Article

Identification of Student Demands and Teaching Reform of Finance and Accounting Curriculum Based on the Kano Model

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Abstract: Background/Objectives: Advancements in digital technologies and regulatory updates have profoundly reshaped the competency requirements for finance and accounting positions. Against this backdrop, this study aims to explore students' hierarchical demands for finance and accounting curriculum reform and propose targeted optimization strategies. Methods: This study adopts the Kano model to design a two-way questionnaire covering three dimensions of student demands: traditional teaching optimization, AI-enabled digital teaching, and industry-education integration adaptability. The research subjects are sophomore and junior undergraduates majoring in finance and accounting at Guangdong University of Science and Technology. A total of 381 questionnaires were collected, and 290 valid samples were retained after data cleaning, with a valid response rate of 76.12%. The Kano model analytical and optimisation approach is adopted to calculate the Better–Worse coefficients of corresponding indicators, which are then plotted into a constructed two-dimensional quadrant diagram. Results: The quadrant results show that Course-job skill alignment , Industry mentor & project training and Industry trends & career development fall in the one-dimensional quadrant with the steepest satisfaction elasticity; Hands-on AI tools teaching and AI finance practical training lie in the attractive quadrant; Timely fiscal & tax policy updates and interactive teaching fall in the must-be quadrant, and the remaining items fall in the indifferent quadrant. Conclusions: This paper proposes a four-tier reform framework: prioritising the fulfilment of students' must-be demands to guarantee content updating and interactive teaching; focusing on enhancing students' one-dimensional demands to realise precise alignment between the curriculum system and occupational skills; selectively optimising students' attractive demands to foster AI-enabled differentiated teaching capabilities; and sustaining the indifferent zone through experiential teaching resources. The findings provide empirical evidence for the precise reform of finance and accounting curriculum.

Keywords: Kano model; Better–Worse coefficients; finance and accounting; student demands; curriculum reform

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Driven by the widespread application of digital technologies and continuous updates to fiscal, tax and accounting regulations, the finance and accounting industry is undergoing accelerated transformation. The core functions of finance and accounting positions are shifting toward a data-driven model, and enterprises have continuously raised their competency requirements for finance and accounting talents. However, curriculum provision has failed to keep pace with industrial transformation: course content often lags behind policy adjustments, and classroom teaching remains dominated by one-way instruction. Meanwhile, there exists a structural mismatch between the curriculum system and the practical requirements of finance and accounting positions. Students have limited access to resources such as enterprise projects, industry mentors and career guidance. Therefore, the teaching reform of finance and accounting courses has become urgent. The effectiveness of teaching reform should ultimately be verified through students' learning experience and competency acquisition, and reform supply should be premised on the accurate identification of student demands. Nevertheless, most existing studies on finance and accounting curriculum reform adopt a supply-side

perspective and lack empirical identification of the hierarchical structure of student demands.

The Kano Model is a user requirement ranking analysis method developed under the influence of the Two-Factor Theory. It can be adopted as a quality management method based on student demands, introducing satisfaction evaluation criteria into the field of quality management to classify and prioritize student requirements [1-4]. The Kano Model subdivides student demand items into five categories with distinct characteristics. Accordingly, this paper introduces the Kano model to design a student demands questionnaire covering three dimensions: traditional teaching optimization, AI-enabled digital teaching, and industrial post adaptability. This study collects questionnaire data from students majoring in Accounting and Finance at Guangdong University of Science and Technology. Based on the classification of demand attributes, it further calculates the Better–Worse coefficients and constructs a quadrant diagram to determine priority levels. On this basis, targeted teaching reform strategies are proposed, providing empirical evidence for precise educational supply.

1. Materials and Methods

1.1. Participants and Data Collection

Questionnaires were distributed to sophomore and junior students majoring in accounting and finance at Guangdong University of Science and Technology. Having completed basic professional courses, these students possess direct experience with current teaching modes. A total of 381 questionnaires were collected, and 290 valid samples were retained after data cleaning, representing a valid response rate of 76.12%.

1.2. Questionnaire Design

This paper collects student demands data for the blended teaching model via questionnaire survey. Designed based on the Kano model, the questionnaire systematically falls into three major categories: traditional teaching optimization, AI-enabled digital teaching, and industrial post adaptability, covering ten specific demand items. Reliability and validity tests are conducted for the Kano questionnaire. All ten demand items are designed as paired positive and negative questions with a five-point Likert scale. Each question offers five response options: I like it, It should be so, I am neutral, I can tolerate it, and I dislike it very much. This setup aims to capture students' satisfaction when a certain function is available or unavailable. The positive and negative responses to each question form a total of 5×5 combinations, as shown in Table 1.

