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Determining the Company Marketing Sales Perfomance Using the Operational Competitiveness Rating Analysis (OCRA) Method

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ABSTRACT

Sales marketing can assist improved sales for a firm and can undoubtedly play a significant role in the process of introducing a new product. One of the initiatives in human resource management to build and enhance employee capabilities, particularly sales marketing in support of increasing sales, which is one of the company's goals, is sales marketing performance appraisal. Company executives typically assess each marketing salesperson's sales turnover when deciding which among them is the finest marketing salesperson. The goal of this study is to apply an operational competitiveness rating analysis method (OCRA) marketing performance assessment model with the assessment criteria namely discipline (C1), softskill and hardskill (C2), quality of work (C3), and absenteeism (C4) in order to avoid mistakes in decision-making or to give the impression of subjectivity in determining the best salesman. The study's findings, specifically the calculation of the final value of the ranking, led to an analysis showing how heavily the final result of the preference value for each alternative is influenced by using the maximum and minimum values for the performance rating of the alternatives in extraction.

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INTRODUCTION

The role of sales marketing for companies can be an integral component of the process of introducing new items and can contribute to higher corporate sales. As for the marketing salesperson, his duty is to sell things and he must have strong interpersonal skills because he prioritizes connecting with each possible consumer who comes into direct contact with the supplied products (Liang & Gao, 2020). Assessment of sales marketing performance is part of human resource management's attempts

to develop and improve employee capabilities, particularly sales marketing's role in promoting greater sales, which is one of the organization's objectives (Ismawati, 2022). An crucial skill is the ability to communicate, which is essential and must be tailored to the time, place, and personality of the person you will encounter. Due to the enormous number of marketing salesmen, organizations must select the best marketing salesmen who can subsequently be promoted to sales supervisor positions and connect effectively with everyone who comes into direct contact with the product.

Communication skills are essential and must be tailored to the time, place, and personality of the individuals you will encounter. Due to the vast number of marketing salesmen, businesses must select the most qualified candidates for promotion (Mutiasari et al., 2021). In picking the greatest marketing salesperson, business leaders typically consider simply the quantity of sales made by each alternative salesperson marketing priority (Santika et al., 2022). This disregards other relevant elements in supporting the judgment (Hanum et al., 2020), leading to errors in decision-making or the appearance of subjectivity in identifying the best salesperson. PT Kharisma Jaya, a company operating in the furniture industry, has also established sales goals for social media and sales marketing people to encourage greater sales. Each marketing sales business is assigned a sales quota, with a bonus for achieving the quota if the quota is met. To be pursued and accomplished by every sales marketing, and if a sales marketing is able to attain the goal, PT Kharisma Jaya will pay incentives and other additional commissions.

Given the vital function of sales marketing in supporting greater sales, it is of course vital to retain the zeal and consistency of a sales marketing campaign and to recognize target accomplishments. The primary objective of research is to objectively discover the best sales marketing alternative in order to produce transparent choice outcomes and to be able to deliver detailed evaluations to each marketing sales individual in order to decide the findings of the assessment (Siregar et al., 2020; Sudipa et al., 2021). This study provides a decision support model for marketing performance assessment to aid the organization in carrying out an objective assessment process based on the assessment criteria and to enable marketing sales to acquire thorough assessment findings (Azhar, 2019; Nainggolan et al., 2022) utilizing the Operational method Competitiveness Rating Analysis (OCRA), several previous studies that applied the OCRA method to various multi-criteria problems (Batu et al., 2022; Hasibuan, 2021; Toruan, 2021), the OCRA method has the benefit of producing rankings based on the competitive value of alternative performance on each criterion (Indini et al., 2021), so that decisions can be made that are effective and in accordance with the assessment.

RESEARCH METHOD

Human Resource Management

Human resource management (HRM) is the development and utilization of personnel (workers) to meet individual, organizational, community, national, and international goals and objectives (Larasati, 2018). Human resource management is the process and effort of recruiting, developing, motivating, and evaluating the total human resources required by an organization to achieve its objectives. Human resource management is defined as the planning, organizing, directing, and supervising of the acquisition, development, compensation, integration, maintenance, and termination of employees in order to achieve the organization's goals (Halisa, 2020). HRM highlights the enormous potential of the human workforce, which is the driving force for variables supporting management operations that must be exploited optimally through synergy with the surrounding environment. Extremely rapid technological change compels businesses to adapt to their operating environment.

