

Fuzzy Decision-Making Soft Model for Family Financial Planning in The Post COVID-19 World

Chia-Chi SUN (✉ 139866@gms.tku.edu.tw)

Tamkang University

Research Article

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Sun, Chia Chi

Sun, Chia Chi (corresponding author)

Associate Professor

Tel: +886-2-2621-5656 ext: 2851

Fax:+886-2-2620-9730

Email: samsun0712@gmail.com; ccsun@mail.tku.edu.tw

Address: No.151, Yingzhuan Rd., Danshui Town, Taipei County 25137, Taiwan
R.O.C.

Grade Institute & Department of International Business
Tamkang University

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Abstract

With COVID-19 making headlines around the world, it is normal to feel uncertain about many aspects of life right now, including family financial planning and wealth management. With the increase in family wealth and the size of organizations, there is a comparable increase in their assets. There is considerable demand for professionals to manage these assets and coordinate investment activities in order to maintain growth. The issue arises of how to increase a wealth management bank's competitive advantages by segmenting a set of the selection criteria for a wealth management bank to effectively manage personal wealth. The results showed that the management's learning and growth perspective was the most important causal dimension of wealth management bank selection. This paper also draws on the research results for managerial practice implications.

Keywords: Personal financial planning, Wealth management, COVID-19, Decision Making Trial and Evaluation Laboratory (DEMATEL), Multiple criteria decision making (MCDM), Fuzzy set, Fuzzy theory

1. Introduction

The COVID-19 pandemic has thrown many of us a financial curveball. Managing personnel financial planning is important at all times, but it becomes essential during a crisis such as the coronavirus pandemic. We are starting to see some economic consequences already, but what is less visible is the financial-induced stress caused by the uncertainty. Therefore, in the new world, across segments, income has vanished, reduced, or settled at a new low. Family wealth management is an investment advisory discipline that incorporates financial planning, investment portfolio management, and a number of aggregated financial services (Lurtz et al., 2020; Su 2008). Private wealth management is the term generally used to describe highly customized and sophisticated investment management and financial planning services delivered to high net-worth investors (Gao et al. 2005). In general, this includes advice on the use of trusts and other estate planning vehicles, business succession or stock option planning, and the use of hedging derivatives for large blocks of stock (Wu et al. 2010).

The pandemic may change the nature of trust in payments for two reasons: The first is the aforementioned increase in fraud, while the second is the generally higher

level of economic distress worldwide. The COVID-19 pandemic is having a devastating impact on the nation's economy. More people have lost their jobs, businesses across the nation have shuttered or declared bankruptcy, and a major drop in the stock market has clobbered many people's savings and retirement investments (Danes and Brewton, 2014; Lee et al., 2020). Wealth management can help investors determine what is really important to people and then develop actionable strategies to help people realize their most cherished hopes and defend against the things that might undo them. Wealth management services include investment planning, insurance planning, retirement planning, asset protection, and tax planning (Gao et al. 2005). A wealth management bank assists people in investing money in various investment markets, keeping in mind the people's investment goals. A wealth management bank also assists people in selecting from various types of insurances, self-insurance options, and captive insurance companies (Jorgensen et al. 2019). Retirement planning is critical to understand the amount of funds people would require in their old age. A wealth management bank begins with the people's financial advisor to understand the people's preferred lifestyle and then helps the investor deal with threats, such as taxes, volatility, inflation, creditors, and lawsuits, to maintain this lifestyle. With the development of personal financial services in domestic banks, the personal finance business has become a key area of domestic commercial banking products and services innovation (Arunraj and Maiti 2010; Chang et al. 2011; Chen et al. 2012; Wiktorowicz and Krzeszowski 2020; Sun 2014; Sun 2014).

2. Literature Review

As the world continues to learn more about COVID-19, or the novel coronavirus, it is clear that the pandemic may influence several aspects of our lives. However, there are opportunities to use this time to take stock of your current financial situation and establish habits that put you on a stronger financial footing once the pandemic ends and the economy recovers, or for when the next economic downturn hits. Moreover, there is an opportunity to establish better financial planning based on the last couple of months. Financial planning management is a service provided by financial institutions to help high net-worth individuals protect and grow their wealth. This advanced investment advisory discipline involves providing a diverse range of services, such as financial planning, investment management, tax planning, and cash flow and debt management, based on the client requirements. This section identifies the influential wealth management bank selection criteria based on past literature and discusses the regions of scarcity in these studies.

Wealth Management Bank Image Perspective

The wealth management bank image perspective's needs can be divided into three categories: reputation, market share, and the degree of internationalization.

Reputation

Corporate reputation has recently become a topic of considerable interest for the financial business (Chen and Tzeng 2011; Babić-Hodović et al. 2011; Chen and Hogg 2010; Kotha et al. 2001). Corporate reputation is an important intangible asset that enables firms to establish customer relationships (Mitra, 2011; Ou et al., 2006; Ohtsuki and Iwasa, 2004). Corporate reputation helps customers decide whether to buy services or not when they cannot assess the quality before buying. Consequently, reputation is particularly important for service companies with predominantly intangible services (Cornelissen and Thorpe, 2002; Cravens et al. 2003; Craven and Oliver 2006; Wang and Nakao 2010). A good reputation is widely regarded to lead to better employee recruitment/retention, more favorable coverage by stock market analysts and the media, better relationships with regulating agencies, an enviable bargaining tool with source/vendor/partner/distributor networks, and a more saleable brand (Papaioannou and Stamoulis 2006; Helm et al. 2009; Helm and Salminen 2010; Wolitzky 2011).

Market Share

Market share is calculated by taking the company's sales over a period and dividing it by the total industry sales over the same period (Ailawadi et al. 1999; Chan et al. 2007; Veiga et al. 2008). This metric is used to give a general idea of the size of a company within its market and against its competitors (Veiga et al. 2008; Uncles et al. 2010). Market share refers to the percentage of the overall volume of business in a given market that is controlled by one company in relation to its competitors. Information on a firm's relative market share-which indicates its competitive position - can be combined with information on the growth rate and attractiveness of the industry to determine the best future positioning of the firm (DeSarbo et al., 2002; Ritz, 2008). The attractiveness of an industry can be determined through an industry analysis, which points out the threats and opportunities facing competitors (Danaher 1994). The growth rate of an industry can be determined by measuring the trends in customer spending levels (Ailawadi et al. 1999; Mixon Jr. and Hsing 1997).

