

# Research on the Transformation and Development of Application-Oriented Undergraduate Programs Driven by Product-centric Mindset—A Case Study of Hotel Management

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**Abstract.** The necessity of proficient thinking guidance cannot be overstated when aiming for the transformation and superior advancement of application-oriented undergraduate programs. Hotel management, being a quintessential application-driven discipline, continues to grapple with a spectrum of hurdles encompassing antiquated guiding principles, restricted digitalization, cursory industry-education integration, firmly entrenched faculty paradigms, and nebulous curriculum benchmarks. Consequently, this paper posits the proposition of instituting a consensus pertaining to a product-centric mindset for program evolution, the formulation of comprehensive product-oriented curriculum standards, a reevaluation of the teacher's role identification, as well as the enhancement of program development process management and the assurance of quality.

## 1 Introduction

Application-oriented programs leverage their deep industry-education integration as a primary advantage to cultivate a substantial pool of specialized professionals for various industries. In the backdrop of the era characterized by informatization and digitization, multiple sectors in society are undergoing unprecedented transformations and challenges, necessitating timely proactive responses from application-oriented undergraduate programs. These programs should accelerate their transformation, upgrading, and innovative development in congruence with the evolving external environment. Hotel management, as a traditional field, swiftly emerged and expanded in response to the vigorous growth of the tourism and hospitality industry. Hitherto, it has established an extensive education hierarchy spanning from vocational training to higher vocational education, undergraduate studies, master's programs, and even doctoral studies. Among these, the application-oriented undergraduate level occupies a pivotal and substantial portion. Drawing upon the extensive presence of major players in the hotel industry market, numerous educational institutions have initiated partnerships with enterprises to enhance the depth of industry-education integration, with the aim of fostering the high-quality development of talent. However, a persistent challenge remains: a deficiency in understanding the fundamental essence and character of this industry-education integration and an inability to effectively discern innovative advancements in the industry's transformation and progress. This deficiency has resulted in constraints on the conceptualization of industry-education integration,

blurred demarcation lines, and impediments in achieving collaborative synergy between educational institutions and enterprises. Hence, taking the undergraduate program in hotel management as an illustrative case, it becomes imperative to meticulously scrutinize the essence of industry-education integration, considering the changing environmental dynamics. This endeavor involves distilling the direction and goals of the transformation and development of the hotel management field and reshaping the leading logic and innovative thinking in program development. Addressing these issues is of utmost importance. Innovative reform measures and efficacious implementation are indispensable for substantially elevating the caliber of talent nurturing, facilitating program iteration, and fostering holistic advancement within the field.

## 2 Literature Review

Research on the transformation and development of hotel management programs has centered on several key aspects, including educational models, practical teaching methods, faculty resources, and school-enterprise collaborations. Early studies have addressed critical issues within the hotel management field, such as the misalignment between talent cultivation and industry demands, inaccurate goal setting, a curriculum system that places insufficient emphasis on skill development, and the lack of operational mechanisms in school-enterprise collaborations. Consequently, recommendations have emerged to promote the transformation of faculty resources and deepen the

