



SLCH: A Novel Customer Satisfaction Scoring

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Abstrac. People are using customer satisfaction scores as consideration to set new goals and grow their business. In customers' sight, a satisfaction score can be seen as a reasonable rating that shows how good the business quality is. They prefer businesses with high ratings over others. Customer satisfaction score can be obtained using survey, CSAT, Net Promotor Score (NPS), or Customer Effort Score (CES). Those methods can serve meaningful data in many scales, but may lack informative reasons behind the single representative score. We propose a new method called SLCH Rating, that has the scale of 0.0 to 4.0, presented as a single numeric value followed by the letter of s, l, c, or h that shows the dominant criteria between service, layout, cleanliness, or hospitality. Our SLCH rating score lets customers comprehend the whole special aspect of a business without reading all reviews or questionnaire details. We have developed a Quick Response App to collect SLCH ratings and feedbacks from customers. According to the feedbacks, 88.8125% participants agreed on the novelty of SLCH, 83.34375% agreed on the rating convenient, 83.03125% agreed on the informative aspect of SCLH compared to predecessor ratings, 84.53125% agreed on the adopted GPA concept in SLCH scoring, and 84.71875% agreed that SLCH scoring helps customer to recognize the business specialty.

Keywords: Business, Rating, Customer Satisfaction, Response App.

1. INTRODUCTION

Business managers who directing the whole business operations certainly realize the importance of good feedbacks from customers, for the business sustainability. To obtain the good feedbacks, some specific approaches are needed. One approach is attracting the hearts of customers. We know that customers may have differ perspectives on how they see a business entity. They may put a good assessment upon one business element while put bad assessment upon others. The managers should focus on developing their lacking business aspects specifically, so the business will run more efficient and effective. There have been various methods to obtain credible assessment from customers, on how they see our business. The methods are often called customer satisfaction scoring. It can be represented as survey consisted by relevant questions about how much customers are satisfied by the service or product they had [1]–[3]. It also can be represented as relevant CSAT questions with measured answer that leads to the final score calculation [4]–[6]. And it also can be represented as Net Promoter Score with the core question of probability whether the customers would recommend the business to friends or colleagues [7]–[11]. Among many methods, we may need to adopt only the one that best suits our business circumstances, while easy to do, requiring minimal costs, and effective in explaining the state of our business in the eyes of customers. Those methods are functional and beneficial, and most of them give a singular final score that corresponded to the conclusion of how much the

customers love our business. High score means lovable and vice versa. As customer, we may find a dilemma when come across some final scores of a customer satisfaction scoring online, about some public business, and we still don't get the meaning of those scores other than the conclusion that the business is lovable when the score is high. We still need more information about some aspects of those businesses like how polite the waitress treats us, or how clean the tables are, or how tasteful the menus, which will not be facilitated by only a single high final score. We need a novelty of how to present the customer satisfaction scores with rather more informative and self-explanatory, so we don't have to waste more time reading the reviews list, to get the meanings behind every score. Within this research, we try to present a novel way to present the customer satisfaction score which is more informative and self-explanatory.

This research focus on proposing the new customer satisfaction scoring method that is able to cover various types of businesses with rather general assessment sides. We hope the assessment method can provide uniform perception about the definition of customer satisfaction scoring regardless of the various business field chosen. Using the assessment points of Service Quality, Shop Layout, Cleanliness, and Hospitality, our method can be called as SLCH. This SLCH is expected to be effectively able to facilitate customer opinions about the business state on those wholesome specific assessment points. We also develop the Quick Response Application to support the use of SLCH in real case study (real business conditions and environments). The statistics and survey responses about SLCH will be presented at the end of the research. We hope the method and application we proposed are able to produce credible and representative data. We also hope the research able to provide benefits to various parties in the large community and make a broad contribution to the scientific field used.

2. Methods

Many studies on customer satisfaction scoring have been published in the last few decades. There are various aspects of a business, taken account by researchers, to better show the whole business state to customers. We try to present a novel way of presenting the customer satisfaction score that is more informative and self-explanatory. There are many crucial aspects of a business where customers need to know, like how tasteful the menu, how competitive the prices, or how polite we'll be treated when entering the business area. We need to compose novel customer satisfaction scoring with few solid aspects that commonly needed by customer.

The concept we propose consists of four aspects, namely Service Quality, Shop Layout, Cleanliness, and Hospitality (Fig. 1). The Service Quality element describes business conditions in the form of how well the services are provided to customers so that customer needs are met, or customer problems are resolved through the solutions provided [12]–[16]. The Shop Layout element describes the atmospheric, condition, beauty, layout, theme, or architecture of the business site (can be in the form of physical shop, gallery, workshop, etc.) [17]. The Cleanliness element describes the sanitation aspect of the business site [18], [19]. The Hospitality element describes the friendliness aspect of business representative or workers of the business in treating customers [20].



