase, Inventory, and Manufacturing).

3) After that, fill in the Odoo.com form.

4) When finished, click Start Now.

5) After the odoo.com account is created, the next step is to enter the list of existing purchases (not waiting for new orders) into the Purchase feature.

After all the data has been entered into Odoo.com, the next step is to prepare presentation reports for the ERP System in the form of Print Out Vendor Bill (Figure 1a.) and Purchase Order (Figure 1b.). The display of the results that have been entered into Purchasing will be presented in Figure 2.



Makro

Vendor Bill BILL/2023/07/0004

Date:	Source:	Reference:
07/05/2023	P00015	CP Extra Public Company Limited

Description	Quantity	Unit Price	Taxes	Amount
P00015: Chao Koh Coconut Milk 250 mL	1.00	117.76	PT1	117.76 ฿
P00015: King Oyster Mushroom 200g/pack	3.00	20.00	PT0	60.00 ฿

Untaxed Amount	177.76 ฿
Taxes	8.24 ฿
Total	186.00 ฿
Paid on 07/05/2023	186.00 ฿
Amount Due	0.00 ฿

Shipping address:
edu_Buruma Cafe and Bistro
Indonesia

Makro

Purchase Order #P00015

Purchase Representative:	Your Order Reference:	Order Date:
tyastoprimaahmadi29071998	CP Extra Public Company Limited	07/26/2023 12:21:37

Description	Taxes	Date Req.	Qty	Unit Price	Amount
Chao Koh Coconut Milk 250 mL	PT1	07/05/2023 18:57:01	1.00	117.76	117.76 ฿
King Oyster Mushroom 200g/pack	PT0	07/05/2023 18:57:01	3.00	20.00	60.00 ฿

Untaxed Amount	177.76 ฿
Taxes	8.24 ฿
Total	186.00 ฿

(a) (b)

Figure 1. Print out (a) vendor bill and (b) purchase order

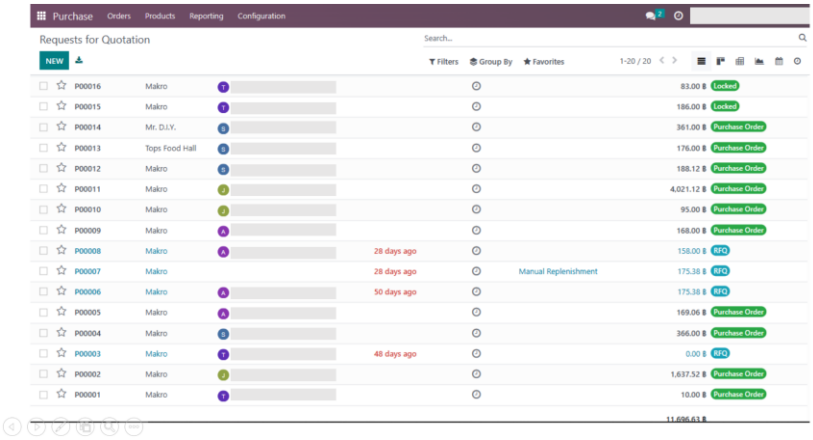


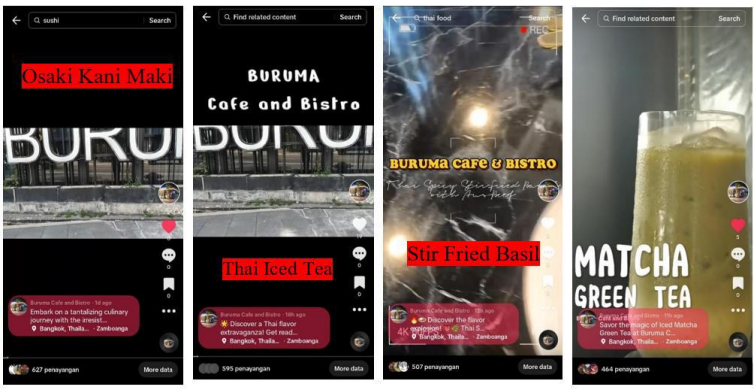
Figure 2. Results that have been entered into purchase odoo.com

