

# Evolving Training Methods and Technology Integration in Hospitality Management Education: A Conceptual Review

Ravi Kumar<sup>1\*</sup> and Ajay Khatter<sup>2</sup>

<sup>1</sup>Senior Lecturer, Institute of Hotel Management Catering Technology and Applied Nutrition (IHM), Ranchi

<sup>2</sup>Senior Lecturer, William Angliss Institute, Melbourne, Australia

\*Correspondence: <ravi.kumar@ihmranchi.in>

Submission: 10 March 2026 Acceptance: 8 June 2026

DOI: <https://doi.org/10.48165/palash.2026.1.02.04>

## ABSTRACT

This review examines the evolution of training methodologies and the integration of emerging technologies in hospitality management education, with particular emphasis on the Indian context. The study synthesises existing scholarly literature from hospitality education, human resource development, educational technology, and adult learning theories to examine the transition from traditional training models towards experiential, competency-based, and technology-enhanced learning approaches. A structured literature review approach was adopted using academic sources identified through databases including Scopus, Google Scholar, and hospitality-related journals. The selected literature was analyzed thematically to identify major developments, opportunities, and challenges associated with modern hospitality training. The findings highlight that effective hospitality education requires a balanced integration of experiential learning, emotional intelligence development, digital technologies such as virtual reality and artificial intelligence, and stronger alignment between academic curricula and industry requirements. The review identifies challenges related to technological investment, faculty preparedness, infrastructure limitations, and the need to maintain the human-centered nature of hospitality service. The paper contributes practical recommendations for hospitality institutions seeking to develop future-ready graduates capable of adapting to an increasingly digital and service-oriented industry.

**Keywords:** Hospitality management education; training methodologies; experiential learning; educational technology; artificial intelligence; hospitality workforce development

## 1. INTRODUCTION

Hospitality is fundamentally a people-centred industry in which guest experiences are largely shaped by the quality of human interaction and service delivery. A deficiency in employee competence, communication, or emotional awareness can negatively influence the overall guest experience regardless of the quality of the physical product. In few other industries does the competence, and the character, of frontline workers matter quite so directly to the product itself (Baum, 2019). The past decade has put enormous pressure on the systems we use to prepare those workers. Digital technologies have transformed almost every stage of the guest journey, from AI-assisted booking platforms to contactless arrivals and room controls via smartphone (Pillai et al., 2021). Guests expect more, they expect it faster, and they expect it to feel personal ("Index,"

2025). The COVID-19 pandemic added a significant challenge to this landscape, hollowing out experienced hospitality workforces at exactly the moment when the industry needed to rebuild its operational capability quickly (Fu et al., 2024; Pillai et al., 2021)

Recent developments in artificial intelligence, data-driven decision-making, smart hotel technologies, and digital transformation have changed the competencies expected from hospitality graduates, increasing the importance of digital literacy and technological capabilities. Consequently, hospitality education must move beyond traditional operational training and prepare students to work effectively with AI, robotics, IoT, and other emerging technologies (Chaudhuri et al., 2023; Wan et al., 2025). Indian hospitality education, particularly within the NCHMCT system, has historically followed standardised,

syllabus-driven curricula that emphasise the development of operational competencies (NCHMCT, 2023). While these programmes have been effective in producing graduates with fundamental technical skills, such as food and beverage service and front-office operations, the industry increasingly demands broader competencies including communication, emotional intelligence, adaptability, and problem-solving abilities (Bharwani & Talib, 2017; Papageorgiou et al., 2024). Closing that gap is what this review is about. The paper synthesises literature from hospitality human resource development, educational technology, and adult learning theory to examine where hospitality training has come from, what the evidence says about current approaches, and what practitioners and educators would need to do differently to prepare the next generation of professionals more effectively. In line with the purpose of this conceptual review, the paper is guided by the following research questions:

RQ1. How have training methodologies in hospitality management education evolved in response to changing industry needs?

RQ2. What role do technology-enhanced learning tools, including blended learning, virtual reality, and artificial intelligence, play in modern hospitality training?

RQ3. How can hospitality educators integrate experiential learning, competency-based education, and emotional intelligence development into contemporary training programmes?

RQ4. What are the key challenges and practical strategies for modernising hospitality management education, particularly in the Indian context?

### **1.1. Objectives of the Review**

This review is guided by four principal objectives:

- To trace the historical evolution of training methodologies in hospitality management education.
- To examine the role of technology-enhanced learning tools in contemporary hospitality training.
- To identify key theoretical frameworks underpinning modern hospitality training design.
- To offer practical recommendations for educators seeking to modernise training delivery, particularly in the Indian context.

## **2. LITERATURE REVIEW**

Before examining which training methods are effective, it is necessary to consider the nature of the learning outcomes that hospitality education seeks to develop (Biggs & Tang, 2011). The hospitality environment requires more than procedural competence; it demands professionals who can integrate technical knowledge with emotional

intelligence, adaptability, and continuous learning in unpredictable service contexts. Consequently, hospitality training has been influenced by theoretical perspectives such as experiential learning, reflective practice, and constructivism, which emphasise learning through experience, reflection, and active knowledge construction (Gibbs & Slevitch, 2019; Wilson-Wünsch et al., 2016).