Table 1. Kano Questionnaire Evaluation Form

Service Function Attribute		**Positive Question**				
		I like it	It should be so	I am neutral	I can tolerate it	I dislike it very much
Negative Question	I like it	Q	R	R	R	R
	It should be so	A	I	I	I	R
	I am neutral	A	I	I	I	R
	I can tolerate it	A	I	I	I	R
	I dislike it very much	O	M	M	M	Q

The Kano model also includes the questionable attribute, which corresponds to invalid responses arising from respondents' careless answers or poor understanding of survey questions. In the table, M, O, A, I, R and Q represent must-be, one-dimensional, attractive, indifferent, reverse and questionable attributes respectively.

1.3. Instrument Quality

The results show that the Cronbach's α coefficient is 0.8768 for positive questions and 0.8695 for negative questions, indicating good internal consistency of the questionnaire. In addition, the KMO value reaches 0.9014 for positive questions and 0.8893 for negative

questions. Bartlett's test of sphericity is significant ($p<0.001$), confirming satisfactory construct validity for both positive and negative questionnaires.

1.4. Data Analysis

In conventional questionnaire analysis of the Kano model, the demand attribute of each service item is generally classified according to the maximum count of quality elements reported by respondents.Classifying Kano demand attributes merely by the "maximum count" method not only ignores the distribution of other attribute categories, but also fails to accurately reflect the extent to which the presence or absence of a given service affects respondents' satisfaction. The Better–Worse coefficient addresses this limitation by characterising the marginal effects of each demand item on satisfaction and dissatisfaction [5]. Accordingly, this study adopts quadrant distribution as the basis for priority setting.

The specific calculation formulas for the Better–Worse coefficients are as follows:

$$\textbf{Better} = \textbf{(O+A)/(M+O+A+I)} \quad \textbf{(1)}$$

$$\text{Worse} = (M+O)/(M+O+A+I)\times(-1) \quad (2)$$

1.4.1. Student Demands Classification

Following the analytical and optimisation method of the Kano model, this study statistically categorises ten items of students' latent demands and calculates the Better–Worse coefficients for corresponding indicators, as shown in Table 2. The counts of reverse (R) and questionable (Q) responses remain low across all items, indicating that careless or inconsistent answering is limited and that the responses are largely interpretable.

Table 2. Kano Classification and Better–Worse Coefficient Analysis of Student Demands (N = 290).

Demand Point	A	O	M	I	R	Q	Better	Worse
Timely fiscal & tax policy updates (A)	24	31	100	126	3	6	0.1957	-0.4662
Industry practice integration (B)	30	48	76	119	2	15	0.2857	-0.4542
Interactive teaching (C)	25	42	87	117	10	9	0.2472	-0.4760
Diversified assessment (D)	35	34	46	161	11	3	0.2500	-0.2899
Hands-on AI tools teaching (E)	39	61	60	129	1	0	0.3460	-0.4187
AI personalized Q&A tutoring (F)	39	47	44	152	4	4	0.3050	-0.3227
AI finance practical training (G)	35	58	57	134	1	5	0.3275	-0.4049
Course-job skill alignment (H)	21	82	96	83	3	5	0.3652	-0.6312
Industry mentor & project training (I)	27	82	80	95	2	4	0.3838	-0.5704
Industry trends & career development (J)	28	75	81	99	4	3	0.3640	-0.5512

1.4.2. Better–Worse Quadrant Analysis

To visualise the distribution and priority level of each demand item, the Better coefficient is set as the vertical axis and the |Worse| coefficient as the horizontal axis. Taking their mean values (0.3070 and 0.4585) as the origin, we plot the Better–Worse coefficient quadrant diagram (Figure 1).