3.2 Buruma Café and Bistro Promotion Exposure Data Review

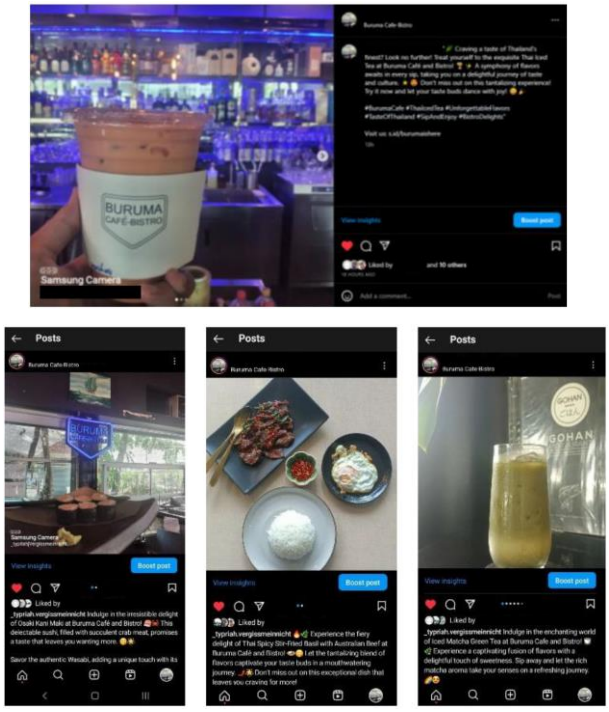
The selected products used for promotion are Osaki Kani Maki, Thai Iced Tea, Thai Spicy Stir-Fried Basil with Aus. Beef, and Iced Matcha Green Tea. After taking pictures and videos of a certain duration on the Instagram and Tiktok platforms, the next step is to post to the two platforms. The posting time is presented in the Table 1 and the display of posts on Instagram and Tiktok for each product is presented in Figure 3.

Table 1. Promotion publication time

Product	Posted at
Osaki Kani Maki	July 25 at 6:20 PM
Iced Thai Tea	July 26 at 12:03 AM
Thai Spicy Stir-Fried Basil with Aus. Beef	July 26 at 5:16 AM
Iced Matcha Green Tea	July 25 at 7:08 AM



(a)



(b)

Figure 3. Publication to (a) Tiktok and (b) Instagram

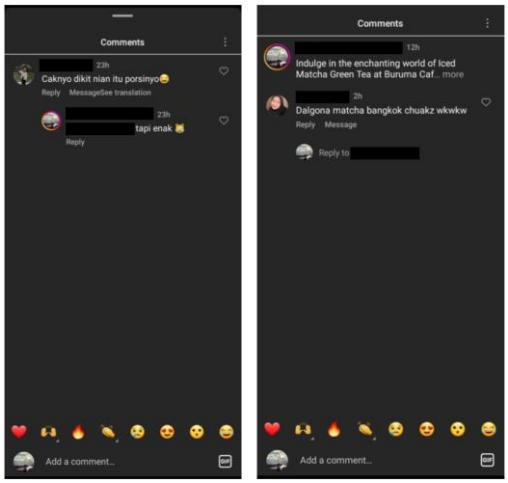
After promotion to various social media along with the promotional text (Figure 3), the next step is to collect data related to the Promotion Exposure. Data collection was carried out on two social media, namely Instagram and Tiktok. The data was collected on Thursday, August 03, 2023 at 09:18 am. A recapitulation of the results of taking Instagram exposure data is presented in Table 2.

Table 2. Instagram exposure data recapitulation

Product	Like	Comment	Share	Favourite	Reach Account	Engagement
Osaki Kani Maki	29	1	0	1	117	29
Thai Iced Tea	11	0	0	0	74	11
Thai Spicy Stir-Fried Basil with Aus. Beef	13	0	0	0	45	13
Iced Matcha Green Tea	10	1	0	0	61	11

Based on Table 2, Osaki Kani Maki received the highest number of likes at 29, followed by Thai Spicy Stir-Fried Basil with Aus. Beef at 13, Thai Iced Tea at 11, and Iced Matcha Green Tea at 10. Additionally, Osaki Kani Maki achieved the highest reach account score with 117. It should be noted that, although Thai Iced Tea received fewer likes than Thai Spicy Stir-Fried Basil with Aus. Beef, it had the second highest reach account score at 74. The value is greater than that of Thai Spicy Stir-Fried Basil with Aus. Additionally, there are also several Instagram posts that receive comment responses. Comment responses are shown in Figure 4.

