

Implementation Of Hierarchy Analytical Process (Ahp) Method For Determine The Preferences Of Choosing Online Pharmacy In Bekasi, West Java

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Abstrak : This Study Aims To Determain The Preferences Of Bekasi People To Choosing An Online Pharmacy Store. Based On The Results Of The Pre-Research Conducted, There Are Three Names Of Online Pharmacy Stores That Are The Top Of Mind. Thus More Detailed Research Maps The Community's Preference For Yaotu Pharmacy Onle Store; Halodoc, [Http:// Jualobatmurah.Com/](http://Jualobatmurah.Com/) And [Http://Aptik.Medicastore.Com](http://Aptik.Medicastore.Com), And Involved 120 Respondents In Bekasi Who Knew The Three Online Pharmacy Shops. As For Assessments Related To Web Quality, Reputation And Transactions. Based On The Results Of The Study Showed That Halodoc Is An Online Pharmacy Store That Has Quite A High Core Compared To The Others, Then The Second Order Is Pharmacy, Medastore And Last Is Jualobatonline. Halodoc's Strengths Are In Web Design And Reputation While The Medicastore Pharmacy Excels In Ease Of Transaction.

Keywords ; Pharmacy Online Store, Preferences, Hierarchy Analytical Process (Ahp), Bekasi, Indonesia

INTRODUCTION

Bekasi Is One Of The Areas In West Java With A Fairly High Population Density, One Of The Causes Of The High Population In Bekasi Is The Existence Of An Industrial Estate That Is So Massive Built In Bekasi (Dhian Tyas Untari, 2020). Population Density Coupled With High Industrial Activity, Causes The Level Of Pollution In Bekasi Also To Be Very High. The High Level Of Pollution Has A Significant Impact On Public Health In Bekasi.

The Internet Is Being Developed Rapidly Since Last Two Decades, And With Relevant Digital Economy That Is Driven By Information Technology Also Being Developed Worldwide (Kaur, 2013). The Advancement Of Time And Advances In Information Technology Are Causing Shifts In Shopping Patterns, As Well As Shopping Patterns For Pharmacy Products. Very High Community Activity Is A Business Opportunity For Pharmacy Entrepreneurs To Develop Business With An Online System (Nasution & Baidawi, 2016).

Companies That Are Able To Compete In The Competition Are Companies That Are Able To Implement Technology And Information Into Their Companies (Bauman & Bachmann, 2017). One Type Of Technology Implementation In Terms Of Increasing Business Competition And Product Sales Is To Use Electronic Commerce (E-Commerce) To Market A Variety Of Products Or Services, Both In Physical And Digital Form (Nasution & Baidawi, 2016). Retail E-Commerce Has Grown Nearly To Us \$ 840 Billions In 2014 Surpassing The

Sales Of Us \$ 695 Billions In Year 2013 And It Was Estimated To Increase To Us \$ 1506 Billions In 2018. The Continuous Sales Increment Indicated That E-Commerce Has A Huge Market Potential (Lim Et Al., 2016). (Davis, 2012), Editor Of The Internet Retailer Magazine, Estimated That 25 Million Online Retailers Sell Products Over The Internet.

The Development Of Product Sales Through Online Media Is Also Utilized By Pharmacies, Drug Stores Or Individuals In Drug Sales (Khalid Suidan Al Badi, 2018). This Has Led To The Development Of Online Pharmacies, Online Drug Stores Or Various Sites That Sell Drugs, Such As [Http:// Jualobatmurah.Com/](http://Jualobatmurah.Com/), Medicastore Pharmacy ([Http://Apotik.Medicastore.Com](http://Apotik.Medicastore.Com), K24 Pharmacy [Http: //Www.K24klik .Com](http://Www.K24klik .Com), [Https://Www.Klikapotek.Com](https://Www.Klikapotek.Com) And [Https://Www.Goapotik.Com](https://Www.Goapotik.Com) Or The Halodoc Application (Ariyulinda, 2018).

Pharmacy Stores With Online Media Sales Systems Offer A Wider Market, Cheaper Prices, Faster, And The Possibility Of Purchasing Anonymously. With The Purchase Of Drugs Through Online Media, People Get Easy And Fast Access. Although Currently The Popularity Of Online Pharmacy Stores Is Still Not As Popular As Online Fashion Stores Or Online Food Stores. But The Pharmacy Online Store Offers A Very Potential Market Opportunity. Based On This, It Is Necessary To Further Study People's Preferences In Choosing An Online Pharmacy Store.

Method

This Type Of Research Is A Quantitative Research, Because It Uses Measurement Data And Objective Statistics Through Scientific Calculations Derived From Community Samples By Providing Answers To A Number Of Questions As Outlined In The Questionnaire Using The Analytical Hierarchy Process (Ahp) Approach.

The Study Was Conducted In Two Stages, The First Stage Being Asked To Name The 3 Most Popular Online Pharmacy Stores. From This First Step, We Get The 3 Most Popular Names Namely; Halodoc, [Http:// Jualobatmurah.Com/](http://Jualobatmurah.Com/) And [Http://Apotik.Medicastore.Com](http://Apotik.Medicastore.Com), These Three Online Shops Will Then Become Alternative Choices. In The Second Stage, The Respondents Of 120 Bekasi Residents Know The Three Online Pharmacy Stores With Web Display Criteria, Online Store Reputation And Ease Of Transaction Are The Criteria In Determining Shopping Decisions (Untari Et Al., 2020).