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program's internal development <sup>[1]</sup>. Additionally, some studies have underscored issues in hotel management talent development, such as an overemphasis on service-related skills at the expense of managerial skills and a greater focus on social skills while neglecting technical competencies. In response to these issues, recommendations have been put forth, focusing on refining talent development plans, restructuring curriculum frameworks, and enhancing practical training platforms <sup>[2]</sup>. Faculty transformation has also been proposed to keep educators up-to-date with evolving industry dynamics <sup>[1]</sup>. Furthermore, there is an emphasis on leveraging new technologies, specifically the "Internet + Hotel Management" approach, to drive the adjustment and optimization of traditional hotel management programs and create specialized programs for the digital economy era <sup>[3]</sup>. In terms of practical teaching in hotel management, constructing a comprehensive practical teaching system is recommended, focusing on defining clear objectives, structuring relevant content, establishing support mechanisms, and implementing practical assessment and evaluation procedures <sup>[4]</sup>, and it is also combined with the filling of concrete practical teaching work to strengthen the positive cognitive attitudes of young talents towards the development of the profession and industry, as well as professional self-confidence <sup>[5]</sup>. Suggestions have also been put forth for the construction and development of undergraduate hotel management program laboratories to provide students with hands-on learning experiences <sup>[6]</sup>. Moreover, the concept of a practical teaching system can involve the integration of course experiments, professional practices, and real-world experiences within the hotel management field <sup>[7]</sup>. Faculty development in hotel management can benefit from the creation of a "dual-teacher" teaching workforce through shared faculty training platforms, the formulation of cooperative evaluation systems, and innovative collaborative mechanisms <sup>[8]</sup>. Furthermore, involving industry experts in the development of "dual-qualified" teaching staff at universities is essential <sup>[9]</sup>. At the same time, the construction of enterprise immersion system for professional teachers is carried out to effectively strengthen the value of professional theoretical knowledge in practical teaching <sup>[10]</sup>. Notably, the recent application of a product-centric mindset in international Chinese education reform research <sup>[11]</sup> has yet to be deeply integrated into the development of hotel management programs. This paper, using the hotel management field as a case study, aims to analyze the current state of the industry-education integration and proposes a perspective centered on a product-centric mindset for the transformation and development of hotel management programs.

### **3 Current Status of Transformation and Development in Hotel Management Programs**

#### **3.1 Outdated and Insufficiently Iterated Guiding Ideology and Lack of Top-Level Design**

High-quality talent cultivation necessitates a scientific and rational guiding ideology and educational philosophy. Moreover, it should proceed in alignment with a systematic top-level design. Existing guiding ideologies often adhere to traditional and entrenched notions. For instance, some emphasize excessive training in operational skills while neglecting the cultivation of critical thinking, competency, and theoretical application. This results in a lack of clear differentiation between undergraduate and vocational education. Conversely, some ideologies lean towards a theoretical approach, focusing solely on theoretical explanations within the subject's knowledge framework, with inadequate practical training and application exploration. This approach can leave students ill-equipped to handle real-world job positions, often labeled as having "high expectations but low capabilities." It is notable that there are shortcomings in the guiding ideology of hotel management program development, marked by outdated perspectives and insufficient adaptation. Application-oriented undergraduate programs in hotel management should aim to produce professionals with practical skills capable of addressing real-world industry challenges. Simultaneously, they should possess sound professional ethics and qualities to adapt to the evolving demands of the industry's continuous innovation and development.

#### **3.2 Sluggish Progress in Digitalization Initiatives and Limited Achievements**

In the digital age, the hotel industry and hotel management programs are on an inevitable path of digital transformation. Currently, there are varying perspectives on the understanding of digital applications, transformation, and innovation in the hotel industry. Stakeholders, including owners, hotel management companies, employees, and customers, all express diverse opinions regarding digitalization. The hotel industry is characterized by its diversity, wide range of formats, significant differences in business models, and varying scales. It faces new challenges, such as increasing labor costs, relatively low overall labor efficiency, and more demanding customer experience expectations. The impact of digital applications varies for different types of hotels and stakeholders, but the pervasive use of digital technology is an irreversible trend. Correspondingly, internal hotel management will bring about more changes and demands regarding organizational structure, operational models, and employee management. This shift will also usher in new job categories, such as positions related to new media operations. Currently, the progress in digitizing hotel management programs has been relatively sluggish, and the effectiveness of using digital technologies and resources to cultivate students'

digital thinking and capabilities remains limited. If digital education within hotel management programs remains confined to traditional system module operations training, it will only exacerbate the gap between education and industry talent demands. The root cause of this issue lies in a misunderstanding of the role of digitalization. Digitalization in hotel management programs is not about training programmers or engineers; instead, it is about nurturing professionals who understand digital applications and possess the skills for innovative analysis. Through digitalization initiatives, there is an opportunity to optimize curriculum design and enhance its quality. This approach allows students to become familiar with the current state of digital applications in the industry, grasp future trends, and cultivate innovative thinking to adapt to the new standards of digital transformation in the industry.