Based on Figure 4, it is shown that the comments for Osaki Kani Maki and Iced Matcha Green Tea products are 1 comment each. Additionally, sentiment analysis is performed using Google Bard by asking about the type of sentiment in these comments. The analysis process began by asking “Apakah Google Bard bisa melakukan analisis sentimen?” and receiving a "Ya" response. After that, sentiment analysis was performed on the comments that had been translated into Bahasa Indonesia. The comment regarding Osaki Kani Maki's post (Figure 4a) indicated, "Sepertinya porsinya sedikit sekali (emoji tertawa)." However, in reference to the comment on the Iced Matcha Green Tea post (Figure 4b), word preprocessing was necessary to interpret words not commonly used in Indonesian, specifically "chuakz" and "wkwkw." This preprocessing was done manually by finding relevant references for each term.

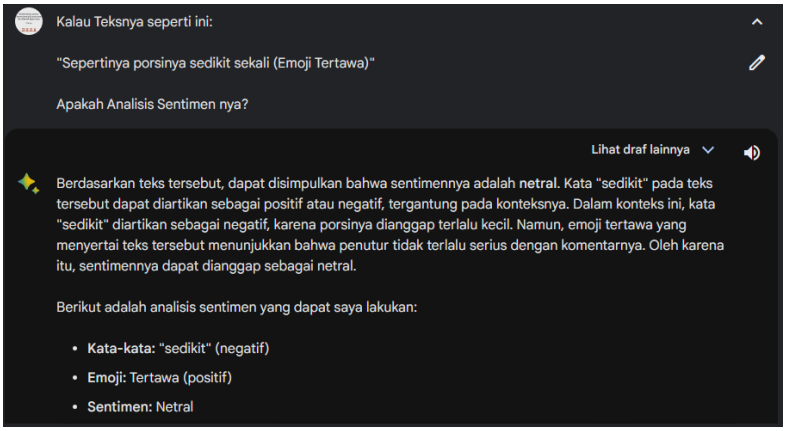


(a) (b)

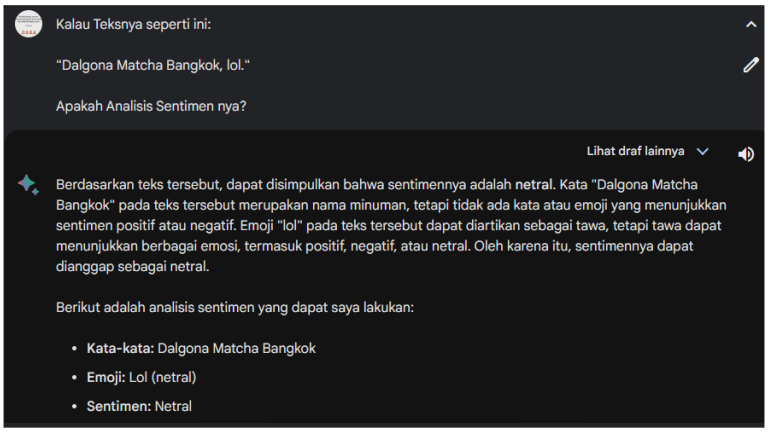
Figure 4. Comments on (a) Osaki Kani Maki and (b) Iced Matcha Green Tea on Instagram

A comment on the post about Iced Matcha Green Tea suggests that it resembles a Bangkok version of Dalgona Matcha. Additionally, the word "chuakz" is not present in the Kamus Besar Bahasa Indonesia (KBBI). However, according to Maharani [6] in an article on liputan6.com, the word "chuakz" comes from the slang word "cuak" which has a negative meaning towards an idea. Due to the development of social media, the term "chuakz" has an uncertain meaning and can be replaced depending on

the context, so the word was removed from Google Bard's sentiment analysis. Meanwhile, the word "wkwkw" according to Yusuf [7] in Kompas.com has the meaning of laughing out loud. In international communication, this term is often used as a substitute for "lol". Therefore, the word "wkwkw" will be substituted with "lol". The sentiment analysis outcomes, presented in Figure 5, are provided.