Degree of Internationalization

The idea is that as firms increase the share of their operations abroad, thus increasing their degree of internationalization, they experience higher levels of performance (Hong and Roh 2009; Mockaitis et al. 2006; Riahi-Belkaoui 1999;

Riahi-Belkaoui 1998). The degree of internationalization can be measured in terms of the share of total sales, assets, income, or employees located outside a company's home country. Internationalization allows firms to learn about domestic markets from their international market experience, thus improving performance (Pangarkar 2008; Hsu and Pereira 2008). Operating in foreign jurisdictions allows firms to access factors at lower costs (Granstrand 1999; Knudsen and Servais 2007; Kafouros et al. 2008).

Customer Service Perspective

When selecting the optimal wealth management bank, the service attitude, professional consultation service, and additional services must be taken into account.

Service Attitude

Success in business depends largely on cultivating an attitude of service and providing value to others (Lee et al. 2007; Kwon 2010; Mazaheri et al. 2011). Firms see a need and supply the solution for this need instead of concentrating on the compensation or monetary aspect (Zhang et al. 1999; Susskind et al. 2000; Gilbert and Han 2005). An attitude of service enables companies to truly and consistently exceed the client's expectations, without having to consciously follow any process for doing so (Culpan 1995; Gultek et al. 2006; Payne and Webber 2006). If financial service providers take the time to listen, make the effort to care, and show a willingness to be there to help, service providers will win customers for life (Tzeng et al. 2007; Teo and Noyes 2011; Williams et al. 2011).

Professional Consultation Service

Professional services provide clients with programs designed specifically for attorneys, paralegals, and other legal professionals (Bugge et al. 2006; Hazel et al. 2010). The development programs consist of on-site seminars, forums, conferences, lectures, and other formats that provide continuing legal education credits (Lynn 1986; Landeta et al. 2011). An experienced team of trusted attorney consultants and a faculty group of subject matter experts (Wiggers and Sanson-Fisher 1997; Skinner and Zare-Behtash 2018) conducts these convenient, cost-effective, accredited courses.

Additional Services

Additional services range from individual consultations involving budgeting, credit matters, estate planning, retirement planning and college funding, general investment subjects, and tax issues (Yu et al. 2009; Salunke et al. 2011).

Business Process and Product Perspective

In addition to satisfying the needs associated with the wealth management bank image perspective and the customer service perspective of selecting the optimal wealth management bank, the business process and product perspective still needs to be addressed.

Diversification of Financial Instruments

Diversification is a technique that reduces risk by allocating investments among various financial instruments, industries, and other categories (Laeven and Levine 2007; Goddard et al. 2008). It aims to maximize return by investing in different areas that would each react differently to the same event (Lin et al., 2007). Most investment professionals agree that, although it does not guarantee against loss, diversification is the most important component that reaches long-range financial goals while minimizing risk (Mercieca et al. 2007; Zhou 2010).

Transactional Safety

Transactional safety is one of the most significant concerns for both the shopper and the retailer during an online transaction (Yoon 2002; Chang and Lee 2006). With the increase in online banking options and shopping sites that encourage the use of checking and credit card information, transaction security has become more important than ever before. As the web grows and diversifies with options for online payments, a number of false sites pose a constant threat to all computer users (Kleist 2004). Exchanging sensitive information without the appropriate encryption technology or security measures can make a computer user or identity particularly vulnerable. Online transactions take place at record speed, oftentimes faster than a standard credit card transaction or check processing. Providing personal data on the Internet does pose various risks, and taking preventative action is a necessary part of ensuring online safety (He and Lee 2009; Georgiou and Fanti 2010).

Diversification of Transaction Modes

The diversification of transaction modes can help clients manage risk and reduce the volatility of an asset's price movements (Park and Jang 2012). Remember though, that irrespective of how diversified a clients' portfolio is, risk can never be completely eliminated. The risk associated with individual stocks can be reduced, but general market risks affect nearly every stock, so it is important to diversify among different asset classes (Hanna et al. 2001; Tong 2011). The key is to find a medium between risk and return; this ensures that clients achieve their financial goals, while still getting a good night's rest (Wilson 2003; Fukui and Ushijima 2007).

Managers' Learning and Growth Perspective

The managers' learning and growth perspective's needs can be divided into three categories: professional financial competence, educational background and training, and previous successful experiences.

Professional Financial Knowledge

Knowledge is defined as a generic quality referring to a person's overall capacity, while competency refers to specific capabilities such as leadership, which are made up of attitudes and skills (Shae et al. 2001; King 2003). Knowledge is a complex multi-dimensional phenomenon defined as the ability of the financial managers to practice safely and effectively, fulfilling their professional responsibility within the managers' scope of practice (Kaufman 1974; Awuah 2007).

Educational Background and Training

A financial manager's educational background investigation is one of the most important criteria for the selection process (Jorgensen et al. 2019; DeJaeghere and Cao 2009). A thorough background investigation will yield job-relevant information concerning an individual's past behavior, experience, education, performance, and other critical factors important in the overall selection process. The background investigation is utilized in conjunction with other screening criteria, which are equally important in determining applicants that are best qualified to be financial managers (Chang and Birkett 2004; Helm and Salminen 2010). A manager's background can influence investors who chose to pursue a performance degree at a higher education institution rather than continue training at professional private studios (Bartman and Bruijn 2011; Jorgensen et al. 2019).

Previous Successful Experiences

The practitioners' experience may also influence information search activities. An individual with adequate professional experience might be a highly skilled technical manager with a great repertoire of understanding and possess exceptional abilities.

3. Expert Interviews

As of the publication of this post, COVID-19 is having a massive effect on the global economy, even if this effect has not yet been felt on everyone's household budgets (Riahi-Belkaoui 1998; Arunraj and Maiti 2010). Irrespective of the current or coming health effects of COVID-19, the pandemic has affected and is likely to continue to affect household finances for years to come. Having a plan, prioritizing spending, and using resources efficiently will be key to your financial stability (Sicard

et al. 2011; Vinnari 2008; Cay and Iscan 2011; Li et al. 2020; Sun 2014; Liu et al. 2018). We interviewed these experts in their offices rather than off-site in Taichung City and Changhua City in Taiwan (as Table 1) (Cay and Iscan 2011).