### **3.3 Failure of Superficial Industry-Education Integration to Support Talent Development**

Industry-education integration is the lifeblood of the development of the hotel management profession. However, misconceptions and practical challenges remain regarding "what and how to integrate." Extant efforts in industry-education integration have made some progress, including the joint development of training programs, the creation of specialized courses, collaboration in practical teaching, the establishment of educational platforms, the execution of application-oriented research projects, the publication of innovative teaching materials, and faculty internships. However, when scrutinizing graduates' career preferences and prospective trajectories, there is a weaker inclination among them to pursue careers in the hotel industry. The percentage of graduates who actually secure high-value positions within the industry remains limited. Effective industry-education integration should provide students with comprehensive educational support to meet high-value job positions. However, there are signs of superficiality in the actual implementation of industry-education integration. Many hotel companies' involvement in integration activities primarily revolves around promoting their corporate culture, attending symbolic conferences, and extending discussions. They often offer limited practical suggestions for educational reform within the field, and there is a lack of in-depth consideration of industry trends and emerging requirements. Furthermore, some hotel departments maintain rigid perceptions of the talents needed in the modern era, primarily viewing them as suitable for labor-intensive foundational positions in the service industry. They often lack adequate attention to the hotel industry's digitalization, the application of new technologies, and innovations in management. As a result, the evolving industry trends and new demands are not effectively integrated into the educational programs within the field. Moreover, in the process of industry-education integration, hotels exhibit a lack of enthusiasm, often regarding students merely as a means to control labor costs. Students typically make their employment choices independently, and there is no enforced placement of

students at specific hotels. Regarding financial contributions, hotels provide limited or even negligible direct monetary investments. Instead, they tend to contribute indirectly through non-monetary means, such as organizing student field visits or facilitating teachers' temporary placements within the industry. Consequently, this surface-level approach to industry-education integration fails to achieve the intended outcomes in terms of students' critical thinking and skill development, making it increasingly challenging for them to excel in high-value job positions.

### **3.4 Difficulty in Facilitating Role Transition of Faculty Members**

As educators, it is the responsibility of the teaching staff to continuously adapt to their environment and undergo self-improvement and iteration. In the context of industry-education integration, teachers should strengthen their professional awareness. The responsibility of "imparting knowledge, dispelling doubts, and teaching" should be approached with a market-oriented mindset, considering students as the end product of education and nurturing them meticulously throughout the process. However, some teachers are content with delivering knowledge within the confines of their subject matter expertise. They do not fully engage in instructional design that addresses real-world issues in the hotel industry. They may perceive themselves solely as disseminators of theoretical knowledge or trainers of basic operational skills. Their attention to industry trends, innovative applications, digital and intelligent analysis, and understanding of job role transitions may be lacking. These professional educators have yet to redefine their roles as product managers, making it difficult for them to integrate into the professional activities of industry-education integration. This situation leads to outdated knowledge systems, outdated training programs, and the inability to keep up with the demands of the modern era. For instance, aspects such as the application of new media technologies, digital marketing, and internet-based thinking may not receive sufficient attention and emphasis in their curriculum. The teaching staff is the foundation of professional development, and there is an urgent need to shift away from rigid role perceptions. Only by proactively adjusting to the role of a product manager can they effectively contribute to the transformation and development of the profession.