### **2.1. Theoretical Frameworks Underpinning Hospitality Training**

#### **2.1.1 Experiential Learning Theory**

Kolb's experiential learning theory provides a dominant framework for understanding learning in hospitality education because it conceptualises learning as a continuous cycle of concrete experience, reflection, conceptualisation, and experimentation (Kolb & Kolb, 2005). The theory emphasises the integration of theoretical knowledge with practical application rather than privileging one form of learning over another (Kolb & Kolb, 2005). Its influence can be seen in hospitality education's long-standing use of training restaurants, simulated hotel environments, service-learning projects, and industrial placements designed to bridge classroom knowledge and professional practice (Bharwani & Butt, 2012; Lin et al., 2017).

#### **2.1.2 Constructivism and Social Learning**

Learning in hospitality extends beyond individual skill acquisition and is shaped through social interaction, participation, and observation. Sociocultural perspective emphasises that knowledge is constructed through interaction with others and within specific cultural contexts (John-Steiner & Mahn, 1996). This idea is extended by Lave and Wenger (1991) communities of practice framework, which explains how novices develop professional competence through participation alongside experienced practitioners. In hospitality environments, these principles underpin approaches such as mentoring, shadowing, and collaborative learning (Brownell, 2008). Social learning theory highlights the importance of observational learning, suggesting that trainees develop professional behaviours by watching and modelling experienced colleagues (Horsburgh & Ippolito, 2018).

#### **2.1.3 Competency-Based Education**

Competency-based education shifts the focus of curriculum design from content coverage to the demonstrable capabilities that graduates should possess (Morcke et al., 2013). CBE frameworks therefore define explicit learning outcomes encompassing knowledge, skills, and professional attitudes, and evaluate educational effectiveness according to whether these competencies are achieved (Wagenaar, 2014). In India, the NCHMCT

framework provides a structured competency foundation for hospitality education, however, contemporary literature suggests that these frameworks must continue to evolve to incorporate digital competencies, adaptability, and

emotional intelligence demanded by modern hospitality practice (Adeyinka-Ojo et al., 2020; Bharwani & Talib, 2017).

**Table 1. Theoretical Frameworks and Their Application in Hospitality Training**

| Framework                                                        | Core Premise                                                                                                                         | Application in Hospitality Training                                                                            |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Experiential Learning Theory (Kolb, 1984)                        | Learning is a four-stage cycle: concrete experience, reflective observation, abstract conceptualisation, and active experimentation. | Training restaurants, mock hotel floors, internship programmes, structured debriefs, live service simulations. |
| Constructivism & Social Learning (Bandura, 1977; Vygotsky, 1978) | Knowledge is actively built through social interaction, shared experience, dialogue, and observational modelling.                    | Peer learning groups, mentorship, team service exercises, shadow-shifts, coaching traditions.                  |
| Competency-Based Education (CBE)                                 | Outcomes defined as demonstrated knowledge, skills, and attitudes rather than content coverage alone.                                | NCHMCT competency framework; technology-assisted assessment; granular, continuous progress tracking.           |

Source : Author's own creation/work

## 2.2. Evolution of Training Methodologies in Hospitality

### 2.2.1 Traditional Training Models

Early hospitality training relied heavily on informal workplace learning, where novices developed skills by observing and working alongside experienced practitioners (Bandura, 1977; Baum, 2006). This approach, often referred to as “sitting by Nellie,” provided immediate and context-specific learning opportunities but was criticised for producing inconsistent standards and offering limited opportunities for systematic development of broader professional competencies (Winterton, 2007). Hospitality work requires more than the accurate execution of technical tasks; it involves aesthetic and emotional dimensions in which employees are expected to demonstrate warmth, attentiveness, composure, and appropriate interpersonal behaviours during guest interactions (Baum, 2006; Warhurst et al., 2000). However, these qualities cannot be effectively developed through simple observation and imitation alone, requiring deliberate educational strategies that cultivate emotional competence, self-awareness, and professional judgement. Recognition of this limitation contributed to a broader shift in hospitality education from narrow task-based training towards more competency-oriented approaches (Gibbs & Slevitch, 2019).

### 2.2.2 Experiential and Simulation-Based Training

From the late twentieth century onward, hospitality education increasingly incorporated training kitchens, student-operated restaurants, and simulated operational environments to provide students with authentic opportunities to practise professional skills before entering commercial settings (Askren & James, 2021; Dang & Moreo, 2022). The pedagogical principle underpinning

these facilities is experiential learning: students learn by engaging in realistic service situations, making manageable mistakes, reflecting on their performance, and applying improvements in subsequent practice (Kolb, 1984; Lin et al., 2017). Evidence consistently supports the value of active and experiential learning over passive instruction, particularly in promoting deeper understanding and the transfer of skills into professional contexts (Prince, 2004). Simulation-based approaches provide a psychologically safe environment in which learners can practise, make mistakes, receive feedback, and build confidence before entering live service environments (Salas et al., 2012). Within hospitality education, hands-on simulations and active learning activities have been associated with increased student confidence, stronger teamwork skills, and improved readiness for industry practice (Askren & James, 2021). The most integrative forms of experiential learning, such as capstone projects, further promote problem-solving, collaboration, and the development of professional identity.