Table 1 Major suggestions for evaluation framework from expert interviews

Interviewees	Working Background	Working years
A	Banking Industry	20 years
B	Banking Industry	15 years
C	Professor in Finance and Investment	12 years
D	Professor in Finance and Investment	8 years
E	Professor in Marketing	5 years
F	Existing Customer	35 years
G	Existing Customer	15 years
H	Existing Customer	10 years

The evaluation dimensions are Wealth Management Bank Image Perspective (D₁), Customer Service Perspective (D₂), Business Process and Product Perspective (D₃) and Managers' Learning and Growth Perspective (D₄). Then, the evaluation criteria are Reputation (C₁), Market Share (C₂), Degree of Internationalization s (C₃), Service Attitude (C₄), Professional Consultation Service (C₅), Additional Services (C₆), Diversification of Financial Instruments (C₇), Transactional Safety (C₈), Diversification of Transaction Modes (C₉), Professional Financial Knowledge (C₁₀), Educational Background and Training (C₁₁), and Previous Successful Experiences (C₁₂) (as Figure 1).

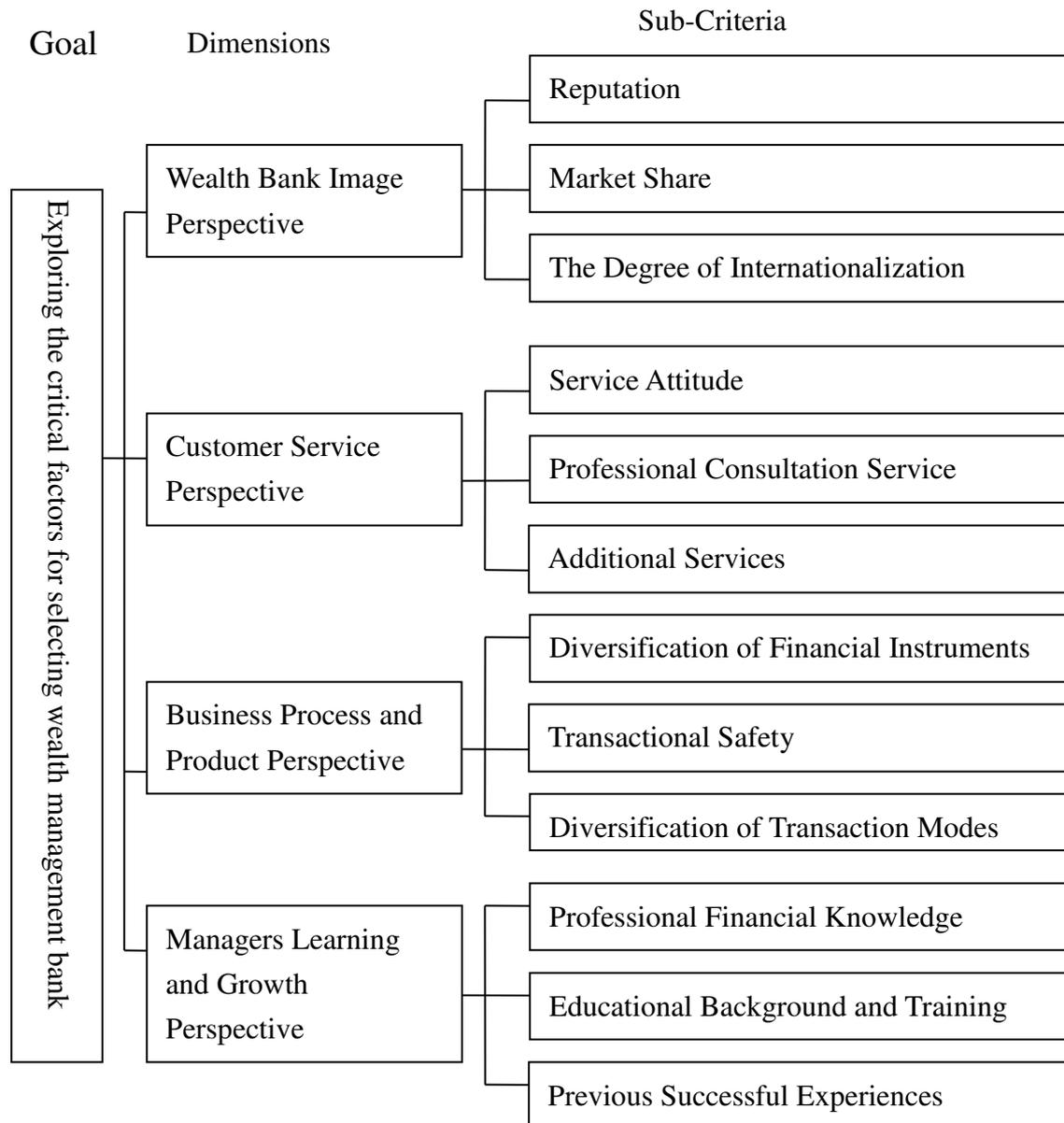


Figure 1 Evaluation Framework for Wealth Management Bank

4. Fuzzy Decision Making Trial and Evaluation Laboratory (Fuzzy DEMATEL) Method

In real life, humans' subjective cognition of abstract things is often vague and unquantifiable. It is often distorts the true cognition of the respondent even using quantitative scales. Zadeh (1965) proposed the Fuzzy Theory to express the data that was uncertainly and fuzzily. The contribution of this theory is used mathematical structure to express qualitative and quantitative data and providing a realistic judgment (Delice and Can 2020; Hussain et al. 2021). Let decision makers can able to define problems clearly and compare the data. Fuzzy theory makes the result of things no longer just yes and no, but a concept of degree between yes and no (Wang et al.

2020; Sivaraman et al. 2020). The linguistic variable of fuzzy theory is used as an expert's scoring scale to solve the inconsistency of subjective cognition and make the question degree closer to reality. Then, designing fuzzy numbers (FNs) represented by different linguistic variable, let respondents to choose the most appropriate meaning (Abdullah and Najib 2016; Qin et al. 2020). Next, through the defuzzified process to transform FNs to the numerical value, and making decision. We combine the traditional MADM method and fuzzy theory to solve the problem of nurses' competency more appropriately (Büyüközkan and Göçer 2019; Suresh and Dillibabu 2020).