### **3.5 Lack of Product-centric Mindset in Course Development Quality Standards**

The development of flagship courses is the core vehicle and a crucial foundation for ensuring talent development and professional construction. In the process of vigorously strengthening the reform and innovation of flagship courses, the driving force and role of the product-centric mindset have not been given sufficient attention. The existing Outcome-Based Education (OBE) concept is somewhat aligned with the product-centric mindset, but the modern product-centric mindset places more emphasis

on market sensitivity and connectivity, maintaining a constant focus on the industry. The current curriculum development process lacks clear standards or a standardized system guided by the product-centric mindset. A scientifically effective standard system serves as a guideline for implementing curriculum development based on the product-centric mindset, providing a reference for collaborative curriculum development by teachers and students. The primary product of academic institutions is the graduates they nurture, while the hotel industry's product is a series of services that meet market value demands. Industry-education integration provides a solid theoretical foundation for curriculum development based on the product-centric mindset. However, it is also necessary to examine whether the product characteristics of educational outcomes align with the high-value positions in the industry from both educational and corporate perspectives. In the future, curriculum development objectives and directions should be reverse-engineered based on the comprehensive requirements of high-value positions. This process will lead to the construction of curriculum quality standards.

## **4 The Reform and Construction Approach Driven by Product-centric Mindset in Hotel Management**

### **4.1 Clarify the Essence and Logical Analysis of Product-centric Mindset**

The essence of the product-centric mindset is rooted in market orientation. It commences with the dynamic adaptation to high-value positions within the industry, involves profound contemplation of the comprehensive abilities, knowledge, and qualities demanded by enterprises, and culminates in formulating the educational blueprint for professional talent. Drawing from the attributes of these talents, it then retroactively designs programs for training professional talent and curriculum systems, utilizing a knowledge map to establish correlations between product profiles and curriculum systems. Both student development and curriculum construction stand as flagship products of a profession. By embracing a product-centric approach in curriculum development, students' competitiveness and adaptability are bolstered, aligning them more effectively with high-value industry roles. The critical prerequisite for achieving this is a focused effort on identifying and defining high-value position clusters in the present and future.

### **4.2 Establish Standards for Curriculum Development Based on Product-centric Mindset**

Courses form the nucleus of professional talent development, and incorporating the product-centric mindset into curriculum development necessitates the establishment of precise standards as benchmarks. These standards can be crafted around four key indicators: philosophy and objectives, teams and platforms, content

and resources, and outcomes and evaluation. Regarding philosophy and objectives, curriculum development for the Hotel Management program, driven by the product-centric mindset, should adopt a market and customer-centric approach. It should commence by bolstering the competencies essential for high-value positions within organizations and then work in reverse to craft a comprehensive curriculum knowledge map. The curriculum development objectives should be in harmony with the broader strategy for industry-education integration at the university. This approach should facilitate the profound integration of recessive knowledge and practical aspects stemming from real-world practices, unifying the processes of value creation, knowledge transmission, and competency enhancement for high-value positions. Concerning the team and platform aspect, it is imperative to establish a curriculum team comprising both full-time and adjunct members, with a dedicated inclusion of industry professionals in a specified ratio. Ongoing curriculum development should be the norm, fully capitalizing on and integrating resources available from on-campus practical teaching platforms and industry-education integration platforms, particularly those developed in partnership with enterprises. These platforms should facilitate the exploration of diverse resources and the implementation of innovative teaching methods in alignment with contemporary trends, thereby enabling continuous and systematic curriculum enhancements. In terms of content and resources, the curriculum should be meticulously attuned to the competencies essential for high-value positions, as delineated by the reversed knowledge map. It is advisable to promote team-based group assessments employing mediums such as documents, reports, and proposals to augment students' learning experiences through exploratory curriculum innovations. Furthermore, there should be a concerted effort to create high-caliber visual digital teaching resources through collaborative ventures with enterprises. These resources may encompass digital courses, repositories of case studies, and videos featuring industry experts. With respect to outcomes and evaluation, it is imperative to construct a knowledge map and create three-dimensional teaching resources, including digital courses. The curriculum's quality should garner recognition from industry enterprises and peer institutions, meeting the criteria of being advanced, innovative, and intellectually stimulating. A proportionate emphasis should be placed on the design of the indicators outlined above, and pilot curriculum development projects guided by the product-centric mindset should be launched within the framework of educational reform initiatives.