Operating Competitiveness Rating Analysis (OCRA) Method

Operational Competitiveness Rating Analysis (OCRA) is a nonparametric model-based relative performance measuring method (Madić et al., 2015; Wang, 2006). A very effective and

straightforward tool for assessing and comparing various sectors and decision units. Additionally, the capacity to track and compare the performance of decision units over time. The objective behind the OCRA technique is to do an independent evaluation of alternatives based on benefit and cost criteria, and then to combine the two aggregate ratings to arrive at a competitive rating, which helps the decision maker avoid losing knowledge during the decision making process (Lukic & Hadrovic Zekic, 2021). Specifically, OCRA method stages.

1. Form a decision matrix X. In the row of the matrix, alternative decisions are placed, while criteria are placed in the column. In this matrix, xij indicates the performance of alternative I with respect to criterion j.

$$X= [X_{ij}]_{mxn} = \begin{bmatrix} x_{11} & x_{12} & \cdots & x_{1n} \\ x_{21} & x_{22} & \cdots & x_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ x_{m1} & x_{mj} & \cdots & x_{mn} \end{bmatrix} ; i = ,...m, j =1,2,...n \quad (1)$$

   Information
   M = number of alternatives
   N = number of criteria
   Xij = alternative performance value on each criterion
2. Determining the preference rating by calculating solely the performance value of the alternatives for the cost criteria.

$$\bar{I}_i = \sum_j^g wj \frac{\max(x_{ij})-x_{ij}}{\min(x_{ij})} (i=1,2...,m\ j=1,2...,g) \quad (2)$$

3. Determine the linear preference ranking of each alternative based on the criteria to be minimized (cost).

$$\bar{I}_i = \bar{I}_i - \min(\bar{I}_i) \quad (3)$$

4. Calculating the preference rating by calculating simply the performance value of the option for the maximal criteria (benefit).

$$\bar{O}_i = \sum_{j=g+1}^n wj \frac{x_{ij}-\min(x_{ij})}{\min(x_{ij})} (i=1,2...,m\ j=g+1,g+2...,m) \quad (4)$$

5. Determine the linear preference rating for each choice based on the criteria that will be maximized (benefit).

$$\bar{O}_i = \bar{}_i - \min(\bar{O}_i) \quad (5)$$

6. Calculate the total preference value for each alternative.

$$P_i = (\bar{I}_i + \bar{O}_i) - \min(\bar{I}_i + \bar{O})\ i = 1,2, \ldots m \quad (6)$$

Research Flow

Research flow can help researchers formulate problems through data collecting to identify problems, identify problem identification, and identify alternative data, criteria, and business selection processes in firms. Figure 1 below depicts the research flow.

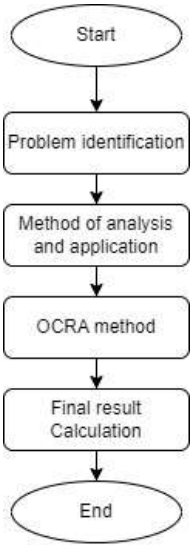

Figure 1. Research flow

On the basis of Figure 1, it can be explained that the stages of problem identification are obtained from the observation and interview process to be able to obtain data related to marketing sales alternatives to be selected (Cakranegara et al., 2022), there are also data on the assessment criteria used, namely discipline (C1), softskill and hardskill (C2), quality of work (C3), and absenteeism (C4) based on analysis problem, then there is an analysis and implementation of selection calculation techniques with the OCRA method, after successfully calculating the selection criteria.

RESULTS AND DISCUSSIONS

Implementation of the Operating Competitiveness Rating Analysis (OCRA) Method

The implementation of the OCRA method is a step in the calculating process for decision support systems that determines the preferred marketing sales alternative. Alternative data, namely marketing sales candidate data, will be chosen for problem-solving and decision-making in the best marketing sales suggestion process. The alternative data that will be used in this investigation are displayed in Table 1 below.

Table 1. Criteria data

Criteria	Criteria Name	Weight	Criteria Type
C1	Discipline	0.30	Benefit
C2	Softskill and Hardskill	0.25	Benefit
C3	Quality of Work	0.10	Benefit
C4	Absenteeism	0.15	Cost

Each criterion C1, C2, C3, and C4 is evaluated using a Linkert scale to facilitate the scoring of alternative values for each criterion with a value range between 1 and 5. In the meantime, the value for criterion C5 is determined by the number of monthly absences for each sales staff.

Table 2. Criteria attribute value

Value	Information
5	Very good
4	Well
3	Enough
2	Not enough
1	Very less

Alternative Performance Rating Score on Criteria

The alternative value for each criterion that has been entered in accordance with the attribute value evaluation is used to determine the alternative appropriateness rating value. Alternative rating values for appropriateness are shown in Table 3.