We obtained four dimensions and twelve criteria suitable to evaluate a wealth management bank (Chen et al. 2011; Chiang and Birtch 2011; Chou et al. 2019). The DEMATEL analysis steps are based on the research of scholars Chou et al. (2019) and Chiang and Birtch (2011) and so on. It divides the analysis process into 6 steps.

(1) Define the quality factor characteristics and establish an evaluation scale

The evaluation scale for causal relations and a pair-wise comparison of the quality factors is then constructed. We referred to the scale designed by Yue et al. (2020) and Büyüközkan and Göçer (2019) and adopted 0, 1, 2, 3, and 4 as the five levels of measurement.

(2) Obtain interdependent data for all factors using the expert opinion method

These pair-wise comparisons between any two factors are denoted by $Z_{ij}^{(k)}$ and are given an integer score of 0-4, representing “No influence (0),” “Low influence (1),” “Medium influence (2),” “High influence (3),” and “Very high influence (4),” respectively (Abdullah and Najib 2016; Qin et al. 2020). The matrix $Z_{ij}^{(k)}$ called the initial direct-relation matrix of expert k .

(3) Calculate the arithmetic mean matrix

Assume that the number of factors is n , and the value is from K professionals who judge the factors based on the 0, 1, 2, 3, 4 five-level evaluation scale: $Z_{ij}^{(k)}$ and $X_{ij}^{(k)}$ ($i = 1, 2, 3, \dots, n$; $j = 1, 2, 3, \dots, n$) represents the influence degree of factor i to factor j . Then, sum up and average all $X_{ij}^{(k)}$ from k experts. The calculation formula is given below to calculate the $n \times n$ arithmetic mean matrix (Suresh and Dillibabu 2020).

(4) Calculate direct/indirect matrix

The direct/indirect relation matrix and the total-relation matrix illustrate the interrelated impact on each factor; the formula is as below. The normalized direct-relation matrix can be gotten as $X^{(k)}$ (Wang et al. 2020; Hussain et al. 2021).

$$X^k = \begin{bmatrix} X_{11}^{(k)} & X_{12}^{(k)} & L & X_{1n}^{(k)} \\ X_{21}^{(k)} & X_{22}^{(k)} & L & X_{2n}^{(k)} \\ M & M & O & M \\ X_{n1}^{(k)} & X_{n2}^{(k)} & L & X_{nn}^{(k)} \end{bmatrix}; \quad k = 1, 2, K, P \quad (1)$$

(5) Utilize the direct/indirect matrix

Let $X^{(k)}$ be the quality of the given y factor for the direct/indirect matrix T , and $i, j = 1, 2, \dots, n$ (Delice and Can 2020). Sum up the columns and the rows of the direct/indirect matrix (T); the formula is given below. It includes the direct and the indirect impact, which is the degree of the direct or the indirect impact on the other factors. Once the normalized direct-relation $X^{(k)}$ is obtained, the total-relation matrix T can be calculated, it should be ensured that the convergence of $\lim_{w \rightarrow \infty} X^w = 0$. The total-relation matrix is shown as Equations (2), (3) (Wang et al. 2020; Sivaraman et al. 2020).

$$T = \lim_{w \rightarrow \infty} (X + X^2 + L + X^w) \quad (2)$$

$$T = \begin{bmatrix} t_{11} & t_{12} & t_{1n} \\ t_{21} & t_{22} & t_{2n} \\ t_{n1} & t_{n1} & t_{nn} \end{bmatrix} \quad (3)$$

(6) Causal diagram

The causal diagram is depicted in two-dimensional graphics, where the total $(D_i + R_i)$ is the horizontal axis and the difference $(D_i - R_i)$ is the vertical axis. This graphic can simplify the complex causal relation into an easily understandable visual structure and therefore make us facilely conceive the idea of solving the problems. When $(D_i - R_i)$ is positive and located above the x axis, the quality factor m belongs to the type of cause, but if $(D_i - R_i)$ is negative and located below the x axis, the quality factor belongs to the type of result (Abdullah and Najib 2016; Suresh and Dillibabu 2020).

5. Empirical Study

Maintaining financial health during this situation can be critically important. With a solid handle on finances, we will be better prepared for whatever life throws our way in the coming weeks and months. Following the case scenario, an evaluation model can be developed for constructing a wealth management bank selection decision hierarchy (Lin et al. 2011; Liou et al. 2007; Wu and Lee 2007; Wu 2008; Suresh and Dillibabu 2020). A typical hierarchy consists of at least three levels: the

goal and the evaluation criteria (Wu et al. 2010; Wu and Tsai 2011; Tsai and Kuo 2011; Shieh et al. 2010; Büyüközkan and Göçer 2019). The empirical material for the study was collected in the fall and winter of 2011 with a questionnaire, which was followed by expert interviews. The questionnaire was sent to 28 experts. Eight participants filled in the questionnaire incompletely, and their views were not used in this study (Tsai et al. 2010; Wen et al. 2005; Han et al. 2018; Lee et al. 2011). As there are four dimensions, the 20 4×4 matrices are as follows:

$$\begin{aligned}
Z^1 &= \begin{bmatrix} 0 & 4 & 2 & 2 \\ 3 & 0 & 2 & 1 \\ 2 & 3 & 0 & 3 \\ 3 & 3 & 3 & 0 \end{bmatrix}, & Z^2 &= \begin{bmatrix} 0 & 3 & 2 & 2 \\ 3 & 0 & 3 & 2 \\ 1 & 3 & 0 & 1 \\ 1 & 2 & 2 & 0 \end{bmatrix}, & Z^3 &= \begin{bmatrix} 0 & 4 & 2 & 4 \\ 3 & 0 & 3 & 4 \\ 3 & 3 & 0 & 4 \\ 4 & 4 & 3 & 0 \end{bmatrix}, \\
Z^4 &= \begin{bmatrix} 0 & 3 & 2 & 2 \\ 3 & 0 & 3 & 3 \\ 2 & 3 & 0 & 2 \\ 2 & 3 & 3 & 0 \end{bmatrix}, & Z^5 &= \begin{bmatrix} 0 & 1 & 1 & 3 \\ 2 & 0 & 1 & 2 \\ 1 & 2 & 0 & 3 \\ 3 & 2 & 1 & 0 \end{bmatrix}, & Z^6 &= \begin{bmatrix} 0 & 4 & 3 & 4 \\ 4 & 0 & 3 & 3 \\ 3 & 3 & 0 & 2 \\ 3 & 4 & 3 & 0 \end{bmatrix}, \\
Z^7 &= \begin{bmatrix} 0 & 4 & 2 & 2 \\ 4 & 0 & 4 & 1 \\ 3 & 3 & 0 & 4 \\ 4 & 4 & 3 & 0 \end{bmatrix}, & Z^8 &= \begin{bmatrix} 0 & 4 & 4 & 4 \\ 2 & 0 & 2 & 3 \\ 2 & 1 & 0 & 4 \\ 3 & 2 & 2 & 0 \end{bmatrix}, & Z^9 &= \begin{bmatrix} 0 & 4 & 2 & 2 \\ 4 & 0 & 3 & 2 \\ 3 & 3 & 0 & 3 \\ 3 & 4 & 3 & 0 \end{bmatrix}, \\
Z^{10} &= \begin{bmatrix} 0 & 4 & 3 & 4 \\ 4 & 0 & 3 & 3 \\ 3 & 3 & 0 & 3 \\ 4 & 4 & 3 & 0 \end{bmatrix}, & Z^{11} &= \begin{bmatrix} 0 & 4 & 4 & 3 \\ 4 & 0 & 3 & 3 \\ 3 & 3 & 0 & 3 \\ 3 & 3 & 3 & 0 \end{bmatrix}, & Z^{12} &= \begin{bmatrix} 0 & 4 & 3 & 2 \\ 3 & 0 & 4 & 2 \\ 3 & 4 & 0 & 2 \\ 2 & 4 & 3 & 0 \end{bmatrix}, \\
Z^{13} &= \begin{bmatrix} 0 & 2 & 1 & 3 \\ 2 & 0 & 1 & 3 \\ 2 & 2 & 0 & 1 \\ 2 & 3 & 1 & 0 \end{bmatrix}, & Z^{14} &= \begin{bmatrix} 0 & 4 & 4 & 4 \\ 4 & 0 & 4 & 4 \\ 4 & 4 & 0 & 4 \\ 4 & 3 & 4 & 0 \end{bmatrix}, & Z^{15} &= \begin{bmatrix} 0 & 4 & 4 & 3 \\ 4 & 0 & 3 & 3 \\ 3 & 3 & 0 & 3 \\ 3 & 3 & 3 & 0 \end{bmatrix}, \\
Z^{16} &= \begin{bmatrix} 0 & 3 & 1 & 3 \\ 3 & 0 & 1 & 2 \\ 1 & 2 & 0 & 3 \\ 3 & 3 & 2 & 0 \end{bmatrix}, & Z^{17} &= \begin{bmatrix} 0 & 4 & 4 & 4 \\ 3 & 0 & 4 & 4 \\ 4 & 4 & 0 & 4 \\ 4 & 4 & 4 & 0 \end{bmatrix}, & Z^{18} &= \begin{bmatrix} 0 & 4 & 4 & 4 \\ 3 & 0 & 4 & 3 \\ 3 & 4 & 0 & 3 \\ 4 & 4 & 3 & 0 \end{bmatrix}, \\
Z^{19} &= \begin{bmatrix} 0 & 2 & 3 & 2 \\ 4 & 0 & 2 & 3 \\ 1 & 4 & 0 & 2 \\ 3 & 2 & 4 & 0 \end{bmatrix}, & Z^{20} &= \begin{bmatrix} 0 & 1 & 2 & 1 \\ 3 & 0 & 3 & 1 \\ 3 & 3 & 0 & 1 \\ 1 & 3 & 1 & 0 \end{bmatrix}
\end{aligned}$$

Step 1: Calculate the arithmetic mean matrix

We produced the preliminary arithmetic mean matrix.

$$A = \begin{bmatrix} 0.00 & 3.35 & 2.65 & 2.90 \\ 3.25 & 0.00 & 2.80 & 2.60 \\ 2.50 & 3.00 & 0.00 & 2.75 \\ 2.95 & 3.20 & 2.70 & 0.00 \end{bmatrix}$$

Step 2: Normalize the arithmetic mean matrix

We continually normalized arithmetic mean matrix.

$$X = \frac{A}{s} = \frac{A}{\max(\max_{1 \leq i \leq n} \sum_{j=1}^n a_{ij}, \max_{1 \leq j \leq n} \sum_{i=1}^n a_{ij})} = \begin{bmatrix} 0.00 & 0.38 & 0.30 & 0.33 \\ 0.37 & 0.00 & 0.31 & 0.29 \\ 0.28 & 0.34 & 0.00 & 0.31 \\ 0.33 & 0.36 & 0.30 & 0.00 \end{bmatrix}$$

Step 3: Utilize the causal matrix

Utilize the causal matrix T could be calculated.

$$T = X(I - X)^{-1} = \begin{bmatrix} 9.307 & 10.220 & 9.058 & 9.143 \\ 9.374 & 9.732 & 8.877 & 8.933 \\ 8.995 & 9.630 & 8.325 & 8.626 \\ 9.516 & 10.168 & 9.023 & 8.859 \end{bmatrix}$$

Step 4: Causal diagram

We then produce the causal diagram by mapping a dataset of $(D + R, D - R)$.

Table 1 explains the causal effects of four first-tier dimensions. The diagram of these four dimensions is showed in Figure 2, the Wealth Management Bank Image Perspective, Business Process and Product Perspective, and Managers' Learning and Growth Perspective were the key aspects, whereas Customer Service Perspective was the net receiver. From Figure 2, it is clear that Managers' Learning and Growth Perspective might be the most critical dimension. Moreover, the Customer Service Perspective was affected by itself as well as by Wealth Bank Image Perspective, Business Process and Product Perspective, and Managers' Learning and Growth Perspective.

