Structural model for creating a human-centered banking strategy in a digital environment

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Abstract

In the context of banking digitalisation and increasing customer experience requirements, the concept of human-centricity becomes particularly relevant. This paper proposes a structural model of a human-centered marketing strategy in banking, focusing not only on clients but also on employees, partners, and society. The aim of the study is to develop a comprehensive approach to implementing human-centricity as the foundation for sustainable bank development in a digital environment. The methodology includes customer and internal data analysis, emotional analysis, and the B2H2H and B4H frameworks. The research identifies four key levels of the model: corporate culture, extended human experience, social responsibility, and ethical digitalisation. The paper presents metrics for SDNA, BTI, EPI, and CPI indices, enabling practical assessment of strategy effectiveness. The practical significance lies in the adaptability of the model to specific organizational contexts and the development of flexible tools for managing emotions and engagement. The originality of the approach lies in integrating emotional intelligence, digital tools, and co-creation by both clients and employees. The article is relevant for researchers in marketing, digital transformation, and human resource management in the financial sector.

Keywords: human-centricity, bank, strategic marketing, engagement, digitalization, customer experience, SDNA, B4H

数字化环境中形成银行以人为本战略的结构模型

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简介

在银行业数字化和客户体验要求不断提高的背景下，"以人为本"的概念显得尤为重要。本文致力于在银行中建立以人为本的营销战略结构模型，不仅关注客户，还关注员工、合作伙伴和社会。研究的目的是制定一种全面的方法，将以人为本作为银行在数字环境中实现可持续发展的基础。方法框架包括客户和内部数据分析、情感分析和 B4H 概念。研究确定了模型的四个关键层次：企业文化、增强客户体验、社会责任和以人为本的数字化。报告介绍了 SDNA、BTI、EPI 和 CPI 指数的计算方法，这些指数可对战略实施的有效性进行评估。其实际意义在于，可以根据特定组织的具体情况调整所提出的模型，并开发灵活的工具来管理情感和参与度。该方法的独创性体现在将情商、数字化解决方案以及客户和员工共同创造价值融为一体。这篇文章对金融行业的营销、数字化转型和人力资源管理研究人员很有意义。

关键词： 以人为本、银行、战略营销、参与、数字化、客户体验、SDNA、B4H

There is a contradiction in modern banking practice. The terms 'customer focus' and 'human-centricity' are actively used in corporate documents and marketing materials. However, their content often remains unclear to both employees and customers of financial institutions, creating significant barriers to the full implementation of these concepts in banks' daily work.

The traditional customer-centric approach, which has become an industry standard, focuses primarily on meeting customer needs at the point of interaction. This is

expressed in the creation of convenient digital services, the optimisation of service processes and the personalisation of offers [Todupunuri, 2025]. However, this approach has some limitations, as it sees the customer more as an object of influence rather than a full participant in creating banking services.

The human-centric model provides a deeper and more comprehensive view of the bank's interactions with all stakeholders. Its key characteristics include:

- taking into account the interests of all participants in the banking ecosystem - not only clients, but also employees, shareholders, regulators and society as a whole;
- focusing on building long-term relationships that go beyond individual transactions;
- integrating ethical principles and values into business processes;
- creating conditions for meaningful dialogue between the bank and its stakeholders.

In practice, many financial organisations that claim to be transitioning to human-centeredness limit themselves to superficial changes. These may include the formal introduction of new positions, one-time training sessions, or local initiatives to improve the corporate culture, but these are not systemic transformations.

The model places particular emphasis on transforming organisational culture, as without profound changes in the values and behaviour of employees, any technological or process innovations will remain incomplete.

An important advantage of the model is its flexibility and adaptability to various conditions. It provides different implementation options, taking into account the specifics of each credit institution, the characteristics of its client base, and the stage of development.

Historically, the first model of business interaction with customers was B2C (Business to Consumer), in which companies directly offer goods and services to end consumers. Later, due to the complexity of economic processes and the development of cooperation between enterprises, the B2B (Business to Business) model emerged, focusing on interaction between organisations. However, despite its formal focus on businesses, B2B also involves relationships between people, as corporate decisions are made by specific employees who interact with each other behind the scenes.