Table 3. Alternative match rating on criteria

Alternative	Criteria				
	C1	C2	C3	C4	C5
A1	5	5	3	5	3
A2	4	5	4	4	4
A3	4	3	5	3	2
A4	4	4	3	5	2
Max	5	5	5	5	4
Min	4	3	3	3	2

Performing the Preference Calculation of the minimized criteria (cost), namely Criterion C5

Calculating the preference value for the type of cost criteria using equation 2.

$\bar{I}_1 = \sum (0.15 \frac{4-3}{2}) = 0.075$

$\bar{I}_2 = \sum (0.15 \frac{4-4}{2}) = 0$

$\bar{I}_3 = \sum (0.15 \frac{4-2}{2}) = 0.15$

$\bar{I}_4 = \sum (0.15 \frac{4-2}{2}) = 0.15$

Performs a minimized linear preference ranking calculation

Calculating the value of the preference rating is minimized using equation 3.

$\bar{I}_1 = 0.075 - 0 = 0.075$

$\bar{I}_2 = 0 - 0 = 0$

$\bar{I}_3 = 0.15 - 0 = 0.15$

$\bar{I}_4 = 0.15 - 0 = 0.15$

Perform a preference calculation for maximized (benefit) criteria, namely Criteria C1, C2, C3, C4

Calculating the preference value for the type of benefit criteria using equation 4.

$\bar{I}_1 = \sum (0.30 \frac{5-5}{4}) + (0.25 \frac{5-5}{3}) + (0.20 \frac{5-3}{3}) + (0.10 \frac{5-5}{3}) = 0.13334$

$\bar{I}_2 = \sum (0.30 \frac{5-4}{4}) + (0.25 \frac{5-5}{3}) + (0.20 \frac{5-4}{3}) + (0.10 \frac{5-4}{3}) = 0.175$

$\bar{I}_3 = \sum (0.30 \frac{5-4}{4}) + (0.25 \frac{5-3}{3}) + (0.20 \frac{5-5}{3}) + (0.10 \frac{5-3}{3}) = 0.30833$

$\bar{I}_4 = \sum (0.30 \frac{5-4}{4}) + (0.25 \frac{5-4}{3}) + (0.20 \frac{5-3}{3}) + (0.10 \frac{5-5}{3}) = 0.29167$

Perform a Preference Rating Calculation that will be maximized

Calculating the preference rating value that will be maximized using equation 5.

$\bar{O_1} = 0.13334 - 0.13334 = 0$

$\bar{O_2} = 0.175 - 0.13334 = 0.04166$

$\bar{O_3} = 0.30833 - 0.13334 = 0.17493$

$\bar{O_4}$ = 0.29167- 0.13334 = 0.15833

Performing Total Preference Value Calculations

Calculating the total preference calculation value, namely determining the final value for each alternative, the calculation uses equation 6.

P_1 = (0.075 + 0) – 0 = 0.075
P_2 = (0 + 0.04166) – 0 = 0.04166
P_3 = (0.15 + 0.17493) – 0 = 0.32493
P_4 = (0.15 + 0.15833) – 0 = 0.30833

Based on the above computation utilizing the OCRA approach, table 4 displays the results of ranking all alternatives.

Table 4. Ranking final results

Alternative	Final value	Rank
A3	0.32493	1
A4	0.30833	2
A1	0.075	3
A2	0.04166	4

According to Table 4, alternative A3 is the best marketing sales alternative with a value of 0.32493, followed by alternative A4 as a ranking second alternative with a value of 0.30833, alternative A1 as a ranking third alternative with a value of 0.075, and alternative A2 as the fourth rank with a value of 0.04166. This final result demonstrates that the calculation model employing the OCRA method may be employed as a way of preference for the best marketing sales selection challenge. The max and min values of each alternative value for each criterion were discovered to have a significant impact on the final ranking value based on the results of the study of the appropriateness rating values.

CONCLUSION

The conclusion of the research is the problem of selecting the best marketing sales may be solved with an OCRA method assessment model employing a Likert scale for the values of criteria C1, C2, C3, and C4, as well as the number of monthly employee absences for criterion C5. Calculations Taking into account the nature of cost or benefit criteria, the OCRA approach can solve the challenge of determining the best marketing sales. The calculation of the final ranking value reveals that setting the maximum and minimum values for alternative performance ratings on criteria has a significant impact on the final preference value for each alternative. A conjunction with the weight calculation method is required for the company to make more objective decisions during the selection process for choosing the best marketing sales, which is most appropriate for the evaluation criteria.

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