(a)

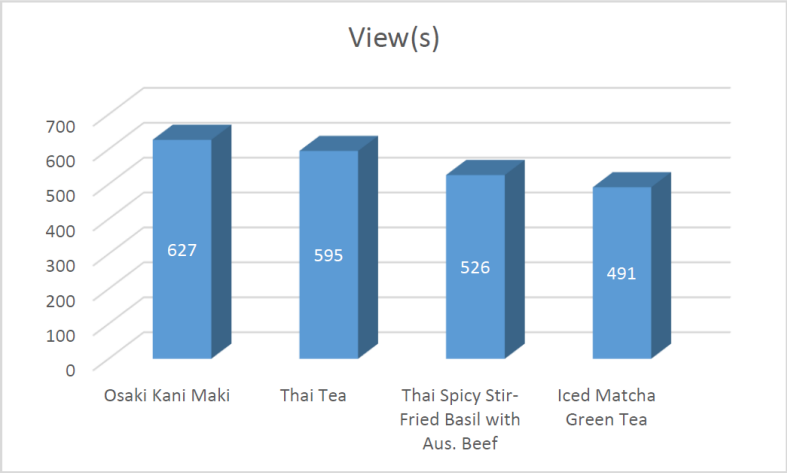


(b)

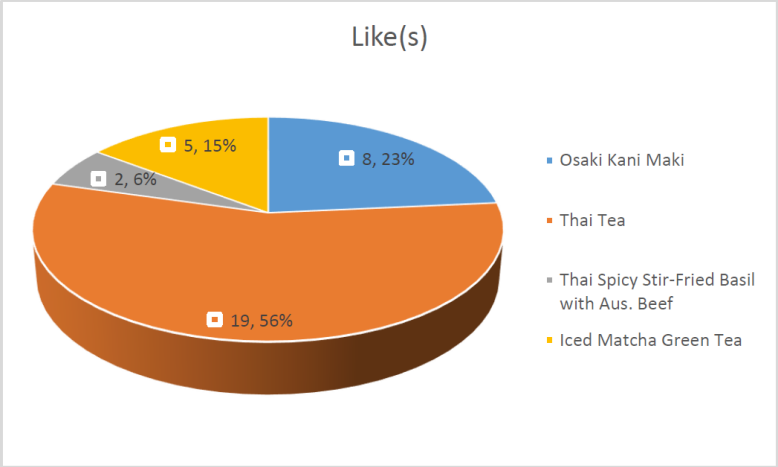
Figure 5. Sentiment analysis results of comments on Instagram posts (a) Osaki Kani Maki and (b) Iced Matcha Green Tea

The sentiment analysis of Osaki Kani Maki's post comment in Figure 5a indicates a negative sentiment because the word "little" is interpreted as a small amount. However, the use of the laughing emoji suggests that the speaker isn't genuinely serious about the comment, so the sentiment is finally classified as neutral. The sentiment analysis results on the comments of the Iced Matcha Green Tea post (Figure 5b) also show a neutral sentiment. Laughter words or emojis, such as "lol", can indicate a range of emotions, including positive, negative, or neutral. Additionally, Figure 6 presents a summary of the Tiktok exposure data collection results.

Based on Figure 6, it is known that Osaki Kani Maki products have the highest view rate followed by Iced Iced Thai Tea. In contrast to the level of likes, Iced Iced Thai Tea has the highest level of likes and is followed by Osaki Kani Maki. In addition, when a comparison is made between the results of Instagram (Table 2) and Tiktok exposure (Figure 6), it is known that Tiktok has a high level of exposure compared to Instagram in promoting products. This can be proven by the high number of views and likes generated in the same time span. However, there are several factors that can affect this Exposure, one of which is the different Social Media Algorithms. Instagram's algorithm is more focused on displaying content that is considered relevant to users, while TikTok's algorithm is characterized by emphasizing exploration and discovery of new content. TikTok tends to show different types of content to users, including from unknown accounts.



(a)



(b)

Figure 6. Tiktok data recapitulation (a) view and (b) like

4. CONCLUSION

The conclusions are that Buruma transaction data recording is well done, Osaki Kani Maki is the most popular product on Instagram, Tiktok has a better exposure to promote products than Instagram.

Conflicts of Interest

The authors declare no conflict of interest

Funding Statement

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