Research on the Evolution of New Energy Platform Development Path Based on Maturity Model

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Abstract. This paper examines the evolution of development pathways and technological research within the context of the business maturity model for new energy platforms. Leveraging theories from the industry life cycle and project management maturity models, this study constructs a business development maturity model specific to new energy platforms and employs fuzzy comprehensive evaluation methods to assess business development maturity. Through an analysis of four primary indicators—strategic capability, technological innovation capability, economic benefit, and social benefit—and their respective secondary indicators, this paper evaluates the maturity of eleven new energy platform businesses. The findings indicate that the maturity levels of these businesses range from nascent stages to mature optimization stages, providing critical insights for strategic planning and layout in the new energy platform sector.

Keywords: New energy platform business, maturity model, fuzzy comprehensive evaluation method

1. Introduction

China has elevated the development of the digital economy to a national strategy. On January 12, 2022, the State Council released the "14th Five-Year Plan for Digital Economy Development," guiding China's high-quality digital economy growth during this period. The new energy platform aligns with the integration of energy and digital transformation, aiming to build a digital economy platform for new energy and support the construction of a new power system. Determining the business strategy and development path for the new energy platform at various stages is crucial for long-term planning and strategic layout. This enables flexible adjustments to the business model and strategic focus based on market changes, maximizing investment returns and market opportunities. It also helps predict future trends and enter emerging markets early, enhancing competitiveness and brand influence.

2. Regarding the Related Literature on the Development Maturity of New Energy Platform Business

Industrial life cycle research originated from the product life cycle theory proposed in the 1960s. It describes an industry's evolution from emergence through growth and maturity to decline and eventual withdrawal from economic activities. This process follows an S-shaped curve, similar to the product life cycle, with four stages: formation, growth, maturity, and decline. The industrial life cycle's development law is reflected in market structure, innovation, and cost-profit dynamics.Vernon (1966) observed that new products undergo a dynamic process of introduction, maturity, and standardization in the market[1]. Differences in the product life cycle across countries with varying technological levels lead to different competitive landscapes, reflecting technological gaps and influencing international investment and trade patterns.

In the 1970s,Abernathy and Utterback introduced the A-U product life cycle theory, dividing it into fluid, transition, and determination stages[2]. Gort and Klepper (1982) expanded this to an

industry-level model, identifying five stages: introduction, mass entry, stability, mass exit, and maturity[3]. Klepper and Graddy (1990) refined this using moving average methods, defining maturity by declining manufacturer growth rates and the end of maturity by decreasing absolute numbers of firms[4].Combining project management maturity models with industrial life cycle theory, a new energy platform business development maturity model can be constructed, defining its dimensions, levels, and internal structure. Sun Xudong et al. applied these theories to the energy industry, distinguishing between energy utilization and traditional manufacturing, and established an evaluation index system for industrial maturity in the energy sector[5].The theoretical framework for industrial maturity has been initially formed, covering technology, product (manufacturing), and market aspects. However, this framework lacks specificity for field characteristics, industrial attributes, national strategic needs, and international context. Ge et al. (2017) categorized smart grid maturity into budding, initial, growth, mature, and mature optimization periods, evaluating regional development through five indicators[6].Given the unique characteristics of new energy platforms, this paper defines the development maturity level into five stages: germination, starting, growth, maturity, and maturity optimization, integrating relevant theories and existing research.

3. Construction of Maturity Model for Business Development of New Energy Platform

Based on the principles of comprehensiveness, objectivity, and independence, this analysis evaluates uncertain factors, key construction tasks, and objectives of the new energy platform.   It covers planning, construction, and operation.   Through interviews with company departments and policy document analysis, the development maturity of the new energy platform is assessed using four primary indicators: Strategic Capability (G), Technological Innovation Capability (H), Economic Benefit (J), and Social Benefit (K).At the level of strategic capability, there are two secondary indicators, namely (1) Support for the Construction of a New Power System (G1), (2) Support for the "Dual Carbon" Goal (G2). At the level of technological innovation capability, there are three second-level indicators, namely (1) the Number of Patents (H1), (2) Technological Capability (H2), and (3) Talent Level (H3). At the level of economic benefits, there are five secondary indicators, namely (1) Sales Ability (J1), (2) Profitability (J2), (3) Development Ability (J3), (4) Cost Control Ability (J4), and (5) Risk Management Ability (J5). At the level of social benefits, there are three secondary indicators, namely (1) the Number of Employees (K1), (2) the Quality of Social Services (K2), and (3) the Implementation Rate of Environmental Protection and Energy Conservation Standards (K3). In total, there are 13 indicators, including one qualitative indicator (support for new power system construction) and twelve quantitative indicators.