Fig. 1. Four aspects in SLCH.

Each of four aspects have a rating scale from 0.1 to 1.0, and the final score can be calculated using the formula in Fig. 2. The final grade calculation scale is similar to the GPA (Grade Point Average) commonly used in universities in Indonesia. We equate this scale with the GPA because the scale has been commonly used, and widely known by the public while also easily comprehensible by many parties.

$$S + L + C + H = \textit{Final Score}$$

** the highest Final Score is 4.0*

Fig. 2. Four Aspects In SLCH.

The SLCH customer satisfaction scoring is represented as value between 0.0 to 4.0 followed by a letter of S, or L, or C, or H, that shows the maximum score a business has within four assessment aspects. As can be seen in Figure 3 below, the SLCH score is informative and self-explanatory since customers are not required to read all reviews to conclude the business's superior aspect. According to sample in Fig. 3, we can easily comprehend that Aziz fried chicken is a good business, recommended, and its superior aspect is the hospitality (refers to how friendly the business representations treating us, and also refers to how much care they give while serving us within transaction). As we compare it with the predecessor rating, it's clearly seen that in the predecessor rating we can't conclude the superior aspect of this business yet until we have read all of the reviews.

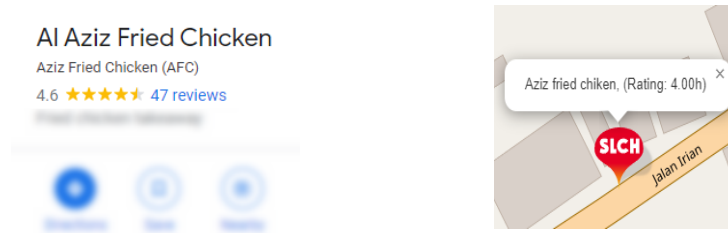


Fig. 3. The Predecessor Review Score (Left) And The SLCH Review Score (Right).

To support the use of proposed method, a Quick Response Application is developed. This application will help the process of collecting data in many places in a shorter time. The application will be built with a very simplistic looks so that business owners can retrieve customer satisfaction data easily and with minimal effort. The stages of the research to be carried out are shown in Fig. 4. These stages begin with developing the Quick Response App, then proceed with data collection, and ended with a comparison of the final value results with other methods.

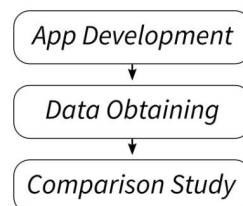


Fig. 4. Research stages.

3. RESULTS AND DISCUSSION

SLCH customer satisfaction scoring is made upon four crucial aspects of a business. Those crucial aspects are easily assessed and understandable by people. In the first stage of our research, participants consisted of students and colleagues are asked to fill CSAT form as their basis knowledge about customer satisfaction scoring.

3.1. Quick Response App Development

The application is deployed as Web App. Web Apps have mobility advantages and minimal technical needs. The web application we created can run on variety devices while requires no additional installation process. Almost any device that can access internet, can run the application. Fig. 5 shows some User Interfaces of the SLCH Quick Response App. The Graphical User Interface (GUI) design is dominated by the color of blue, yellow, and purple. Not only because the three colors are matched very well, but also because they bring the ideas of bright future, good vision, and modernity. The GUI elements are rendered with rounded edges to present concepts about

flexibility, fresh solution, and youthful soul. This App will facilitate users to quickly make a review about business or institution with four interactive sliders and easy to read form inputs. This App also presents users contributed reviews in a simple vector-based map.

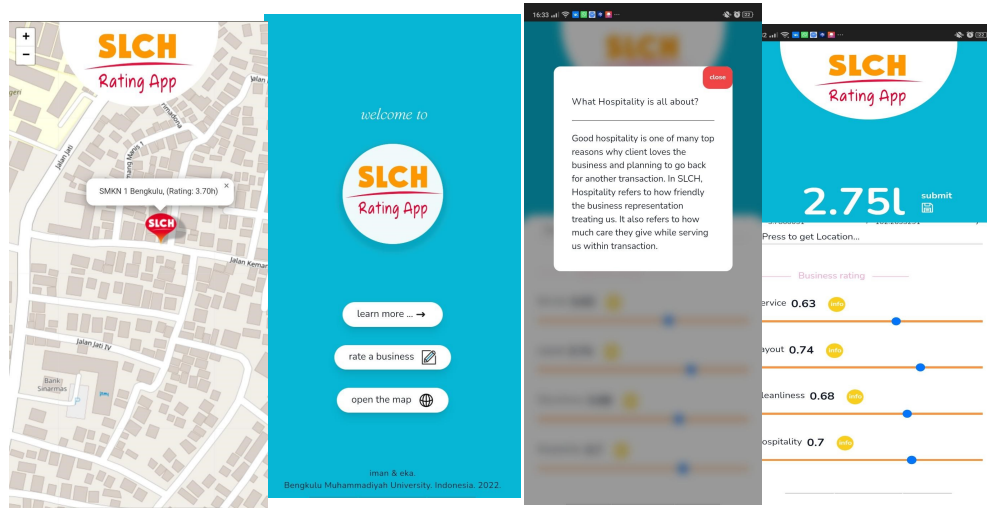


Fig. 5. The SLCH Quick Response App Interfaces.