### 2.2.3 Mentorship, Coaching, and Peer Learning

Research on mentoring has consistently demonstrated positive relationships between structured developmental relationships, career satisfaction, job attitudes, and organisational commitment. In hospitality contexts, mentoring and coaching relationships can strengthen employee attachment and retention by providing context-specific guidance and social support that complements formal training (Yam et al., 2018). Peer learning provides an important complement to instructor-led training because students develop understanding through dialogue, exposure to alternative perspectives, and collaborative problem-solving (Vygotsky, 1978). The accountability created by peer interaction can also increase engagement and commitment, particularly when learning tasks require

mutual dependence and shared responsibility. Within hospitality education, structured peer-review activities and collaborative projects have been shown to strengthen communication, teamwork, and reflective professional practice (Molintas et al., 2023). In contexts where educational cultures remain strongly instructor-led, including many traditional hospitality programmes, deliberate design of peer-learning structures may therefore support the development of more collaborative professional competencies (Kumar & Rewari, 2022).

### **2.3. Technology-Enhanced Learning in Hospitality Training**

#### **2.3.1 E-Learning and Learning Management Systems**

The adoption of digital learning management systems allowed hospitality organisations to standardise training content across geographically dispersed properties, ensuring that employees received consistent instructional messages regardless of individual trainers or locations (Clark & Mayer, 2023). This capability is particularly valuable in international hotel chains, where maintaining brand standards depends on a degree of consistency in service delivery and employee behaviour (Lashley, 2008). More broadly, training research demonstrates that systematic and well-designed training reduces variability in performance and improves organisational outcomes (Salas et al., 2012). Learning management systems provide organisations with scalable mechanisms for delivering self-paced modules, multimedia demonstrations, assessments, and learner-tracking functions, making them particularly valuable in operational environments characterised by dispersed workforces and complex scheduling demands (Clark & Mayer, 2023). Evidence suggests that online learning can effectively support knowledge acquisition, especially when integrated within blended instructional approaches. However, the mere digitisation of training materials does not guarantee meaningful learning; e-learning is most effective when combined with opportunities for practice, feedback, and social interaction (Clark & Mayer, 2023).

#### **2.3.2 Blended Learning Models**

Blended learning involves the intentional integration of online and face-to-face learning activities, enabling institutions to combine the flexibility of digital delivery with the interaction, feedback, and practical application offered by classroom environments. In practice, this often takes the form of students engaging with preparatory digital materials before attending sessions focused on experiential activities and feedback. Such flexibility is particularly valuable in hospitality contexts characterised by rotating shifts and operational constraints. However, the effectiveness of blended learning depends on reliable

technological infrastructure and sufficient digital literacy, conditions that remain unevenly distributed across many resource-constrained educational contexts (Kumi-Yeboah et al., 2023; Muhuro & Kangethe, 2021).

#### **2.3.3 Gamification in Training**

Gamification has emerged as a prominent approach for increasing learner engagement by incorporating game-design elements such as points, badges, leaderboards, and narrative progression into non-game training contexts (Landers et al., 2019). Within hospitality and tourism, these mechanisms have been applied to training and service-related activities to improve motivation, participation, and experiential learning (Pasca et al., 2021). Evidence on gamification is broadly encouraging but highly contextual. Meta-analytic research suggests that well-designed gamification can enhance engagement, motivation, and certain learning outcomes, particularly when game mechanics are closely aligned with instructional goals (Ritzhaupt et al., 2021; Sailer & Homner, 2020). However, poorly designed reward systems or excessive emphasis on competition may undermine intrinsic motivation or distract learners from meaningful performance improvement. Consequently, gamification should be viewed as an instructional enhancement embedded within a broader training architecture rather than a substitute for sound pedagogical design (Landers et al., 2019).

#### **2.3.4 Virtual Reality in Hospitality Training**

Virtual reality has emerged as one of the most significant recent developments in technology-enhanced hospitality training because it creates immersive environments in which learners can experience realistic operational contexts without the consequences associated with errors in live service situations (Lui & Goel, 2022). Using a situated cognition framework, Lui and Goel (2022) demonstrated that 3D VR training enhanced learners' context awareness and cognitive absorption compared with conventional training methods. Similar studies have shown that VR-based hospitality simulations can improve engagement, experiential learning, and practical skill development by allowing students and employees to interact with realistic hotel environments before entering live operational settings (Leung et al., 2022; Patiar et al., 2021). Virtual reality offers particular promise for emotional intelligence training because immersive simulations can place learners in emotionally demanding interpersonal situations that encourage empathy, perspective-taking, and emotional self-regulation (Shadiev et al., 2021). This is especially valuable in hospitality contexts, where difficult guest interactions and high-pressure service scenarios are challenging to reproduce authentically through conventional classroom role-play.



Hospitality studies have shown that VR environments enhance contextual awareness and cognitive absorption while allowing learners to practice without the consequences associated with real guest encounters (Leung et al., 2022; Lui & Goel, 2022). However, widespread adoption, particularly in developing hospitality education systems depends on the affordability of hardware, reliable infrastructure, and the development of culturally appropriate training content (Rambaree et al., 2023).

