

Adaptive Ability Assessment Model for New Business Mode of Power Grid Enterprises in Electricity Retail Sector

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Abstract—With the advancement of various reform tasks, from the perspective of business content, service objects, and service channels, traditional power grid enterprises are facing a new business mode in electricity retail sector. Based on enterprises' core influencing factors analysis of new business mode adaptability, combining special commodity attributes with real-time balance for power generation and supply, an adaptive ability assessment model for new business mode of power grid enterprises in electricity retail sector was constructed, including organizational system, business operations, guarantee support these three primary indicators, which includes 11 secondary indicators, such as adaptability of business strategy and adaptability of management structure. It was found that there were some differences in adaptive ability for different types marketing business of State Grid Corporation of China, and traditional power supply services are generally better, but there is still a big gap compared with advanced external enterprises.

Keywords—power grid enterprises; new business mode in electricity retail sector; adaptive ability assessment

I. INTRODUCTION

With the reform of electric power system and the reform of state-owned enterprises, the business in electricity retail sector has entered a new development period. From the perspective of business content, service objects, and service channels, traditional power grid enterprises is facing a new business mode[1]. From the perspective of business development, influenced by reform, power grid enterprises' traditional power supply service business and emerging business functions have become diversified and business complex, business

environment has undergone profound changes and presented a brand-new competitive ecology. Marketing department is the last link of the power supply service chain and the most front-end of customer service, which is first to perceive changes and to bear the most pressure facing new business and new competitive ecology[2]. To meet the strategic goal of the State Grid Corporation of China(SGCC) to build a world-class energy Internet enterprise with outstanding competitiveness, marketing department will become customer resource centers, new profit centers, Blue Ocean centers and innovation growth power centers, it is urgent to build a new era marketing system.

This paper firstly studies adaptability evaluation core influencing factors of new business mode in electricity retail sector, and a diagnostic model was constructed to evaluate and analyze the adaptability of SGCC facing new business mode in electricity retail sector.

II. CORE ELEMENTS FOR ASSESSING ENTERPRISE ADAPTIVE ABILITY OF NEW BUSINESS

Enterprise marketing ability is an enterprise that accurately obtains information about the market and customers, sharply judge the market development trend, develop a correct marketing strategy, accurately locate the target market, and implement appropriate and effective R&D, promotion and service strategies, thereby occupying a higher market share and the ability to make a profit[3]. Among existing research results, core elements and indicators of marketing competence evaluation of enterprises in different industries are shown in Table 1:

TABLE I. CORE ELEMENTS AND INDICATORS OF MARKETING COMPETENCE EVALUATION OF ENTERPRISES IN DIFFERENT INDUSTRIES

Type of enterprise	Core elements	Source
Petroleum	<ul style="list-style-type: none"> ➤ Sales network construction, including oil refining, chemical and other resources acquisition capabilities, downstream sales network coverage density, etc. ➤ Product strategy, including product sales, product development and market demand, product pricing, etc. ➤ Internal management and sustainable development ability, including R&D staffing and R&D investment, standardization and flexibility of management system and mechanism, etc. ➤ Customer management and services, including customer value analysis and diversified service customization, customer complaint handling, customer relationship management, etc. 	CNKI
Telecom	<ul style="list-style-type: none"> ➤ Information competitiveness, including information analysis level, information system support ability, etc. ➤ Strategic competitiveness, including target market positioning, decision-making ability, brand strategy, etc. ➤ Strategy competitiveness, including channel utilization, pricing, promotion and other strategic applicability; ➤ Execute competitiveness, including marketing team, customer relationship management, supply chain relationship management, etc. 	CNKI
Internet	<ul style="list-style-type: none"> ➤ Resource ability, including capital acquisition ability, customer ownership, etc. ➤ Organizational competence, including the quality of marketing human resources, the perfection of organizational system, the effectiveness of incentive and supervision mechanism, etc. ➤ Dissemination power, including product, price, channel, promotion competitiveness, etc. ➤ Image power, including brand reputation, service fit degree, etc. ➤ Information power, including information acquisition ability, information channel construction, etc. 	CNKI
Other	Product innovation and development capabilities, quality management capabilities, brand management and marketing communication capabilities, supply chain and sales management capabilities, service and customer relationship management capabilities, etc.	MBAlib

Generally speaking, core elements of marketing competence assessment have following characteristics:

Firstly, it attaches great importance to customer segmentation, business decision flexibility, market channel development, customer relationship management and other business operation indicators.