a. Obtain Data

Participants are required to fill out the CSAT form as a traditional customer satisfaction scoring. Once done, they are given the SLCH Quick Response App, then asked to review the business they previously reviewed in the CSAT form.

b. Comparison

Once participants have been using two approaches in reviewing the business, they are asked to fill the survey. The survey consisted by five claims about our proposed SLCH customer satisfaction scoring. Table 1 show all those claims below. Fig. 6 shows the percentages of users agreed on the claims.

TABLE I. RESEARCH CLAIMS ABOUT SLCH PRESENTED IN SURVEY

Number	Claim	
1	The Novelty of SLCH Rating System	
2	The convenient factor of SLCH.	
3	SLCH is much more informative than any predecessor methods.	
4	Adopted GPA concept in SLCH is a good choice.	
5	SLCH scoring helps customer to recognize the business speciality	

a.

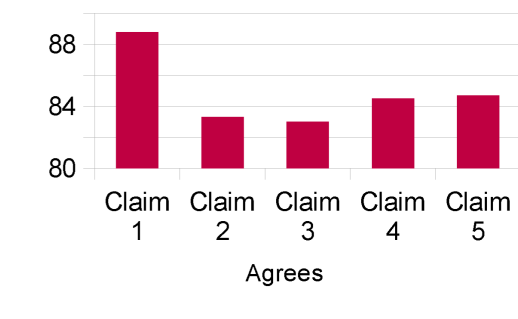


Fig. 6. The Survey Results.

c. Discussion

Past research has made a significant contribution to the evaluation of customer satisfaction, to date, resulting in the emergence of online reviews. However, there are still some limitations we face in daily basis concerned on the credibility of these online reviews. The credibility of reviews will reduce the accuracy of the evaluation results. In reality, online reviews on travel review websites can come from different reviewers, and the credibility of the reviews varies due to the different knowledge, experience, and preferences of reviewers. For example, Leung and Yang show that when two customers are equally satisfied with the hotel experience, the customer with a higher-level society may give a lower rating [21]. Among them are [22] who investigate automotive services and use performance interest analysis (IPA) to develop corporate strategy. They integrate two-dimensional analysis of importance and performance, to evaluate Quality attributes that are critical to customers. Based on the facts above, the SLCH research can be expanded to address known issues and is open to future improvements. The use of SLCH can be increased using a number of credibility check methods. Also, SLCH can be equipped with various analysis products so that the final value provided can become material for a good business strategy in the future.

4. CONCLUSION

We have developed a Quick Response App to collect SLCH ratings from customers. We also embed an online survey to collect feedbacks from customers within the App. According to the feedbacks, 88.8125% participants agreed on the novelty of SLCH, 83.34375% agreed on the rating convenient, 83.03125% agreed on the informative aspect of SCLH compared to predecessor ratings, 84.53125% agreed on the adopted GPA concept in SLCH scoring, and 84.71875% agreed that SLCH scoring helps customer to recognize the business specialty. Based on the good feedbacks from customers, we become optimistic by the use of SLCH rating system in a larger scale. The rating system can be applied on various types of businesses or departments. We hope it can be used along any predecessor rating system in a bigger community possible.