### **4.3 Cultivate a Faculty Committed to Product-centric Mindset**

The cadre of educators with a product manager-type role assumes a central position in the transformation and advancement of the Hotel Management program. They must possess a profound comprehension of high-value positions within the industry, stay abreast of cutting-edge developments, and have practical insights. Educators can

enhance their comprehensive understanding of product concepts, educational outcomes, the corporate ecosystem, and technological innovation chains by engaging in initiatives such as teacher secondments for industry-education integration and participating in external training and conferences. This approach enables educators to steer clear of becoming ensnared by outdated knowledge and pedagogical methods. Instead, they should proactively embrace and adapt to technological and educational shifts, forging a shared consensus on adopting a product-centric mindset. Educators should also engage in self-reflection regarding whether curriculum development objectives, content, teaching techniques, process design, and outcome assessments effectively align with students' readiness for high-value positions. As an illustration, through teacher secondments, they can conduct interviews and research pertaining to Hotel Management courses, industry viewpoints, and trends in organizational operations. Subsequently, this acquired knowledge can be transformed into digital resources to facilitate ongoing curriculum enhancements. Moreover, by intertwining the industry's value chain with educational innovation, educators can pinpoint areas of breakthrough for establishing a distinctive program brand. In this process, harnessing the expertise of product manager-type educators becomes pivotal.

#### **4.4 Ensure Comprehensive Quality Improvement in Hotel Management**

The development of the Hotel Management program driven by a product-centric mindset follows a process-oriented progressive sequence. It encompasses multiple phases, beginning with conducting research on product demand, followed by defining the program's focus, curriculum design, execution of teaching activities, quality assurance, and facilitation of student career development. At each of these stages, product-oriented practices should be seamlessly integrated. Commencing with the examination of high-value job positions and their specific requirements, the program's focus and objectives are markedly articulated and substantiated. This behavior forms the foundation for constructing the curriculum framework and knowledge map. In practice, instructors orchestrate innovative teaching activities and actively engage industry partners to sustain the continuity of industry-education integration. Furthermore, graduates warrant ongoing services as representatives of the program's educational outcomes. The program bears the responsibility of furnishing an array of opportunities and platforms to foster their career development. Similar to how high-quality products necessitate effective marketing, the program can extend career recommendations, counseling workshops, and guidance for pursuing further studies as part of its career counseling and job placement initiatives. Acknowledging the diversity among students, personalized academic and career assistance is indispensable to ensure that each student can fulfill their goals. For instance, in the Hotel Management program, an undergraduate mentorship system is in place, with dedicated instructors offering one-on-one support in areas

such as academic reinforcement, practical activities, and foreign language proficiency.

#### **4.5 Maintain Continuous Quality Control in Professional Development**

Quality management theories drawn from the realm of business civilization are equally applicable to the development of Hotel Management programs. Quality control is pivotal in enhancing process oversight, offering timely feedback for course correction, optimizing the methodologies and pathways of program advancement, and ensuring that program objectives remain on the correct trajectory. To realize these objectives, it is imperative to convene regular communication and exchange meetings to oversee various tasks linked to program development, fostering collaboration on specific challenges, issues, and resource allocations. Moreover, a product-centric mindset is subject to resource constraints regarding inputs and outputs. Therefore, it is crucial to assess whether the allocated resources effectively contribute to attaining program development objectives; failing to do so may result in inefficiencies and resource wastage. Quality control measures can be available applicable through the application of relevant management tools, such as the incorporation of the Deming Cycle (Plan-Do-Check-Act, PDCA cycle).

### **5 Conclusion**

The transformation and enhancement of the Hotel Management program hinge upon the guidance of a product-centric mindset. In order to tackle challenges like superficial implementation, vague standards, and constrained teaching resources within the framework of industry-education integration, it is imperative to elucidate the logical essence of the product-centric mindset, expedite the transformation of the teaching staff, establish curriculum development standards, and optimize process management.

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