Table 2 Direct and indirect effects of four dimensions

		D	R	D + R	D - R
Wealth Management Bank Image Perspective	D ₁	37.73	37.19	74.92	0.54
Customer Service Perspective	D ₂	36.92	39.75	76.67	-2.84
Business Process and Product Perspective	D ₃	35.58	35.28	70.86	0.29
Managers' Learning and Growth Perspective	D ₄	37.57	35.56	73.13	2.01

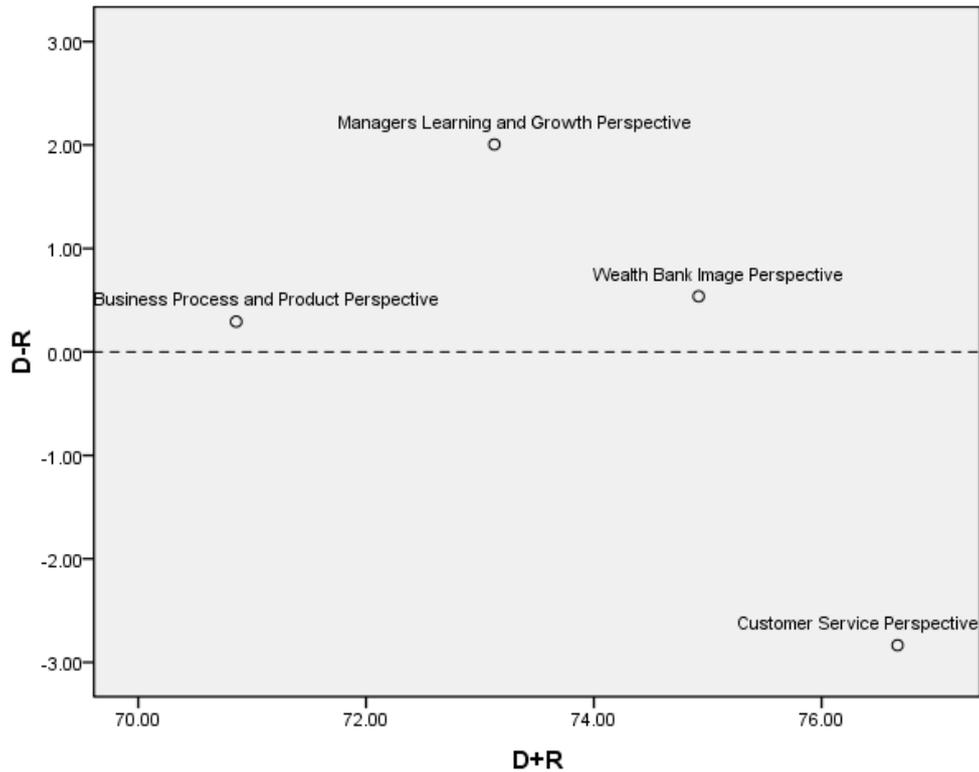


Figure 2 Causal diagram of the main evaluation dimensions

Table 3 summarizes causal effects of the criteria under four different dimensions. With respect to Wealth Management Bank Image aspect, we will discuss the impact and interrelation in Figure 3. The causal relationships among the four second-tier criteria of Customer Service Perspective are shown in Figure 4. The causal relationships among the three second-tier Business Process and Product Perspective criteria are shown in Figure 5. Figure 6 summarizes the causal relationships among four second-tier Managers' Learning and Growth Perspective criteria.

Table 3 Direct and indirect effects of the criteria under evaluation dimensions

Criteria	$D+R$	$D-R$
<i>Wealth Management Bank Image Perspective</i>		
Reputation	54.921	-0.268
Market Share	53.592	-0.732
Degree of Internationalization	54.770	1.000
<i>Customer Service Perspective</i>		
Service Attitude	40.864	1.138
Professional Consultation Service	41.709	-0.881
Additional Services	39.209	-0.256

<i>Business Process and Product Perspective</i>		
Diversification of Financial Instruments	54.240	-0.151
Transactional Safety	56.275	0.313
Diversification of Transaction Modes	55.212	-0.163
<i>Managers' Learning and Growth Perspective</i>		
Professional financial Knowledge	59.764	-0.467
Educational Background and Training	60.372	-0.203
Previous Successful Experiences	56.200	0.669

This showed that from the organizational culture aspect, Degree of Internationalization was the key factor for solving the core problems, which was the first factor that had to be considered. Moreover, Reputation and Market Share were affected by Degree of Internationalization.

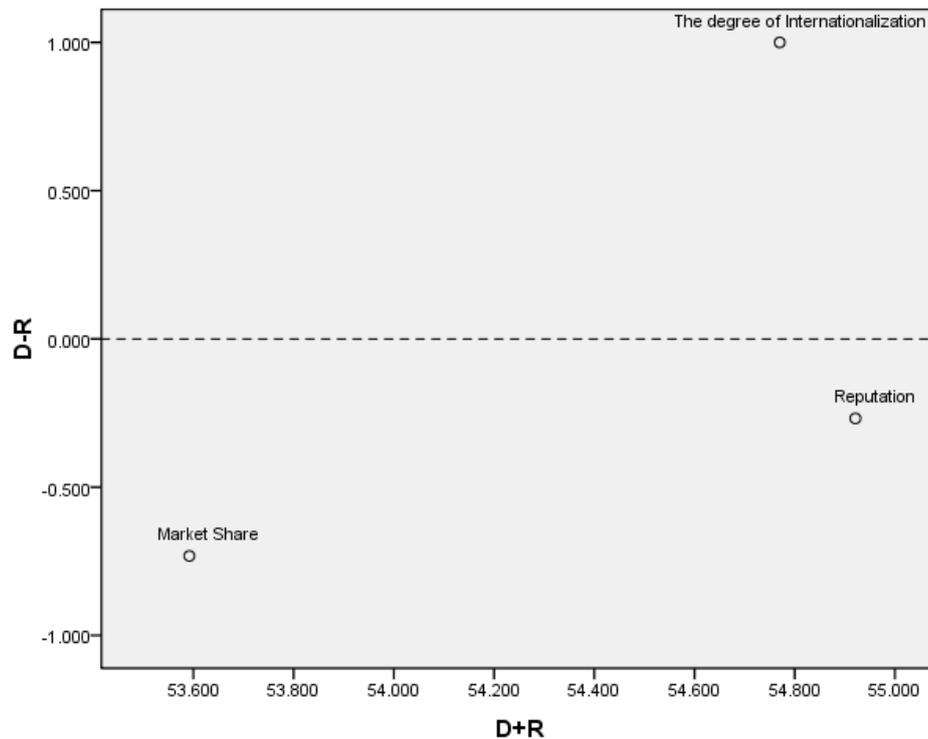


Figure 3 Causal diagram of sub-aspects of Wealth Management Bank Image Perspective

Figure 4 describes that Service Attitude was the net cause, whereas Professional Consultation Service and Additional Services were the net receivers. We concluded that from the organizational structure and system aspect, “Service Attitude” was the key factor in solving the core problems, which was the first factor to be considered. Moreover, Professional Consultation Service and Additional Services were affected

by Service Attitude.