The realisation that any commercial activity ultimately comes down to the human factor leads to the emergence of the B2H2H model (Business to Human (employees) to Human (clients)) [Kotler, 2021]. The development of this concept logically led to B4H (Business for Humans) - a model in which business does not simply sell goods and services, but acts in the interests of people, creating value and long-term relationships in which services are provided to people by the same people.

The B4H model is based on four levels of interaction that form a holistic ecosystem of human-centeredness:

- H1 (Human-Centric Culture) - human-centric corporate culture. This is a transition from KPI-oriented management to a model of employee support and development; the introduction of 'organisational empathic intelligence' that takes into account the emotional state of personnel. Emphasis on the well-being of employees, involvement and long-term development;
- H2 (Human Experience Beyond Client Needs) - human experience beyond client needs. The bank not only satisfies current requests, but also anticipates future needs of clients and employees, creating financial solutions that take into account life scenarios and the context of each person. Proactive support for clients in difficult situations (financial crises, life changes, career changes);
- H3 (Human Ecosystem & Social Responsibility) - social responsibility and the impact of the ecosystem leading to the creation of an interactive platform where the bank becomes a support center, not just a financial institution. Programs for financial education and social adaptation for vulnerable groups are being developed; inclusive banking products are being created for different segments of the population;
- H4 (Human-Driven AI & Ethical Digitalisation) - human-centric artificial intelligence and digitalisation are not technologies that replace people in the workplace. Instead, they act as tools to facilitate and speed up operational processes, allowing people to focus on more important tasks. They provide the opportunity for people to more efficiently and deeply engage with customer problems and to find effective solutions, while AI handles routine work [Lignell, 2023]. The use of hybrid services provides a balance between automation and live communication, based on customer preferences.

The comprehensive model of the human-centric marketing management strategy of B4H Bank consists of three levels. Each level is responsible for creating the necessary elements that characterise the strategy.

The first level is the formation of 'social DNA of the bank', which is the foundation and adaptation of values. Its goal is to create a unified system of values that unites clients and employees. To achieve this, it is necessary to:

- model the bank's values: analyse the corporate culture, values of clients and employees;
- determine the emotional triggers of employees and clients. AI analysis of communications, surveys, HR analytics can be used as tools;
- organise a trust platform, which is a dynamic system for measuring the involvement of clients and employees.

Strategic Decisions and Risk Management / 战略决策和风险管理, 2025, 16(2): 107–202

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Table 1
Example of value categories

Category	Examples of values
Emotional	Trust, empathy, respect
Behavioural	Transparency, engagement, feedback
Social	Inclusion, accessibility, responsibility

Source: compiled by the author.

The result will be a visualised value map. Emotional triggers that influence employee satisfaction and motivation will be identified, and an emotional engagement management strategy will be developed based on these triggers. This will allow us to move on to the next step of personalising the customer experience.

1. The result can be measured using metrics:

Social DNA Index (SDNA Index) - the degree to which a bank's products and communications correspond to its values and customer expectations, calculated using the formula

$$SDNA = \frac{\sum K_c}{N} \times 100\%, \qquad (1)$$

where *SDNA* – the integral index of values conformity (Social DNA Index), K_c – the number of coincidences of values (from the word 'coincidence') between the bank, employees and clients, N – the total number of verified values. A successful result is expected at a rate of 70%+.

To calculate you need:

1) to form a matrix of basic values – a categorical scale, which will become the basis for the survey, text analysis, and comparisons (Table 1);

2) to collect primary data using the following methodologies:

– for external clients:
  – questionnaires (scaling of importance/assessment of values, open-ended questions);
  – interviews (10-20 people, semi-structured);
  – an analysis of reviews on the internet (social networks, forums, app store/google play).
– for internal clients:
  – a survey on the perception of internal values and environment;
  – an analysis of internal communication;
  – interviews with employees at different levels (HR, front-line, IT, strategic).