2.3.5 Artificial Intelligence and Intelligent Learning Systems

Artificial intelligence is increasingly recognised as a transformative force in hospitality and broader educational contexts, creating new possibilities for training design, knowledge support, and workforce development (Dwivedi et al., 2023; Ivanov & Webster, 2019). In particular, AI-enabled learning systems can personalise educational content, analyse learner performance, provide immediate feedback, and adapt learning pathways according to individual needs (Gligorea et al., 2023; Kabudi et al., 2021). The emergence of generative AI tools such as ChatGPT and other large language models has created new possibilities for higher education by supporting content generation, personalised explanations, interactive learning, and

student engagement (Dwivedi et al., 2023; Kasneci et al., 2023). These systems can assist learners with case analysis, problem-solving, writing development, language improvement, and simulated conversations, making them particularly relevant for applied disciplines such as hospitality where communication and scenario-based decision-making are essential (Lo, 2023; Tlili et al., 2023). When integrated with appropriate pedagogical guidance, generative AI can promote greater learner autonomy and independent learning while complementing, rather than replacing, human instruction (Kasneci et al., 2023).

Although generative AI offers substantial educational opportunities, its integration requires careful consideration of ethical concerns, including academic integrity, data privacy, algorithmic bias, over-reliance on automated outputs, and the development of AI literacy among students and educators (Kasneci et al., 2023; Tlili et al., 2023). In hospitality education, the objective should therefore extend beyond adopting AI as a teaching tool toward preparing graduates to work critically and effectively within increasingly AI-enabled service environments (Dwivedi et al., 2023; Ivanov & Webster, 2019).

| Table 2. Comparative Overview of Hospitality Training Methodologies |                 |                                                                                              |                                                                                                                    |
|---------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Training Method                                                     | Tech Investment | Typical Approaches                                                                           | Strengths / Limitations                                                                                            |
| Traditional / OJT                                                   | Nil             | SOP manuals, supervisor observation, 'sitting with Nellie'                                   | Reliable for task-specific skills; poor for adaptive thinking; quality depends heavily on individual supervisors.  |
| Simulation-Based                                                    | Low-Medium      | Training kitchens, mock front desks, role-play, case studies                                 | Builds confidence before live exposure; reduces early service errors; controlled, repeatable environment.          |
| Mentorship & Peer Learning                                          | Low             | Structured shadow-shifts, peer review, reflection groups                                     | Improves job satisfaction and communication; captures tacit knowledge; needs deliberate design.                    |
| Blended Learning (LMS)                                              | Medium          | Online modules + classroom practice + debrief sessions                                       | Scalable and scheduling-friendly; requires digital infrastructure and adequate learner digital literacy.           |
| Gamification                                                        | Medium          | Points, leaderboards, narrative-driven compliance modules                                    | Strong engagement for frontline cohorts; can feel trivial in upscale settings if poorly designed.                  |
| Virtual Reality (VR)                                                | High            | Immersive scenario simulation; perspective-taking exercises                                  | Exceptional for procedural and EI skill-building; hardware costs currently limit Indian adoption.                  |
| Artificial Intelligence (AI)                                        | Medium-High     | Adaptive learning platforms, generative AI tools, intelligent tutoring, AI-based simulations | Personalised learning and immediate feedback; requires ethical guidelines, digital literacy, and careful oversight |

Source : Author’s own creation/work

2.4. Soft Skills and Emotional Intelligence as Training

Outcomes

Although the term “soft skills” is widely used, it can underestimate the strategic importance of interpersonal and emotional competencies, which are increasingly

recognised as essential professional capabilities rather than secondary attributes (Robles, 2012). In hospitality, the ability to communicate effectively, demonstrate empathy, regulate emotions, and build positive guest relationships is central to professional competence (Bharwani & Talib, 2017; Gibbs & Slevitch, 2019). Goleman (1998) conceptualised emotional intelligence as comprising self-awareness, self-regulation, motivation, empathy, and social skills, and hospitality research suggests that these capabilities are fundamental to creating memorable guest experiences beyond merely delivering technically correct service (Koc & Boz, 2020). Bharwani and Talib (2017) argued that effective hospitality performance depends on a broad competency profile in which interpersonal communication, emotional maturity, and professional attitudes are as important as technical expertise. From an emotional intelligence perspective, individuals who cannot regulate their own emotions or accurately perceive the emotional states of guests and colleagues may struggle to apply their cognitive and functional competencies effectively in complex service situations (Côté, 2014; Goleman, 1998). In hospitality contexts, these emotional capabilities are central to building meaningful guest relationships and delivering high-quality service experiences (Koc & Boz, 2020).

Emotional intelligence can be developed through deliberate pedagogical strategies including reflective journaling, structured feedback, critical incident reflection, and perspective-taking exercises rather than being left to emerge from experience alone (Raut & Gupta, 2019). Digital technologies can support this process by creating immersive emotional scenarios and providing structured opportunities for reflection and debriefing (Rambaree et al., 2023). However, the development of emotional competencies is gradual and context-dependent, requiring sustained practice, feedback, and developmental support over time rather than a single standalone module (Boyatzis et al., 2019). Research has consistently demonstrated that emotional intelligence is positively associated with

employee attitudes, performance, and broader workplace outcomes (Côté, 2014). Consequently, investment in emotional and interpersonal competencies has the potential to enhance professional effectiveness, employee engagement, and organisational performance (Boyatzis, 2008). In the Indian hospitality context, where employee turnover remains a significant and costly workforce challenge, developing such competencies may contribute not only to service quality but also to employee retention and long-term organisational sustainability (Gupta, 2019).