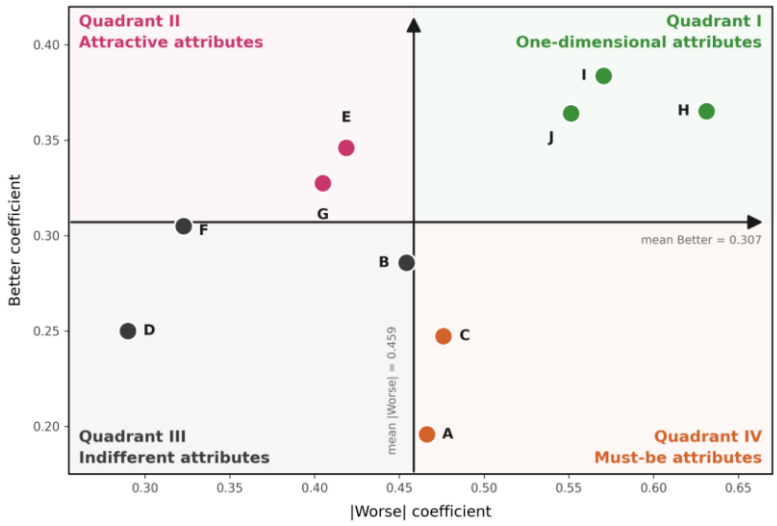

Figure 1. Better–Worse Quadrant Distribution of the Ten Demand Points.

As shown in Figure 1, the first quadrant contains 3 one-dimensional attributes: Course-job skill alignment (H), Industry mentor & project training (I), and Industry trends & career development (J). All three show Better coefficients above 0.36 and |Worse| coefficients above 0.55, with H recording the highest |Worse| value in the table (0.6312). Aligning the curriculum with employment is therefore the central lever for driving satisfaction and preventing dissatisfaction, and educators should prioritize resources here by deepening school–enterprise collaboration and aligning content with job competency standards.

The second quadrant contains 2 attractive attributes: Hands-on AI tools teaching (E) and AI finance practical training (G). Their Better coefficients are relatively high while their |Worse| coefficients remain low, so their presence creates surprise whereas their absence causes little dissatisfaction. Students thus regard AI as a value-added highlight rather than a baseline requirement; AI-based practice and training should be developed as a distinctive feature, and early investment is advisable as such attributes tend to migrate toward one-dimensional ones.

The third quadrant contains 3 indifferent attributes: Industry practice integration (B), Diversified assessment (D), and AI personalized Q&A tutoring (F). All three fall below the overall mean on the Better coefficient and have limited influence on either satisfaction or dissatisfaction, implying low marginal returns. Educators may maintain routine provision without over-investment and redirect resources to the first and second quadrants; notably, B and F lie close to the threshold and are borderline cases.

The fourth quadrant contains 2 must-be attributes: Timely fiscal & tax policy updates (A) and Interactive teaching (C). Both show low Better coefficients but high |Worse| coefficients, meaning students take them for granted yet react strongly to their absence. Educators must secure these baseline items against any deficiency, and investment here should aim at meeting the basic standard rather than pursuing excellence.

2. Discussion

Grounded in the quadrant results, reform should follow a four-tier logic: safeguard the must-be baseline, prioritise one-dimensional inputs, cultivate attractive differentiation, and maintain the indifferent zone. This pattern matches the three questionnaire dimensions: (H, I, J) in the one-dimensional quadrant, (E, G) in the attractive quadrant, and (A, C) and (B, D, F) in the must-be and indifferent quadrants.

(1) Timely fiscal & tax policy updates (A) and Interactive teaching (C) show low Better but high |Worse| coefficients and high must-be counts , meaning their absence provokes strong dissatisfaction; content refresh and interactive teaching should be institutionalised at a compliance level.

(2) Course-job skill alignment (H), Industry mentor & project training (I), and Industry trends & career development (J) show the steepest satisfaction elasticity, with H the highest |Worse| and I the highest Better ; a job-capability map, enterprise mentors and industry-trend modules should be introduced.

(3) Hands-on AI tools teaching (E) and AI finance practical training (G) combine relatively high Better with below-average |Worse|, creating surprise when present but little dissatisfaction when absent; an AI-digital chain from tool experience to scenario training should be built early.

(4) Industry practice integration (B), Diversified assessment (D), and AI personalized Q&A tutoring (F) fall below the mean on Better with limited influence, so routine provision should be maintained and demand upgraded through experiential supply; B and F are borderline cases.

3. Conclusions

Based on 290 valid questionnaires, this study applied the Kano model and Better–Worse analysis to identify the demand hierarchy for accounting-course reform. One-dimensional demands concentrate in industrial post adaptability, attractive demands in AI-enabled teaching, must-be demands in content updating and interactive teaching, and the rest stay indifferent. Reform should follow a four-tier logic: safeguard the must-be baseline, prioritise one-dimensional inputs, cultivate AI-based differentiation, and maintain the indifferent zone through experiential supply. Explicit demands and latent satisfaction sensitivity do not always coincide, so well-designed supply can cultivate demand. Limitations include the single-university sample and cross-sectional design; future research should adopt a longitudinal design.

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