3) to collect secondary data on bank operations and reputation. Sources of information:

  – ESG reports, press releases, CSR and brand pages;
  – employee engagement statistics (eNPS, turnover, feedback);
  – brand mention tone - tone analysis in social networks;
  – loyalty and trust indices (if any) CSAT, NPS, Brand Trust Index.

4) to standardise and encode data:

  – translate open-ended responses into coded values (qualitative content analysis → frequency of words, categories);
  – assign values to each indicator (0 – no match, 1 – partial, 2 – full compliance) (Table 2);
  – align scales to a single dimension (for example, recalculation into fractions/percentages).

Next, you need to make calculations according to formula (1). The results can be displayed as a Spider chart or Heat map of the values' correspondence.

2. Brand Trust Index (BTI) - how customers perceive a bank, measured by the formula (2):

$$BTI = \frac{\text{Positive mentions} - \text{Negative mentions}}{\text{Total mentions}} \times 100. \qquad (2)$$

To calculate this indicator, it is necessary to collect and analyze public mentions of the brand for a given period. For example, for 3-6 months, social networks, mass media, media mentions, reviews, and comments in bank applications can be used as sources. An example of interpreting the results can be seen in Table 3.

Table 3
Interpretation of the final index

BTI value	Interpretation
0–39	Critical level of mistrust
40–59	Low level of trust
60–74	Average, unstable level of trust
75–89	High level of trust
90–100	Exceptionally high level of trust and reputation

Source: compiled by the author.

Table 2
Data correspondence matrix

Value	Claimed by the bank	Expected by the client	Actually being implemented	Compliance
Transparency	+	+	+	2
Innovations	+	−	+	1
Empathy	−	+	−	0

Source: compiled by the author.

The second level is 'meta-emotion' as a way to manage customers and work experience. The goal of this level is to create an adaptive system that manages emotions of customers and employees. To do this, you need to:

1) conduct emotional analysis of customers and employees in real-time using NLP analysis of messages, speech tone, and behavioral data.

2) make tailored changes to marketing, service, and internal processes based on emotions.

3) calculate automated employee workload distribution - AI analyses stress levels and redistributes tasks.

At this stage, the bank adjusts customer and internal processes in real time based on the emotional state of customers and employees. This leads to the following relationships: engaged employees → improved quality of customer service; optimized workloads → reduced burnout and errors.

Emotional and behavioral data are then used for collaborative product design and internal process optimiыation.

At this stage, the bank carries out prompt adaptation of both client and internal processes, focusing on the current emotional states of both clients and employees. Such dynamic adjustment of interaction allows for the formation of stable relationships: increased staff involvement contributes to the improvement of the quality of client service, while effective distribution of the workload reduces the risk of professional burnout and the likelihood of errors in operational activities. Second-level performance metric:

The Emotional Perception Index (EPI) measures how positive emotions a bank evokes in customers. That is, it measures how much customers feel positive, trusting, pleased, calm, and involved in their interactions with the bank. This is measured using the following formula (3):

$$EPI = \frac{E_+ - E_-}{E_{total}} \times 100, \qquad (3)$$

where E_+ – number of positive emotional responses, E_- – number of negative emotional responses, E_{total} – total number of emotional expressions (including neutral ones).

The calculation is based on three sources: texts, reviews, and social media. First, we need to analyse emotions in texts and comments using emotion detection. Emotions are divided into positive (joy, trust, gratitude, relief), negative (anger, fear, disgust, irritation), and neutral categories. Then, we conduct a survey of customers with direct questions about the dominant emotion experienced during interaction with the bank. Questions are rated on a scale from 1 to 5 or by intensity 'never - sometimes - often - always'. The third source is psychophysiological analysis. If a UX laboratory study is conducted (on mobile applications or in a bank branch), eye-tracking, facial recognition, skin conductance, EEG (in advanced UX centers) are used. This component is rarely used, but it can be included in the scoring system as a reliable marker of emotional reaction. The EPI value can be seen in Table 4.

The third level – live focus groups – involves joint product development and improvement of internal processes, its goal is to use emotions and behavioral data to improve products, customer service and the internal environment. This level requires:

1) creating a digital platform for collaborative design where ideas from clients, employees, and artificial intelligence are synchronised.