To evaluate the development maturity accurately, a fuzzy comprehensive evaluation method is chosen over simple scoring methods.This method reduces subjective influence and provides more scientific and effective results by expressing evaluations as fuzzy vectors, reflecting each business's actual development status.

The basic steps of assessing the development maturity of new energy platform business are as follows:

(1) Select the evaluation object and split it according to specific evaluation indicators to obtain each individual ability.

(2) Determine the data source for each indicator through literature search, data statistics, and expert consultation, and analyze the collected data.

(3) Evaluate the maturity level of each capability, determine the fuzzy discrimination matrix, and assign scores for each evaluation index.

(4) Establish comment level.$U = \{U_1, U_2, U_3, ..., U_n\}$,is the number of evaluation factors.The set of comments by which the evaluation object may be evaluated is set as $G = \{G_1, G_2, G_3, ..., G_m\}$.There is a distinction between superior and inferior comments, indicating

different categories of comments. According to the development status of new energy platform business and combined with the above setting of development maturity level, this model sets a total of five comments. There are obvious differences among the comments. The five comments are: germination level, starting level, growth level, maturity level, and maturity optimization level.

$$G = \{G_1, G_2, G_3, G_4, G_5\} = \begin{cases} \text{Germination Level, Starting Level,} \\ \text{Growth Level, Maturity Level,} \\ \text{Maturity Optimization Level} \end{cases}$$

(5) Determination of membership degree. The membership degree is F_{ijk} $(i = 1,2,\ldots,N; j = 1,2,\ldots,n; k = 1,2,\ldots,m)$, which indicates the degree to which the jth index in the ith dimension belongs to the evaluation language k.Herein, a distinction should be made between the calculation of the membership degree of qualitative indexes and quantitative indexes. For quantitative indexes, a membership matrix should be obtained. The membership degree is derived by calculating the membership function between the actual value and each standard value.The membership matrix of fuzzy comprehensive evaluation is presented as follows:

$$F = \begin{bmatrix} F_{i11} & \cdots & F_{i1m} \\ \vdots & \ddots & \vdots \\ F_{in1} & \cdots & F_{inm} \end{bmatrix}, i = 1,2,\ldots,N$$

The standard value corresponding to each comment in this model is denoted as $X = \{x_1, x_2, x_3, x_4, x_5\}$. In the new energy platform business development maturity evaluation system, there are 17 influence indicators, all of which are positive indicators. The membership degree is actually calculated as a probability, specifically, the probability that the actual value falls between the two evaluation results. Therefore, the membership of all positive indicators is calculated as follows:

$$F_{g1} = \begin{cases} 1, x \geq x_1 \\ \dfrac{x - x_2}{x_1 - x_2}, x \in [x_2, x_1] \\ 0, \text{ otherwise} \end{cases} \quad F_{g2} = \begin{cases} \dfrac{x - x_3}{x_2 - x_3}, x \in [x_2, x_3] \\ \dfrac{x_1 - x}{x_1 - x_2}, x \in [x_1, x_2] \\ 0, \text{otherwise} \end{cases}$$

$$F_{g3} = \begin{cases} \dfrac{x - x_4}{x_3 - x_4}, x \in [x_4, x_3] \\ \dfrac{x_2 - x}{x_2 - x_3}, x \in [x_2, x_3] \\ 0, \text{otherwise} \end{cases} \quad F_{g4} = \begin{cases} \dfrac{x - x_5}{x_2 - x_3}, x \in [x_5, x_4] \\ \dfrac{x_3 - x}{x_3 - x_4}, x \in [x_4, x_3] \\ 0, \text{otherwise} \end{cases}$$