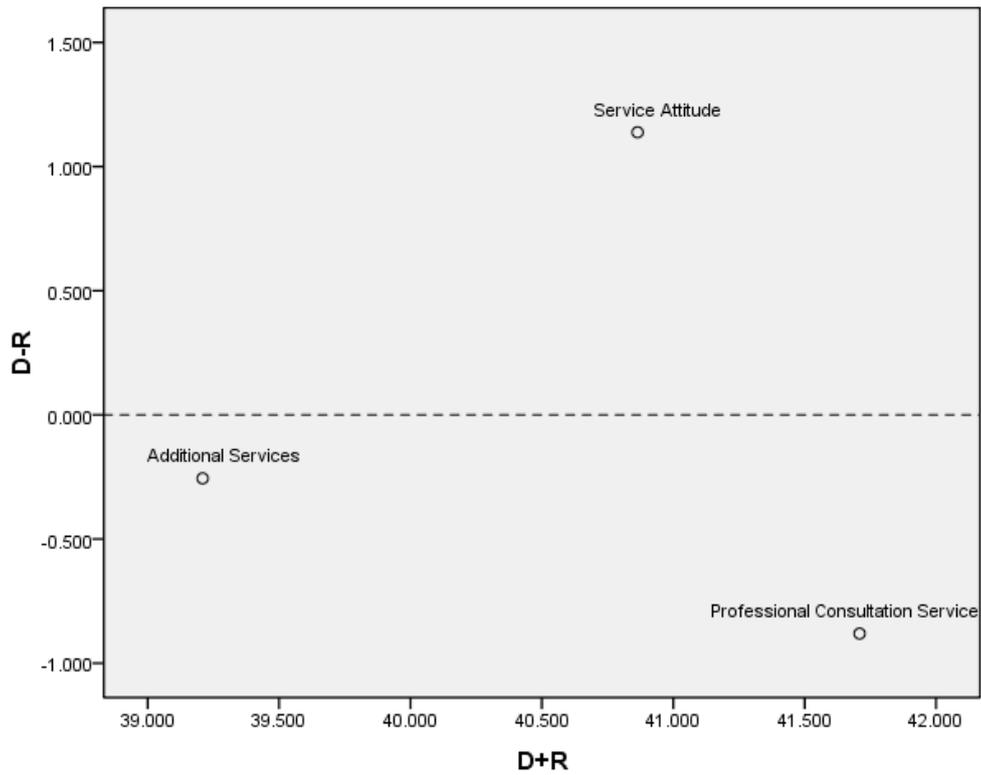


Figure 4 Causal diagram of sub-aspects of Customer Service Perspective criteria

Figure 5 shows that Transactional Safety was the net cause, whereas Diversification of Financial Instruments and Diversification of Transaction Modes were the net receivers. It is clear that Transactional Safety might be the most critical criterion. Moreover, Diversification of Financial Instruments and Diversification of Transaction Modes were affected by Transactional Safety.

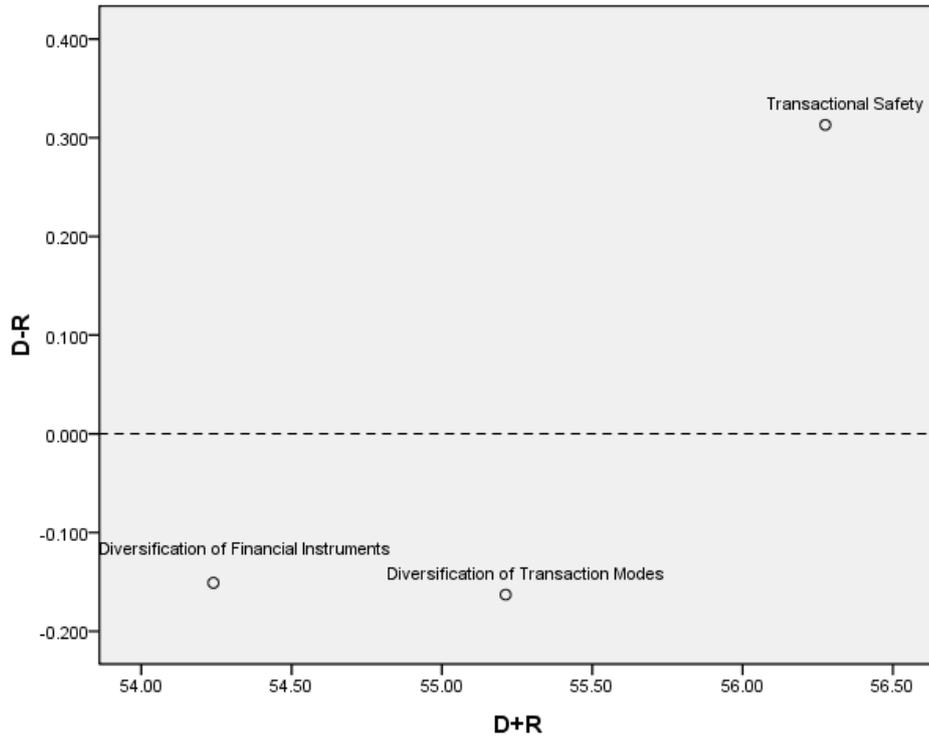


Figure 5 Causal diagram of sub-aspects of Business Process and Product Perspective criteria

Figure 6 describes that Previous Successful Experiences was the net cause, whereas Professional Financial Knowledge and Educational Background and Training were the net receivers. It is clear that Previous Successful Experiences might be the most critical criterion. Moreover, Professional financial Knowledge and Educational Background and Training were affected by Previous Successful Experiences.