Table 4
Interpretation of the EPI scale

EPI value (0–100)	Emotional response of the client
0–30	Discomfort, irritation, negative perception
31–50	Predominantly neutral or contradictory perception
51–70	Moderately positive emotions, basic trust
71–90	High emotional comfort and loyalty
91–100	Strong emotional attachment to the brand (WOW effect)

Source: compiled by the author.

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Table 5
Interpretation of the CPI scale

CPI (%)	Level of involvement
0–30	Formal participation, almost no reactions
31–60	Partial participation, weak implementation
61–85	Moderate and stable involvement
86–100	Strong integration of clients into the bank's development

Source: compiled by the author.

2) implementing interactive feedback and product testing through analysis of reviews and emotional reactions.
3) AI-generated product improvement recommendations for customers and employees [Obuchettiar, Megargel, 2023];
4) changing the working conditions of employees depending on their emotional state.

Products are created taking into account the real emotions and needs of customers. Employees are more involved in optimisation processes. As a result, flexible working conditions for employees lead to a decrease in burnout and, subsequently, an increase in productivity.

Level 3 Performance Metric:

The Customer Participation Index (CPI) allows for quantitative measurement of the degree of customer participation in the development of bank products and services. It also measures the depth and frequency of interaction between customers and the bank, as a co-creator of value. The index is calculated using a formula that takes into account customer feedback:

$$CPI = \left(\frac{P_{\text{involved}}}{P_{\text{total clients}}} + \frac{I_{\text{implemented}}}{I_{\text{offered}}} \right) \div 2 \times 100\%, \qquad (4)$$

where P_{involved} – The number of customers who participated in the creation and improvement of products, $P_{\text{total clients}}$ – total number of active clients, $I_{\text{implemented}}$ – number of ideas implemented, I_{offered} – total number of ideas proposed by clients.

The share of engaged customers can be determined by using CRM (Customer Relationship Management) platform analytics (how many customers participate in surveys, testing, and participation programs), as well as forms (Google Forms, Typeform, 'Suggest an idea') and a platform such as the customer's personal account or mobile app.

Information on the share of accepted ideas (implemented) can be obtained from internal reports/initiative logs, platforms such as the 'idea bank', crowdsourcing portals, and reports on the implementation of client proposals (for example, from public communications).

The sum of the two indicators, P and I, must be divided by 2 because the CPI formula uses two equally important components. The arithmetic mean of their shares is taken, as an example of interpreting the results, which can be seen in Table 5.

Let's take a closer look at how the state of employees and their attitudes towards them affect the customer experience:
- burnout → slow and poor service → negative customer emotions → customer churn;
- engagement → empathy → improved customer experience → increased satisfaction;

Fig. Schematic visualisation of the model
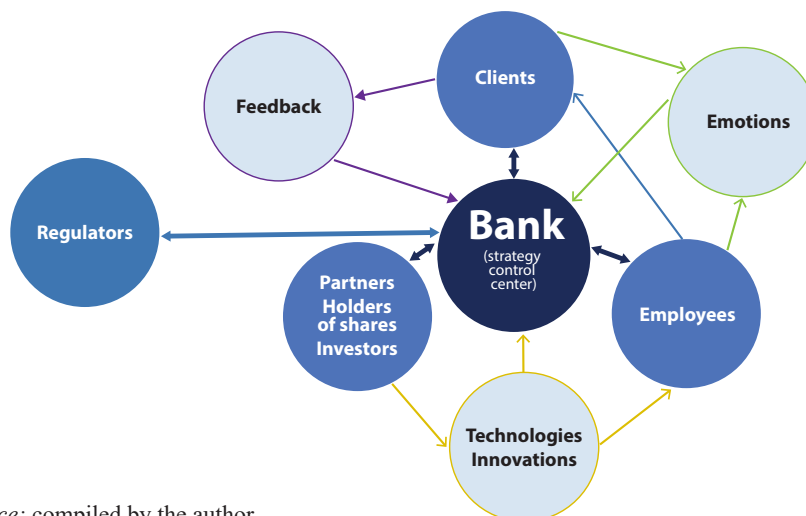
Source: compiled by the author.