(6) Upon determining the evaluation grade and membership degree of each factor and calculating the total weight value of each factor, fuzzy transformation can be executed for comprehensive evaluation. Subsequently, the fuzzy comprehensive evaluation set of the ith dimension of a new energy platform business (designated as industry z) is

$$G^z = [W_1, W_2, W_3, \ldots, W_N] \times [G_1^z, G_2^z, G_3^z, \ldots, G_N^z]^T G_i^z = W_i \times F_i^z$$

$$= [W_{i1}, W_{i2}, W_{i3}, \ldots, W_{iN}] \times \begin{bmatrix} F_{i11} & \cdots & F_{i1m} \\ \vdots & \ddots & \vdots \\ F_{in1} & \cdots & F_{inm} \end{bmatrix} = [g_{i1}^z, g_{i2}^z, g_{i3}^z, \ldots, g_{iN}^z]$$

Herein, $G_i^z (i = 1,2,\ldots,n)$ denotes the fuzzy comprehensive evaluation index of the Zth new energy platform business. This model allows each factor to contribute to the comprehensive evaluation, reflects the significance of each factor of the evaluation object and its distribution state in the characteristics of the evaluation, and renders the overall depiction of the evaluation object more objective.

(7) Repeat steps 4 to 6 to evaluate the maturity of all indicators.

(8) Calculate the comprehensive discriminant matrix using the optimal-worst method weights and the principle of maximum membership degree.

(9) Determine the industrial development maturity level by calculating the overall maturity of the new energy platform business.

In the fuzzy comprehensive evaluation, weights are determined using the Best-Worst Method (BWM). BWM considers expert opinions, experience, and knowledge by selecting the best and worst indicators and comparing them with others, making it simpler than the Analytic Hierarchy Process (AHP). The specific principles and steps are as follows.

First, in the index set $\{c_1, c_2, \cdots, c_n\}$, the optimal index c_B and the worst index c_W are selected. Select the best and worst indicators from the index set based on their relative importance, not their values.   Through expert interviews, social benefit is identified as the best indicator, and economic benefit as the worst.

Second, the 1-9 scale is employed to conduct pairwise comparisons between the selected optimal indicator and other indicators. The optimal comparison vector $A_B = (a_{B1}, a_{B2}, \cdots, a_{Bn})$ can be constructed in accordance with the comparison results. a_{Bi} represents the degree of preference of the optimal indicator in comparison with other indicator i. The larger the value, the more important the optimal indicator is relative to indicator i, and $a_{BB} = 1$. Based on expert interviews and questionnaire surveys, the optimal comparison vector is (2, 3, 4, 1).

Third, the 1-9 scale score is utilized to determine the degree of preference of all other indicators in comparison with the worst indicator, and the worst comparison vector $A_W = (a_{1W}, a_{2W}, \cdots, a_{nW})$ is constructed. Here, a_{iW} represents the degree of preference of indicator i in comparison with the worst indicator. The larger the value, the more important indicator i is relative to the worst indicator, and $a_{WW} = 1$. According to expert interviews, the worst comparison vector is (3, 2, 1, 4).

Fourthly, the mathematical programming problem is constructed and solved to obtain the optimal weight $(w_1^*, w_2^*, \cdots, w_n^*)$. To obtain the optimal weight for each indicator, it is necessary to minimize the largest of all $\{|w_B - a_{Bi}w_i|, |w_i - a_{iW}w_W|\}$ values for all indicator i. Thus, the planning function can be expressed as:

$$min \max_{i}\{|w_B - a_{Bi}w_i|, |w_i - a_{iW}w_W|\}$$

$$s.t. \sum_{i} w_i = 1, w_i \geq 0 , \quad \text{For all } i$$

The aforementioned programming function can be transformed into the following form for solution:

$$min\, \xi$$

$$s.t. |w_B - a_{Bi}w_i| \leq \xi, For\ all\ i$$

$$|w_i - a_{iW}w_W| \leq \xi, For\ all\ i$$

$$\sum_{i} w_i = 1, w_i \geq 0, For\ all\ i$$

The above list constitutes a linear equation and has precisely one unique solution. Through solving the model, the optimal weights $(w_1^*, w_2^*, \cdots, w_n^*)$ and ξ^* can be obtained.

Fifth, conduct a consistency check. The Best-Worst Method (BWM) employs the consistency ratio (CR) to test the consistency of comparison results among indicators, thereby verifying whether the obtained index weights are effective. CR can be calculated according to ξ^* and the consistency coefficient:

$$CR = \frac{\xi^*}{CI}$$

For different values of a_{BW}, there exist different CI values. The smaller the ξ^* value is, the smaller the CR will be. A stronger consistency indicates a higher reliability of the index comparison results.