Secondly, should pay more attention to supporting indicators such as business synergy, assessment and motivation.

Thirdly, the differences between natural monopoly enterprises and market competition in the evaluation of marketing adaptive ability are mainly reflected in the differences in customer resource accumulation, the importance of brand value, product and service innovation.

III. ADAPTIVE ABILITY DIAGNOSTIC MODEL FOR NEW BUSINESS MODE IN ELECTRICITY RETAIL SECTOR

A. Model Constructed

Combining special commodity attributes with real-time balance for power generation and supply, the new situation and characteristics in electricity retail sector, such as natural monopoly and competitive business overlap, multi-dimensional life cycle business overlap, etc., the marketing department adaptive ability evaluation system of new business mode in electricity retail sector should follow these principles: First, it should take into account both traditional and emerging businesses, and it is versatile, that is can be compared with different types of enterprises. Second, it is able to comprehensively judge the organizational system, business operations and guarantee support. The specific interpretation of adaptive ability diagnostic assessment indexes for new business mode in electricity retail sector is as shown as Fig.1.

TABLE II. SPECIFIC INTERPRETATION OF ADAPTIVE ABILITY DIAGNOSTIC ASSESSMENT INDEXES FOR NEW BUSINESS MODE IN ELECTRICITY RETAIL SECTOR

Primary indicators	Secondary indicators	Specific indicators
Organizational system adaptability	Business strategy adaptability	Can the business layout, product and service development direction adapt to the external development environment and adjust flexibly.
	Management architecture adaptability	Whether the management structure and hierarchy are adapted to the characteristics and needs of business development, and whether the management mechanism is complete.
	Front-end and background function perfection	Front end and background division specialization, concentration, comprehensiveness and so on.
Business operations adaptability	Customer segmentation and service matching	Whether the customer segmentation is suitable for customer needs, business development needs, business information analysis capabilities, etc.
	Front end and background collaborative quality	Coordination of internal and external resources and efficient allocation.
	Business channel development and application ability	The standardization and rationality of the overall use of all kinds of business channels.
	Information system support ability	The completeness, advancement and applicability of information system.
	Product and service innovation ability	Original innovation ability of products and services.
Guarantee support adaptability	Talent allocation ability	Does the size of staff, the quality of professional personnel meet the needs of business development
	Business decision flexibility	Applicability of authorization and control systems, etc.
	Effectiveness of incentive assessment	Effect and quality of the incentive assessment mechanism.

B. Diagnosis Method

Because it is a comprehensive evaluation of marketing department adaptability, the weights of the indicators are the same. Each indicator is evaluated according to the scores of 1 to 3 organizational experts, and the evaluation is carried out between different internal and horizontal business, external vertical and advanced enterprises:

1) Diagnosis of marketing adaptability of SGCC for different types of business

Horizontal evaluation of various business marketing adaptabilities, such as traditional power supply services, electric energy replacement, integrated energy services, retail electricity, e-commerce, and vehicle network operations.

2) Comparative analysis of marketing adaptabilities with external companies

Comparative analysis with companies such as Electricite De France(EDF), Tokyo Electric Power Co(TEPCO), China Mobile, Huawei, and Alibaba.