### 3. RESEARCH METHODOLOGY

#### 3.1. Review Design

This study adopts a structured conceptual literature review approach to examine the evolution of training methodologies and the integration of emerging technologies within hospitality management education. A conceptual review was considered appropriate because the objective of the study is to synthesise existing knowledge, identify major themes, and develop practical insights for hospitality educators rather than to conduct a quantitative assessment of empirical findings (Jaakkola, 2020; Lim et al., 2022; Snyder, 2019).

#### 3.2. Literature Search and Selection Strategy

Relevant literature was identified through searches of academic databases including Scopus, Google Scholar, and leading hospitality, tourism, education, and human resource development journals as shown in Table 3. The literature search focused on studies related to hospitality training, experiential learning, competency-based education, educational technology, blended learning, virtual reality, artificial intelligence, emotional intelligence, and workforce development.

Priority was given to peer-reviewed journal articles, recognised theoretical works, and influential books that have contributed to the understanding of hospitality education and training. Both foundational literature and contemporary studies were included to capture the historical evolution of training approaches as well as emerging technological developments.

**Table 3. Literature Search Strategy and Selection Criteria**

| Component             | Description                                                                                                                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Review approach       | Structured conceptual literature review using a thematic synthesis approach                                                                                                                                                                |
| Databases and sources | Scopus, Google Scholar, and peer-reviewed hospitality, tourism, education, and human resource development journals                                                                                                                         |
| Search keywords       | Hospitality training, hospitality education, experiential learning, competency-based education, blended learning, learning management systems, virtual reality, artificial intelligence, emotional intelligence, and workforce development |
| Time coverage         | Foundational theoretical literature and contemporary studies, with particular attention to recent developments in digital technologies and hospitality education                                                                           |

|                    |                                                                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inclusion criteria | Peer-reviewed journal articles, recognised academic books, seminal theoretical studies, and relevant literature addressing hospitality training and educational development |
| Exclusion criteria | Non-scholarly sources, studies lacking academic rigour, and publications with limited relevance to hospitality management education and training                            |
| Analysis approach  | Thematic analysis used to identify recurring themes, emerging trends, challenges, and practical implications                                                                |

Source : Author's own creation/work

### 3.3. Inclusion and Exclusion Criteria

The literature included in this review consisted of studies that examined hospitality education, training methodologies, human resource development, digital learning technologies, and competency development. Studies from related educational and organisational learning fields were also considered where they provided significant theoretical or practical insights relevant to hospitality. Sources lacking clear academic credibility, non-scholarly publications, and studies with limited relevance to hospitality training and educational development were excluded from the review.

### 3.4. Data Analysis and Thematic Development

The selected literature was analysed using a thematic approach as shown Table 4. The review identified recurring themes associated with the development of hospitality training, including experiential learning, competency-based education, technology-enhanced learning, emotional intelligence development, and the institutional challenges associated with implementing modern training approaches. These themes provided the foundation for organising the discussion and developing practical recommendations for hospitality educators, particularly within the Indian hospitality education context. As a conceptual review, this study does not aim to provide a quantitative synthesis of findings but rather to develop a comprehensive understanding of major themes, emerging developments, and practical implications within hospitality management education.

**Table 4. Summary of Key Literature Reviewed and Thematic Contributions**

| Author(s)                                                                                                                                           | Key Concept / Focus                                           | Contribution to Hospitality Training                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kolb (1984); Kolb & Kolb (2005)                                                                                                                     | Experiential learning theory                                  | Provides the foundation for learning through experience, reflection, conceptualisation, and active experimentation in hospitality education.                                                                                               |
| Vygotsky (1978); Lave & Wenger (1991); Bandura (1977)                                                                                               | Constructivism, social learning, and communities of practice  | Highlights how knowledge is developed through social interaction, collaboration, observation, mentorship, and participation within authentic professional environments.                                                                    |
| Bharwani & Butt (2012); Bharwani & Talib (2017); Adeyinka-Ojo et al. (2020)                                                                         | Hospitality competencies and competency-based education       | Demonstrates the importance of aligning hospitality curricula with industry requirements, including technical skills, digital capabilities, emotional intelligence, and professional competencies.                                         |
| Prince (2004); Salas et al. (2012); Askren & James (2021)                                                                                           | Active, experiential, and simulation-based learning           | Supports the effectiveness of experiential activities, simulations, and practical training environments for improving student confidence, skill transfer, and workplace readiness.                                                         |
| Graham (2006); Means et al. (2013); Clark & Mayer (2023)                                                                                            | Blended learning and digital learning systems                 | Demonstrates the value of integrating online technologies, learning management systems, and face-to-face teaching to create flexible and scalable learning experiences.                                                                    |
| Pasca et al. (2021); Sailer & Homner (2020); Ritzhaupt et al. (2021)                                                                                | Gamification and learner engagement                           | Demonstrates how well-designed gamification strategies can increase learner motivation, engagement, and participation when aligned with educational objectives.                                                                            |
| Lui & Goel (2022); Leung et al. (2022); Patiar et al. (2021)                                                                                        | Virtual reality and immersive learning                        | Shows the potential of VR-based simulations to improve contextual awareness, experiential learning, practical skills, and learner engagement within hospitality environments.                                                              |
| Ivanov & Webster (2019); Kabudi et al. (2021); Gligorea et al. (2023); Dwivedi et al. (2023); Kasneci et al. (2023); Lo (2023); Tlili et al. (2023) | Artificial intelligence, adaptive learning, and generative AI | Demonstrates how AI can personalise learning, provide intelligent feedback, support content generation, and create new opportunities for hospitality education while highlighting ethical concerns, AI literacy, and responsible adoption. |
| Goleman (1998); Koc & Boz (2020); Boyatzis (2008)                                                                                                   | Emotional intelligence and professional capability            | Establishes the importance of self-awareness, empathy, emotional regulation, and interpersonal competence for effective hospitality service and workforce development.                                                                     |