To calculate the weights of new energy platform business indicators, LINGO 12.0 software is used following the outlined steps. The optimal weights for the four first-level indicators (G, H, J, K) are determined using the max-least pros and cons method.As can be seen from the calculation, the weight of the first index is as follows: strategic capability (G), 0.172; technological innovation capacity (H), 0.259; economic benefits (J), 0.103; social benefit (K), 0.466.Based on the first-level index weight calculation method, the second-level indices of new energy platform business development maturity were evaluated to determine their comprehensive weights. The specific weights are as follows. G1:index weight 0.667, comprehensive weight 0.115; G2: index weight 0.333, comprehensive weight 0.057; H1: index weight 0.292, comprehensive weight 0.076; H2: index weight 0.542, comprehensive weight 0.14; H3: index weight 0.167, comprehensive weight 0.043; J1: index weight 0.237, comprehensive weight 0.024; J2: index weight 0.416, comprehensive weight 0.043; J3: index weight 0.071, comprehensive weight 0.007; J4:index weight 0.118, comprehensive weight 0.012; J5: index weight 0.158, comprehensive weight 0.016; K1: index weight 0.167, comprehensive weight 0.078; K2: index weight 0.542, comprehensive weight 0.252; K3: index weight 0.292, comprehensive weight 0.136.

4. Model Result Analysis

Utilizing the aforementioned analysis model, eleven new energy platform services are analyzed as follows:

4.1 Carbon Metering and Monitoring Business

Through expert interviews and questionnaires, the carbon measurement and monitoring business is evaluated in four key areas: strategic capability, technological innovation, economic benefit, and social benefit. Strategic capability is assessed using fuzzy evaluation methods. The maturity levels of two quantitative indicators(support for new power system construction and support for the "dual carbon" goals)are evaluated, as shown in the table below.

Table 1.Assessment of the Development Maturity of Strategic Capability Indicators for Carbon Measurement and Monitoring Business

Primary Indicators	Secondary Indicators	Expert Rating Ratio				
		1	2	3	4	5
G	G1	0	0.27	0.42	0.31	0
	G2	0	0.18	0.38	0.44	0

According to the questionnaire results, the proportions for G1 are: 0% at the budding level, 27% at the starting level, 42% at the growth level, 31% at the mature level, and 0% at the mature optimization level. Similarly, the fuzzy discriminant vector for G2 can be calculated. Combining the maturity levels of both aspects, the comprehensive fuzzy discrimination matrix for strategic capability is obtained as follows:

$$G_G^1 = W_G^1 \times g_G^1 == [0.667, 0.333] \times \begin{bmatrix} 0 & 0.27 & 0.42 & 0.31 & 0 \\ 0 & 0.18 & 0.38 & 0.44 & 0 \end{bmatrix} = [0 \quad 0.240 \quad 0.407 \quad 0.353 \quad 0]$$

Based on the principle of maximum membership, the single-factor fuzzy evaluation result for the strategic capability of the carbon measurement and monitoring business is "growth level".

The fuzzy evaluation of the technological innovation capability index is conducted based on the statistical results of the questionnaire, as presented in the following table.

Table 2.Evaluation of the Development Maturity of Technological Innovation Capability Indicators for Carbon Measurement and Monitoring Business

Primary Indicators	Secondary Indicators	Expert Rating Ratio				
		1	2	3	4	5
H	H1	0	0.18	0.40	0.42	0
	H2	0	0.13	0.38	0.49	0
	H3	0	0.19	0.45	0.36	0

In the evaluation of the number of patents, the proportion at the budding level is 0; the proportion at the starting level is 18%; the proportion at the growth level is 40%; the proportion at the mature level is 42%; and the proportion at the mature optimization level is 0. Similarly, the fuzzy discrimination vectors of technical ability and talent level can be calculated. At this juncture, the fuzzy discrimination matrix of technological innovation capability is as follows:

$$G_H^1 = W_H^1 \times g_H^1 = [0.292, 0.542, 0.167] \times \begin{bmatrix} 0 & 0.18 & 0.4 & 0.42 & 0 \\ 0 & 0.13 & 0.38 & 0.49 & 0 \\ 0 & 0.19 & 0.45 & 0.36 & 0 \end{bmatrix} = [0 \quad 0.155 \quad 0.398 \quad 0.448 \quad 0]$$

According to the principle of maximum membership, the single-factor fuzzy evaluation result of scientific and technological innovation of carbon measurement and monitoring business is "mature level".