IV. ADAPTIVE ABILITY DIAGNOSTIC ANALYSIS OF SGCC FACING NEW BUSINESS MODE IN ELECTRICITY RETAIL SECTOR

A. Diagnosis of Marketing Adaptability of SGCC for Different Types of Business

In general, the traditional power supply service marketing ability is better adaptable, the marketing ability of emerging business is less adaptable and the weak links of different

businesses are different, indicating that the emerging business presents the problem of “acclimatization” under the traditional management mode, which is as shown as in Fig.2.

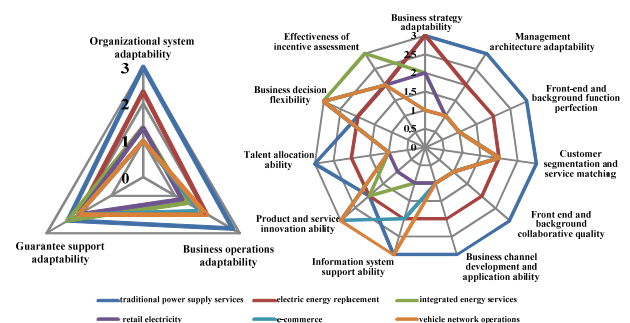


FIGURE 1. DIAGNOSIS RESULTS OF MARKETING ADAPTABILITY OF SGCC FOR DIFFERENT TYPES OF BUSINESS

1) With regard to traditional power supply services and electric energy replacement services, the adaptability in organizational systems and business operations is relatively good, and the relatively weak links are reflected in product and service innovation capabilities and guarantee support.

As a basic force to guarantee basic electricity consumption, the traditional power supply service has formed current organizational system and business operation mode after long-term exploration, so continuity and fit are the highest. Traditional power supply services emphasize safety and reliability, service quality and efficiency, so the original business innovation needs are not strong. Compared with

emerging businesses, there is a gap in business decision-making flexibility and incentive assessment effectiveness, and the burden on grassroots business units is generally heavier.

2) With regard to emerging businesses, the organizational system is generally less adaptable, and the problems of weak business operations and guarantee support infrastructure are more prominent.

Front end and background division office collaboration, business channels are generally lacking, and basic guarantee support is weak. Among them, e-commerce and vehicle network operations are relatively better in terms of information system support, product and service innovation due to business characteristics.

B. Comparative Analysis of Marketing Adaptabilities with External Companies

Compared with the advanced enterprises that started the reform and focused on marketing work, the company has a significant gap in marketing organization system, business operation and guarantee support ability. Among them, Alibaba has a significant advantage in all aspects as a first-class Internet company. With the advanced level of benchmarking, SGCC should comprehensively improve its marketing adaptive ability, which is as shown as in Fig.3.

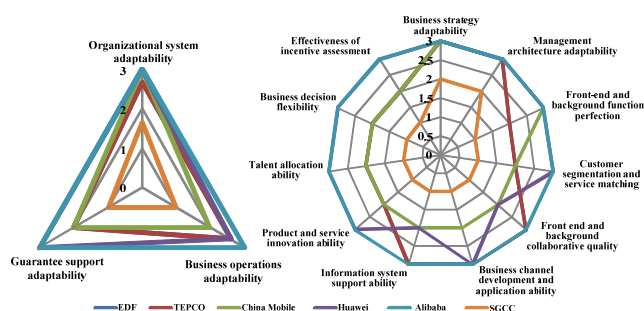


FIGURE II. COMPARATIVE ANALYSIS RESULTS OF MARKETING ADAPTABILITIES WITH EXTERNAL COMPANIES

V. CONCLUSION

Benchmarking advanced enterprises, combined with weak links of the company, in terms of future organizational system optimization, SGCC should study and construct an organizational structure that adapts to the next-generation marketing system, and improve the front-end and back-office functions to meet business needs; in terms of business operation optimization, improve customer segmentation and service matching optimization strategies, front-end and background collaboration mechanisms, business channel development and application mechanisms, information system support ability improvement strategies, and product and service innovation ability improvement strategies; in terms of optimization of guarantee support, realize the lean allocation of human resources, improve the reasonable authorization mechanism, and evaluate the incentive mechanism.

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