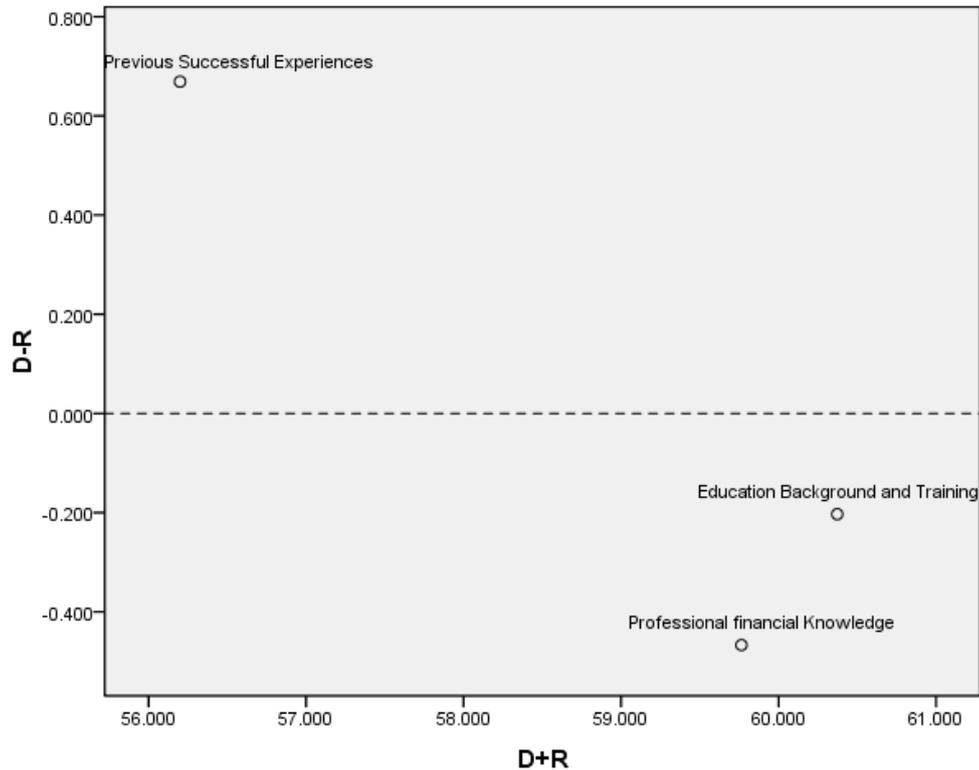


Figure 6 Causal diagram of sub-aspects of Managers' Learning and Growth Perspective criteria

6. Conclusions and Remarks

The coronavirus outbreak and reports of how it will impact the economy continue to dominate the news. A key concern for many of us is how to manage our finances amidst this global pandemic. There are many questions that arise, such as whether to make credit card bill payments now or to defer them for a couple of months or how to plan for the upcoming financial year in the wake of an uncertain economic scenario or where to keep our savings in this uncertain market. In an environment such as this, one needs to go back to the basics and make sure that he/she has a sound financial plan in place. Wealth management bank selection is composed of many interacting elements.

The results indicated that Managers' Learning and Growth Perspective was the most important factor. Thus, we concluded that financial professionals cannot just be good at crunching numbers; they must also be able to communicate their knowledge with effective speaking, writing, and presentation skills (Li and Tzeng, 2009; Liaw et al., 2011). The people skills needed to succeed as a financial professional include understanding different personality types, listening, asking the right questions, resolving conflicts, educating others, and counseling clients. Managing relationships

is a key competence whether you are dealing with subordinates, co-workers, bosses, or people outside your company. When people trust wealth managers, they must feel that these managers respect them. Investors will want to help their wealth managers succeed, whether by speaking highly of them, promoting them, or signing them up as clients. Financial professionals need to be able to market their professional skills and knowledge to prospects in their niche markets. While doing so, it is imperative to have a complete understanding of both one's own personal strengths and the wealth management bank professional's strengths (Ho et al., 2011; Hu et al., 2011).

Wealth managers should communicate not only how much they know but also how much they care because "the clients' most valuable asset and their biggest daily concern is not their monetary wealth, but their family." Clients want to know that you can help them manage their money to best provide for their family's long-term needs (Mousavi et al., 2011). Wealth managers will need to efficiently and effectively schedule their time, manage budgets, meet deadlines, and get what they need from other people in time to complete the project successfully (Ouédraogo et al., 2011). Wealth managers will always encounter problems in any job, and it is essential for them to be able to solve these problems effectively rather than cracking under pressure. To get ahead, it would also be helpful for wealth managers to look beyond their own personal responsibilities. Irrespective of where managers work, wealth managers need to be proficient with computer hardware and software and be able to pick up new programs related to their job quickly. A competitive personality, passion for work, and the stamina to work long hours and go above and beyond what is expected and what the co-workers and competitors are doing are all crucial to success in finance (Hsu and Reid, 2021).

Diversification is a technique that reduces risk by allocating investments among various financial instruments, industries, and other categories. The aim is to maximize return by investing in different areas that would each react differently to the same event. Most investment professionals agree that although this does not guarantee against loss, diversification is the most important component of reaching long-range financial goals while minimizing risk.

Security is probably the most significant concern for both the shopper and the retailer during an online transaction. In reality, an online transaction is probably more secure than a card transaction in a shop or conducted over the telephone or by fax, as the information transmitted online is highly encrypted by using complicated logarithm combinations. The transfer of the purchase details from the retailer's site to the wealth management bank is encapsulated using an encrypted digitally signed protocol.

In the end, investors select on the basis of work experience because they expect

experienced financial managers to perform better. Prior experience is often used by employers as an expedient proxy for the knowledge and skill that contributes to performance. Prior work experience can also lead to habits, routines, and other cognitions and behaviors that may or may not be useful for performance when applied in a different context. Work experience may improve performance, but only indirectly via relevant knowledge and skill because prior work experience provides the opportunity for individuals to acquire relevant knowledge and skill that can in turn enhance job performance. Managers can effectively manage in a cost-saving manner and effectively increase the competitive advantage of the wealth management bank. This will help investors to reduce the interference of too much information among numerous influential factors by using expert knowledge. Future research can be conducted to test the adoption factors presented in this study by using different methods and larger sample sizes.

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