A fuzzy evaluation of the economic benefits of the carbon metering and monitoring business shows the following sales capacity proportions based on questionnaire results: 0% at the budding level, 27% at the starting level, 37% at the growth level, 36% at the mature level, and 0% at the mature optimization level. The fuzzy discriminant vector for sales capacity is (0, 0.27, 0.37, 0.36, 0).

Table 3.Evaluation of the Development Maturity of Economic Benefit Indicators for Carbon Measurement and Monitoring Business

Primary Indicators	Secondary Indicators	Expert Rating Ratio				
		1	2	3	4	5
J	J1	0	0.27	0.37	0.36	0
	J2	0	0.04	0.55	0.41	0
	J3	0	0.13	0.45	0.42	0
	J4	0	0.22	0.43	0.35	0
	J5	0	0.17	0.39	0.44	0

Similarly, the fuzzy discriminant vectors with respect to other secondary indexes can be calculated. At this juncture, the fuzzy discrimination matrix of economic benefits can be obtained as follows:

$$G_J^1 = W_J^1 \times g_J^1 = [0.237, 0.416, 0.071, 0.118, 0.158] \times \begin{bmatrix} 0 & 0.27 & 0.37 & 0.36 & 0 \\ 0 & 0.04 & 0.55 & 0.41 & 0 \\ 0 & 0.13 & 0.45 & 0.42 & 0 \\ 0 & 0.22 & 0.43 & 0.35 & 0 \\ 0 & 0.17 & 0.39 & 0.44 & 0 \end{bmatrix}$$

$$= [0 \quad 0.143 \quad 0.461 \quad 0.397 \quad 0]$$

According to the principle of maximum membership, the single-factor fuzzy evaluation result of the economic benefits of the carbon measurement and monitoring business is "growth level".

Table 4. Evaluation of the Development Maturity of Social Benefit Indicators for Carbon Measurement and Monitoring Business

Primary Indicators	Secondary Indicators	Expert Rating Ratio				
		1	2	3	4	5
K	K1	0	0.13	0.45	0.42	0
	K2	0	0.08	0.48	0.44	0
	K3	0	0.21	0.47	0.32	0

The social benefits of the carbon measurement and monitoring business are evaluated through fuzzy analysis. Based on questionnaire results, the employment number proportions are: 0% at the budding level, 13% at the initial level, 45% at the growth level, 42% at the mature level, and 0% at the mature optimization level. Similarly, fuzzy discriminant vectors for other secondary indicators can be calculated. The resulting fuzzy discrimination matrix for social benefits is as follows:

$$G_K^1 = W_K^1 \times g_K^1 = [0.542, 0.167, 0.292] \times \begin{bmatrix} 0 & 0.13 & 0.45 & 0.42 & 0 \\ 0 & 0.08 & 0.48 & 0.44 & 0 \\ 0 & 0.21 & 0.47 & 0.32 & 0 \end{bmatrix} = [0 \quad 0.145 \quad 0.461 \quad 0.395 \quad 0]$$

According to the principle of maximum membership, the single-factor fuzzy evaluation result of the social benefit of the carbon measurement and monitoring business is "growth level".

Combined with the fuzzy discrimination matrix of the aforementioned first-level indicators, the fuzzy discrimination matrix of the development maturity of carbon measurement and monitoring business is further calculated as follows:

$$G^{Carbon\ Metering\ and\ Monitoring\ Business} = W^1 \times g^1 = [0 \quad 0.164 \quad 0.435 \quad 0.402 \quad 0]$$

Based on the fuzzy evaluation results, the "growth level" has the highest membership degree at 0.432 among the five levels: "germination level," "start-up level," "growth level," "maturity level," and "maturity optimization level." According to the principle of maximum membership, the carbon metering and monitoring business maturity is evaluated as "growth level".

4.2 The Development Maturity of Carbon Emission Management Business is Evaluated Using a Similar Assessment Approach

The single-factor fuzzy comprehensive evaluation of each index is obtained using the same method as for evaluating the development maturity of carbon metering and monitoring services. Based on these evaluations, the development maturity of carbon emission management is assessed. The detailed calculation process is shown above and will not be repeated here. The resulting fuzzy discrimination vector is as follows:

$$G^{Carbon\ emission\ management} = W^2 \times g^2 = [0 \quad 0.199 \quad 0.407 \quad 0.394 \quad 0]$$

Based on the fuzzy evaluation results, the "growth level" has the highest membership degree at 0.407. According to the principle of maximum membership, the carbon emission management business maturity is evaluated as "growth level".