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6. REFERENCES

1. J. De Oña and R. De Oña, "Quality of service in public transport based on customer satisfaction surveys: A review and assessment of methodological approaches," *Transportation Science*, vol. 49, no. 3, 2015, doi: 10.1287/trsc.2014.0544.
2. G. Perri et al., "Customer satisfaction survey in Friuli Venezia Giulia university canteens," *Eur J Public Health*, vol. 29, no. Supplement_4, 2019, doi: 10.1093/eurpub/ckz186.278.
3. N. Kawabata and M. Nin, "Effect of continual quality improvement of palliative care consultation teams by iterative, customer satisfaction survey-driven evaluation," *BMC Palliat Care*, vol. 20, no. 1, 2021, doi: 10.1186/s12904-021-00741-2.
4. D. Frenay, "Customer Satisfaction Score (CSAT): The Happy Customer KPI," *Emolytics*.
5. G. Tovmasyan, "Assessment of tourist satisfaction index: evidence from Armenia," *Marketing and Management of Innovations*, no. 3, 2019, doi: 10.21272/mmi.2019.3-02.
6. O. Obinyan, "Survey of users' level of satisfaction toward inclusive management and marketing of library service in Nigeria," *Folia Toruniensia*, vol. 21, 2021, doi: 10.12775/ft.2021.007.
7. A. Wohllebe, F. Ross, and S. Podruzsik, "Influence of the Net Promoter Score of Retailers on the Willingness of Consumers to Install Their Mobile App," *International Journal of Interactive Mobile Technologies*, vol. 14, no. 19, 2020, doi: 10.3991/ijim.v14i19.17027.
8. S. Baehre, M. O'Dwyer, L. O'Malley, and N. Lee, "The use of Net Promoter Score (NPS) to predict sales growth: insights from an empirical investigation," *J Acad Mark Sci*, 2021, doi: 10.1007/s11747-021-00790-2.
9. J. R. Jahnert and H. Schmeiser, "The relationship between net promoter score and insurers' profitability: an empirical analysis at the customer level," *Geneva Papers on Risk and Insurance: Issues and Practice*, vol. 47, no. 4, 2022, doi: 10.1057/s41288-021-00237-3.
10. S. Slamet, F. D. Finalia Sari, I. Indrayati, and I. Azmala, "MILLENNIAL CUSTOMER LOYALTY IN ONLINE SHOPPING ON DIGITAL PLATFORMS: A PERSPECTIVE OF NET PROMOTER SCORE," *Jurnal Bisnis dan Manajemen*, vol. 22, no. 2, 2021, doi: 10.24198/jbm.v22i2.758.
11. A. Baquero, "Net Promoter Score (NPS) and Customer Satisfaction: Relationship and Efficient Management," *Sustainability (Switzerland)*, vol. 14, no. 4, 2022, doi: 10.3390/su14042011.

12. A. Supriyanto, B. B. Wiyono, and B. Burhanuddin, "Effects of service quality and customer satisfaction on loyalty of bank customers," *Cogent Business and Management*, vol. 8, no. 1, 2021, doi: 10.1080/23311975.2021.1937847.
13. B. A. Fida, U. Ahmed, Y. Al-Balushi, and D. Singh, "Impact of Service Quality on Customer Loyalty and Customer Satisfaction in Islamic Banks in the Sultanate of Oman," *Sage Open*, vol. 10, no. 2, 2020, doi: 10.1177/2158244020919517.
14. A. Afthanorhan, Z. Awang, N. Rashid, H. Foziah, and P. L. Ghazali, "Assessing the effects of service quality on customer satisfaction," *Management Science Letters*, vol. 9, no. 1, 2019, doi: 10.5267/j.msl.2018.11.004.
15. Dewi, F. Hajadi, Y. W. Handranata, and M. G. Herlina, "The effect of service quality and customer satisfaction toward customer loyalty in service industry," *Uncertain Supply Chain Management*, vol. 9, no. 3, 2021, doi: 10.5267/j.uscm.2021.5.007.
16. S. Pradeep, V. Vadakepat, and D. Rajasenan, "The effect of service quality on customer satisfaction in fitness firms," *Management Science Letters*, vol. 10, no. 9, 2020, doi: 10.5267/j.msl.2020.2.011.
17. C. Aprilia and A. I. Suryani, "Coffee shop atmospheric effect on customer satisfaction and behavioural intention," *BISMA (Bisnis dan Manajemen)*, vol. 13, no. 1, 2020, doi: 10.26740/bisma.v13n1.p1-13.
18. H. Kim and J. R. Bachman, "Examining customer perceptions of restaurant restroom cleanliness and their impact on satisfaction and intent to return," *Journal of Foodservice Business Research*, vol. 22, no. 2, 2019, doi: 10.1080/15378020.2019.1596002.
19. S. Abubakari, K. A. Mohammed, and I. N. Iddrisu, "Assessing the Impact of Sanitation on Customer Retention: A Survey of Restaurants in the Tamale Metropolis," *OALib*, vol. 06, no. 12, 2019, doi: 10.4236/oalib.1105967.
20. A. Walelign, "Communication and Its Impact on Customer Satisfaction in Hospitality Industry," *iRASD Journal of Management*, vol. 1, no. 2, 2019, doi: 10.52131/jom.2019.0102.0009.
21. X. Y. Leung and Y. Yang, "Are all five points equal? Scaling heterogeneity in hotel online ratings," *Int J Hosp Manag*, vol. 88, 2020, doi: 10.1016/j.ijhm.2020.102539.
22. J. A. Martilla and J. C. James, "Importance-Performance Analysis," *J Mark*, vol. 41, no. 1, p. 77, Jan. 1977, doi: 10.2307/1250495.

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