• flexible working conditions → employee motivation → better service → increased trust in the bank.

You can see a direct relationship between employees and the quality of a bank's products. In a human-centric model, interactions are dynamic, involving employees and partners, as their emotions and involvement determine the level of service. This is in contrast to traditional marketing models where interactions are only between banks and clients.

In the human-centric model, the bank is the central node of the ecosystem. It implements strategic management of all key processes. This can be seen in the figure. The employees form customer service, and are actively involved in product development. Customers provide feedback and participate in the joint creation of value. Partners, including financial, technological and social organisations, contribute to the development of innovative solutions, while regulators, represented by the central bank and government institutions, set the regulatory framework for operation. The interaction between the elements of the ecosystem is based on the principles of mutual benefit: employees gain access to corporate values, training programs and modern technologies, ensuring a high level of engagement, service quality and innovation. Clients use personalised products and services while simultaneously providing the bank with data, emotional responses and loyalty. Employees, through high-quality service, create a positive emotional experience for clients, which in turn serves as a basis for further improvement of service. Partners provide resources, investments, and technological solutions and the bank provides access to new markets, integration models. Compliance with regulatory requirements ensures the transparency and sustainability of the entire ecosystem. It is not just a bank but a living ecosystem where each participant influences the quality of service and strategy.

Unlike the traditional model, where banks 'force' products on clients, the human-centric model is based on flexible relationships and mutual beneficial development.

The emotions of employees and customers become not just a fact, but a tool for marketing and business development. As a result, the bank operates on values and involvement as a dynamic and self-developing platform.

To implement the proposed bank's marketing management strategy, the following steps need to be taken:

1. Creating a human-centric banking environment, rethinking the internal culture, and forming a human-centered business model:
   – introduction of emotional leadership - training managers to work with employee motivation and engagement;
   – revision of the performance evaluation system - not only KPIs, but also the Employee Well-being Index.
   – creation of a flexible work environment where employees feel part of a meaningful process.
   – inclusion of clients and employees in the process of joint product design (co-creation)
   – development of the concept of 'financial mentoring', where the bank acts not only as a service, but also as life consultant
   – taking into account not only transaction data, but also context factors (changes in social status, life priorities, personal circumstances).

2. Interacting with customers as people, not as sales objects; moving from managing customer segments to managing life scenarios; demonstrating the flexibility of digital solutions for customer behaviour:
   – instead of standard product lines, individual life models are offered that take into account the client's financial and personal circumstances.
   – focus is on the mental well-being of clients, reducing stress during financial transactions and promoting transparency in decision-making. Aggressive sales are avoided.
   – adaptive interfaces are implemented, allowing the bank to adapt to the user's level of financial literacy. Predictive services are developed to help avoid financial difficulties. Interaction is through a 'financial interlocutor' rather than just chatbots.

3. Social dimension of human-centeredness. Changing the position of the bank in society; making the bank a trusted partner, not just a seller of services.
   – development of sustainable financial behaviour programs: helping clients to develop healthy financial habits.
   – the bank as a support platform, not just a commercial structure (educational initiatives, mentoring).
   – creation of inclusive products, taking into account the needs of people with limited mobility and pensioners.
   – development of ethical marketing and refusal of manipulative sales.
   – increase in the transparency of conditions and reducing cognitive load when making financial decisions.
   – implementation of the 'financial compass' mechanism to help clients find optimal solutions without pressure from the bank.

The B4H model differs from a customer-centric approach in that it not only personalises financial services, but also creates a new paradigm for marketing management based on a deep understanding of the person, their needs, emotions, and life scenarios.

The bank of the future is not just a financial institution, but a social entity that creates long-term value connections between people, technology and society. This model combines analysis of customer and employee emotions to create a living, dynamic ecosystem within the bank. Employees and customers become part of the value-creation process. Emotions are used not only for sales but also for internal optimisation, which allows the bank to gain flexibility and adaptability. Customers get a personalised experience as a result.

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