Source : Author’s own creation/work

4. RESULTS AND DISCUSSION

4.1. Challenges and Barriers to Training Modernisation

Although the literature provides clear directions for improving hospitality training, implementing these changes presents several practical challenges. The implementation reality is considerably messier, particularly in the Indian context. The challenges are structural, cultural, and financial, and they deserve honest treatment. The successful implementation of technology-enhanced hospitality education depends not only on pedagogical innovation but also on institutional infrastructure. Learning management systems and blended learning environments require reliable internet access and learner access to suitable devices, while advanced technologies such as VR demand additional hardware investment and technical support. These requirements remain unevenly distributed, particularly among institutions in rural or resource-constrained regions, creating a persistent gap between pedagogical aspirations and operational feasibility (Kumi-Yeboah et al., 2023; Radianti et al., 2020).

Trainer competency represents a significant challenge in hospitality education reform. While technologies such as learning management systems can be introduced relatively quickly, developing a faculty capable of delivering learner-

centred, facilitation-based pedagogy requires sustained professional development and institutional support. Many educators are transitioning away from traditional instructional paradigms toward more active and student-centred approaches (Kim & Davies, 2014; Kivela & Kivela, 2005; Luong & Kim, 2021). The tension between standardisation and personalisation is a genuine design challenge rather than simply a failure of implementation. Hospitality organisations require consistent training outcomes to maintain brand standards and operational reliability, yet employees also need the flexibility to adapt their behaviours to individual guest needs (Bettencourt & Gwinner, 1996). Similarly, evidence from professional education suggests that adaptive and personalised training can improve learning outcomes, indicating that effective programmes require careful architecture that balances organisational consistency with individual learner needs (Torre et al., 2025). Although Kirkpatrick’s four-level model remains the dominant framework for evaluating training effectiveness, measuring higher-level outcomes such as sustained behavioural change and organisational impact is considerably more challenging than assessing immediate learning gains (Smidt et al., 2009). This challenge is particularly evident in emotional intelligence programmes, where demonstrating long-term effects on outcomes such as guest satisfaction requires longitudinal evaluation designs and significant institutional resources (Grohmann & Kauffeld, 2013; Passmore & Velez, 2012).

| Table 5. Key Challenges in Training Modernisation and Recommended Institutional Responses |                                                                                                                         |                                                                                                          |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Challenge                                                                                 | Nature of the Problem                                                                                                   | Recommended Response                                                                                     |
| Infrastructure & Resource Gaps                                                            | Limited access to hardware, LMS platforms, and reliable internet most acute in Tier-2 and Tier-3 cities.                | Public-private investment in campus digital infrastructure; low-cost cloud-based LMS adoption.           |
| Trainer Competency Gaps                                                                   | Faculty formed in traditional paradigms; limited facilitation skill, digital fluency, or instructional design training. | Mandatory continuing professional development; industry-academic exchange fellowships.                   |
| Standardisation vs. Personalisation                                                       | Chains need brand-consistent SOPs; individual learners need adaptive delivery — these pull in opposite directions.      | Competency frameworks with modular, personalised pathways built within defined performance standards.    |
| Assessing Soft Skills and EI                                                              | EI and interpersonal outcomes resist quantification, making return-on-investment arguments difficult to sustain.        | Rubric-based behavioural assessment; 360° peer feedback; reflective portfolio evidence over time.        |
| Institutional Resistance to Change                                                        | Experienced trainers protective of familiar methods; leadership reluctance to fund experimental programmes.             | Participatory change processes; early pilot successes communicated widely; visible leadership modelling. |

Source : Author’s own creation/work

4.2. Recommendations for Hospitality Educators

The following recommendations are grounded in the

evidence reviewed above. They are intended to be practical rather than aspirational, each point toward a specific change in how programmes are designed or how institutions allocate their developmental attention.