Result And Discussion

The Analytical Hierarchy Procedure (Ahp) Is Proposed By Saaty And It Applied To Uncertain Decision Problems With Multiple Criteria. The Ahp Method Is Expressed By A Unidirectional Hierarchical Relationship Between Decision Levels (Dharmanto Et Al., 2019). The Hierarchy As Shown In Figure 1.

Explanation

A. Criteria In The Decision Making Are :

- 1) Web Design (X1)
- 2) Reputation (X2)
- 3) Transaction (X3)

B. Online Store Alternative Are:

- 1) Halodoc (Y1)
- 2) [Http://Jualobatmurah.Com/](http://Jualobatmurah.Com/) (Y2)
- 3) [Http://Apotik.Medicastore.Com](http://Apotik.Medicastore.Com) (Y3)

PHAMRMACY ONLINE STORE

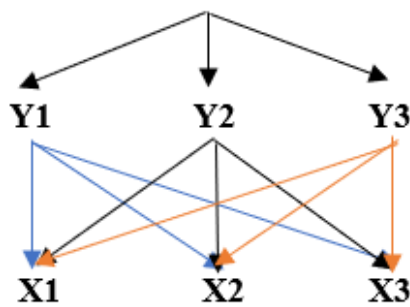


Figure 1. Model Of Ahp

Result And Disscusion

The First Step In The Ahp Model Is To Calculate The Hierarchical Weighting Factor For All Criteria Based On Recapitulation Of The Questionnaire Results Using The Paired Comparison Method, Where The Lower Triangle Matrix Results From The Comparison Of The Upper Triangle Matrix. The Results Of The Calculation Produce A Vector Eigen Value Which Then As A Multiplier Of The Total Value Of Each Criterion To Produce The Maximum Eigenvalue (Maximum λ). Table 1 Contains The Results Of The Vector Eigen Of All The Criteria In The Study.

Tabel 1. Vector Eigen Per-Criteria

	Vector Eigen
X1	0,588
X2	0,221
X3	0,132

Source: Data Processed, 2020

The Next Step Is To Calculate The Evaluation Factors For Each Of The Criteria In Table 1, Explaining About Web Design, Table 2 About The Reputation Of Online Stores, Table 3 About The Ease Of Transaction Of Each Online Store.

Tabel 2. Vactor Eigen According To Web Desain

	Vector Eigen
Y1	0,162
Y2	0,409
Y3	0,290
$\alpha \max = 4,253$	
$Ci = 0,084$	
$Cr = 0,094$ ($Cr < 0,100$ Means The Respondent's Preference Is Consistent)	

Source: Data Processed, 2020

Table 3. Vector Eigen According To Reputation

	Vector Eigen
Y1	0,601
Y2	0,262
Y3	0,081
$\alpha \max = 4,148$	

$C_i = 0,049$
$C_r = 0,055$ ($C_r < 0,100$ Means The Respondent's Preference Is Consistent)

Source: Data Processed, 2020

Table 4. Vector Eigen According To Transaction

	Vector Eigen
Y1	0,621
Y2	0,180
Y3	0,121
$\alpha_{max} = 4,208$	
$C_i = 0,069$	
$C_r = 0,077$ ($C_r < 0,100$ Means The Respondent's Preference Is Consistent)	

Source: Data Processed, 2020

Table 5. Matrix Of Relationships Between Criteria And Alternatives

	Vector Eigen		
	X1	X2	X3
Y1	0,162	0,601	0,621
Y2	0,409	0,262	0,180
Y3	0,290	0,081	0,121

Source : Data Processed, 2020

The Next Step Is To Find The Total Ranking For Each Online Store By Multiplying The Evaluation Factors Of Each Alternative By The Weight Factor, Resulting In The Following Table 6 Values,

Table 6. The Weight Matrix Of Options According To The Criteriatable

	Y1	Y2	Y3
X1	0,11	0,08	0,09
X2	0,23	0,12	0,18
X3	0,07	0,01	0,11
Total	0,41	0,21	0,38

Resource : Data Processed, 2020

From The Results Of Table 7 It Can Be Concluded That The Order Of Priority Shopping At Online Stores Is Based On Communal Considerations (All Criteria) With The Ahp Method In Sequence, Y1 (41%), Y3 (38), Y2 (21%). In Addition, It Can Also Be Seen The Total Ranking Of Each Online Store And The Order Of Priorities As Shown In Table 7,

Table 7. Ranking Of Online Stores Based On Criteria

Ranking Of Priority	Web Desain	Reputation	Transaction
1	Halodoc	Halodoc	Apotik.Medicastore
2	Apotik.Medicastore	Apotik.Medicastore	Halodoc
3	Jualobatmurah	Jualobatmurah	Jualobatmurah

Resource : Data Processed, 2020

Conclusion

Bekasi Has Developed Into One Of The Metropolitan Cities, And This Has An Effect On The Pattern Of People's Lives Which Began To Shift From Traditional Patterns To

Hedonic And Consumerist Patterns. On The Other Hand, Changing Social Patterns Becomes An Opportunity For Marketers, Including Providers Of Pharmacy Products. Based On Pre-Reserch Data, There Are Three Online Pharmacy Stores That Are Considered The Most Popular By The Public. Based On The Results Of The Study Showed That Halodoc Is An Online Pharmacy Store That Has Quite A High Core Compared To The Others, Then The Second Order Is Pharmacy, Medastore And Last Is Jualobatonline. Halodoc's Strengths Are In Web Design And Reputation While The Medicastore Pharmacy Excels In Ease Of Transaction.

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