4.3 Development Maturity of One-Stop Service for the Entire Process of New Energy Station

$$G^{One-stop\ service\ for\ the\ whole\ process\ of\ new\ energy\ station} = W^3 \times g^3 = [0.244 \quad 0.382 \quad 0.279 \quad 0.095 \quad 0]$$

Based on the fuzzy evaluation results, the "starting level" has the highest membership degree at 0.382. According to the principle of maximum membership, the one-stop service maturity for the entire process of the new energy station is evaluated as "starting level".

4.4 Maturity of Network Service Development

$$G^{Network\ service\ development} = W^4 \times g^4 = [0 \quad 0.026 \quad 0.217 \quad 0.354 \quad 0.404]$$

Based on the fuzzy evaluation results, the "maturity optimization level" has the highest membership degree at 0.404. According to the principle of maximum membership, the Internet access service maturity is evaluated as "maturity optimization level".

4.5 Maturity of Subsidy Declaration Development

$$G^{Declaration\ of\ subsidies} = W^5 \times g^5 = [0 \quad 0.026 \quad 0.220 \quad 0.436 \quad 0.319]$$

Based on the fuzzy evaluation results, the "maturity level" has the highest membership degree at 0.436. According to the principle of maximum membership, the subsidy application business maturity is evaluated as "maturity level".

4.6 Data and Information Service Maturity

$$G^{\text{Data and information services}} = W^6 \times g^6 = [0 \quad 0.071 \quad 0.290 \quad 0.411 \quad 0.228]$$

Based on the fuzzy evaluation results, the "maturity level" has the highest membership degree at 0.411. According to the principle of maximum membership, the information service maturity is evaluated as "maturity level".

4.7 Vendor Service Maturity

$$G^{\text{Vendor services}} = W^7 \times g^7 = [0.438 \quad 0.399 \quad 0.157 \quad 0.005 \quad 0]$$

Based on the fuzzy evaluation results, the "budding level" has the highest membership degree at 0.438. According to the principle of maximum membership, the service business maturity of manufacturers is evaluated as "budding level".

4.8 Maturity of Financial Intermediary Business

$$G^{\text{Financial intermediation}} = W^8 \times g^8 = [0.477 \quad 0.434 \quad 0.090 \quad 0 \quad 0]$$

Based on the fuzzy evaluation results, the "budding level" has the highest membership degree at 0.477. According to the principle of maximum membership, the financial intermediary business maturity is evaluated as "budding level".

4.9 Carbon Trading Service Business Maturity

$$G^{\text{Carbon trading services}} = W^9 \times g^9 = [0.080 \quad 0.429 \quad 0.463 \quad 0.030 \quad 0]$$

Based on the fuzzy evaluation results, the "growth level" has the highest membership degree at 0.463. According to the principle of maximum membership, the carbon trading service business maturity is evaluated as "growth level".

4.10 Carbon Financial Service Business Maturity

$$G^{\text{Carbon financial services}} = W^{10} \times g^{10} = [0.348 \quad 0.484 \quad 0.170 \quad 0 \quad 0]$$

Based on the fuzzy evaluation results, the "starting level" has the highest membership degree at 0.484. According to the principle of maximum membership, the carbon financial service business maturity is evaluated as "starting level".

4.11 New Power System Technology Research Business Maturity

$$G^{\text{New power system technology research business}} = W^{11} \times g^{11} = [0.465 \quad 0.435 \quad 0.100 \quad 0.001 \quad 0]$$

Based on the fuzzy evaluation results for the maturity of new power system technology research, the membership degree for the "budding level" is the highest at 0.465. Following the principle of maximum membership, the comprehensive fuzzy evaluation indicates that the maturity of this business is at the "budding level".

5. Conclusion

Based on the maturity evaluation model and analysis of the new energy platform business, the development maturity is assessed using four key factors: strategic capability, technological innovation capability, economic benefit, and social benefit. The improvement in these factors at each level forms the path to enhance overall maturity. By evaluating the maturity model, we can determine the current level and identify practices to bridge gaps between adjacent levels by comparing differences in these key factors.

Acknowledgements

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