**Table 6. Recommendations for Modernising Hospitality Management Training in India**

| Sl.No. | Recommendation                                   | Rationale and Implementation Guidance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | <b>Prioritise Experiential Infrastructure</b>    | Training kitchens, mock front-office environments, and training restaurants should be treated as central pedagogical spaces within hospitality education because they enable students to integrate theoretical knowledge with authentic service practice (Lin et al., 2017; Lyu et al., 2016). Simulation should not be considered a supplementary activity, but a primary instructional strategy designed around experiential learning principles, where students engage in experience, reflection, conceptualisation, and experimentation (Laverie et al., 2022; Poore et al., 2014). |
| 2      | <b>Adopt Blended Learning as the Default</b>     | Curricula should be structured around a blended architecture that intentionally integrates digital content, face-to-face practice, and opportunities for reflection into a coherent learning sequence. Digital technologies should therefore be viewed as tools that extend and enrich learning rather than as replacements for the social interaction, mentorship, and dialogue that occur in classroom environments (Garrison et al., 1999).                                                                                                                                          |
| 3      | <b>Invest in Faculty and Trainer Development</b> | Sustained institutional investment in faculty development is essential for maintaining high-quality teaching and should extend beyond periodic subject-matter updates to include instructional design, facilitation techniques, digital teaching competencies, and the social-emotional dimensions of educator–learner interactions (Fernández-Batanero et al., 2022).                                                                                                                                                                                                                  |
| 4      | <b>Embed Emotional Intelligence Deliberately</b> | Emotional intelligence should be explicitly embedded within programme learning outcomes and developed through structured pedagogical approaches such as reflective journals, feedback processes, empathy-building exercises, and critical incident analysis. Emotional competencies are not automatically acquired through professional experience alone but require deliberate practice, reflection, and developmental support (Boyatzis, 2008).                                                                                                                                       |
| 5      | <b>Pilot Virtual Reality Strategically</b>       | Rather than pursuing wholesale adoption, hospitality institutions should identify high-impact learning situations—such as guest complaint management, cross-cultural interactions, and operational crises and implement targeted VR simulations aligned with specific learning outcomes. The educational value of VR depends on thoughtful instructional design and its ability to create authentic experiential situations rather than the technology itself (Buhalis et al., 2022; Makransky & Petersen, 2021; Parmaxi, 2023; Radianti et al., 2020).                                 |
| 6      | <b>Strengthen Industry-Institution Linkages</b>  | Training design should remain continuously informed by industry through active partnerships, mentorship structures, and industrial placements designed around explicit learning objectives and reflective activities rather than simple workplace exposure (Bharwani & Talib, 2017; Brownell, 2008; Kolb & Kolb, 2005).                                                                                                                                                                                                                                                                 |

Source : Author's own creation/work

## 5. CONCLUSION

Hospitality training in India is currently undergoing a significant period of transition and transformation. The industry has changed faster than the educational systems designed to serve it, and the gap between what graduates can do and what employers actually need is real and widening. This is not primarily a technology gap, it is a pedagogical gap, a gap in how we think about what training is for and what it should produce. The evidence reviewed here suggests that the most effective training approaches share certain characteristics: they connect theory to practice in deliberate, structured ways; they treat the development of interpersonal and emotional capacity as seriously as procedural skill; they use digital tools to extend and personalise learning rather than simply to digitise existing content; and they are continuously informed by the realities of the industry rather than locked into syllabuses designed for a different era. For Indian hospitality educators, this means some uncomfortable conversations about investment priorities, faculty development, and the willingness to redesign programmes

from first principles rather than incrementally adjusting what already exists. Institutions that successfully adapt to these changes are more likely to produce graduates who are equipped to meet the evolving demands of contemporary hotel operations. Conversely, institutions that fail to modernise may continue producing graduates with technical competencies but limited preparedness for the adaptive and interpersonal challenges of modern hospitality environments.

Looking ahead, the future of hospitality education will increasingly depend on the effective integration of emerging technologies such as artificial intelligence, data analytics, and immersive digital learning environments with human-centred service values. The objective is not to replace the interpersonal nature of hospitality, but to develop professionals who can combine technological competence with empathy, creativity, ethical awareness, and adaptability in a rapidly changing industry. This paper has been conceptual in nature, drawing on and synthesising existing literature rather than generating new empirical data. The logical next step is primary research involving students, faculty, and industry partners within

Indian hotel management institutions to test these propositions against the lived realities of specific institutional and operational contexts. Such research would provide valuable empirical insights into the realities of hospitality education and training in the Indian context.

### 5.1. Practical Implications

The findings of this review provide important practical implications for hospitality educators, training institutions, and industry practitioners. Hospitality management institutions should adopt a balanced approach that integrates experiential learning, blended learning, emotional intelligence development, and emerging technologies such as artificial intelligence and virtual reality into their curricula. Greater investment in faculty development, digital infrastructure, and industry-academia collaboration can enhance the quality of hospitality education and improve graduate employability. Furthermore, hospitality organizations can utilize technology-enhanced training methods to develop a workforce that is adaptable, service-oriented, and capable of meeting the evolving expectations of digitally empowered guests.

### 5.2. Theoretical Implications

This review contributes to the theoretical understanding of hospitality education by synthesizing diverse learning theories, including Experiential Learning Theory, Constructivism, Social Learning Theory, and Competency-Based Education, within the context of modern hospitality training. It extends existing literature by demonstrating how these theoretical perspectives can be integrated with emerging digital technologies to create comprehensive learning ecosystems. The review also highlights the growing importance of emotional intelligence and technology-enabled learning as complementary dimensions of hospitality competency development, thereby providing a broader conceptual framework for future hospitality education research.

### 5.3. Limitations

This study is subject to several limitations. As a conceptual literature review, it relies exclusively on secondary data and existing scholarly publications without collecting primary empirical evidence from hospitality students, educators, or industry professionals. The review focuses primarily on hospitality management education and may not fully capture variations across different geographical regions, institutional settings, or hospitality sectors. Additionally, the rapid evolution of technologies such as artificial intelligence and virtual reality may result in emerging developments that were not fully represented within the literature reviewed at the time of this study.

### 5.4. Future Research Directions

Future research should undertake empirical investigations involving hospitality students, faculty members, and industry stakeholders to validate the conceptual insights presented in this review. Longitudinal studies examining the effectiveness of technology-enhanced learning approaches, particularly artificial intelligence, virtual reality, and adaptive learning systems, would provide valuable evidence regarding their impact on student competencies and employability outcomes. Further research may also explore the development and assessment of emotional intelligence, digital literacy, and sustainability competencies within hospitality curricula, particularly in emerging economies such as India where educational modernization remains a critical priority.

## 6. FUNDING STATEMENT

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## 7. ETHICAL STATEMENT

Data were obtained from secondary source. The research has been carried out in accordance with the COPE guidelines.

## 8. AUTHORS CONTRIBUTIONS

Ravi Kumar: Introduction & Review of literature

Dr Ajay Khatter: Results and Discussion, Research methodology, Final Draft

## CONFLICT OF INTEREST

Authors declare no conflict of interest

## DATA AVAILABILITY STATEMENT

All data generated or analyzed during this study are included in this published article (and its supplementary information files)

## REFERENCES

- Adeyinka-Ojo, S., Lee, S., Abdullah, S. K., & Teo, J. (2020). Hospitality and tourism education in an emerging digital economy. *Worldwide Hospitality and Tourism Themes*, 12(2), 113–125. <https://doi.org/10.1108/WHATTT-12-2019-0075>
- Askren, J., & James, W. (2021). Experiential learning methods in culinary course can bridge the gap: Student perceptions on how hands-on curriculum prepares them for industry. *Journal of Hospitality & Tourism Education*, 33(2), 111–125. <https://doi.org/10.1080/10963758.2020.1791134>
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Baum, T. (2006). *Human resource management for tourism hospitality and leisure*. Thomson.
- Baum, T. (2019). Hospitality employment 2033: A backcasting

- perspective (invited paper for 'luminaries' special issue of International Journal of Hospitality Management). *International Journal of Hospitality Management*, 76, 45–52. <https://doi.org/10.1016/j.ijhm.2018.06.027>
- Bettencourt, L. A., & Gwinner, K. (1996). Customization of the service experience: The role of the frontline employee. *International Journal of Service Industry Management*, 7(2), 3–20. <https://doi.org/10.1108/09564239610113442>
- Bharwani, S., & Butt, N. (2012). Challenges for the global hospitality industry: An HR perspective. *Worldwide Hospitality and Tourism Themes*, 4(2), 150–162. <https://doi.org/10.1108/17554211211217325>
- Bharwani, S., & Talib, P. (2017). Competencies of hotel general managers: A conceptual framework. *International Journal of Contemporary Hospitality Management*, 29(1), 393–418. <https://doi.org/10.1108/IJCHM-09-2015-0448>
- Boyatzis, R., Smith, M. L., & Van Oosten, E. (2019). *Helping people change: Coaching with compassion for lifelong learning and growth*. Harvard Business Press.
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1), 5–12. <https://doi.org/10.1108/02621710810840730>
- Brownell, J. (2008). Exploring the strategic ground for listening and organizational effectiveness. *Scandinavian Journal of Hospitality and Tourism*, 8(3), 211–229. <https://doi.org/10.1080/15022250802305295>
- Buhalis, D., O'Connor, P., & Leung, R. (2022). Smart hospitality: From smart cities and smart tourism towards agile business ecosystems in networked destinations. *International Journal of Contemporary Hospitality Management*, 35(1), 369–393. <https://doi.org/10.1108/IJCHM-04-2022-0497>
- Chaudhuri, R., Chatterjee, S., Vrontis, D., Galati, A., & Siachou, E. (2023). Examining the issue of employee intentions to learn and adopt digital technology. *Worldwide Hospitality and Tourism Themes*, 15(3), 279–294. <https://doi.org/10.1108/WHATT-02-2023-0020>
- Clark, R. C., & Mayer, R. E. (2023). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Sons.
- Côté, S. (2014). Emotional intelligence in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 459–488. <https://doi.org/10.1146/annurev-orgpsych-031413-091233>
- Dang, A. S., & Moreo, P. J. (2022). Hospitality education program student-operated restaurants: An applied analysis. *Journal of Hospitality & Tourism Education*, 34(4), 217–228. <https://doi.org/10.1080/10963758.2020.1868309>
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., ... Wright, R. (2023). Opinion paper: "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Fernández-Batanero, J. M., Montenegro-Rueda, M., Fernández-Cerero, J., & García-Martínez, I. (2022). Digital competences for teacher professional development: Systematic review. *European Journal of Teacher Education*, 45(4), 513–531. <https://doi.org/10.1080/02619768.2020.1827389>
- Fu, M., Fraser, B., & Arcodia, C. (2024). The role of self-service technologies in the new normal of hospitality service encounters. In S. W. Maingi, V. G. B. Gowreesunkar, & M. E. Korstanje (Eds.), *Tourist behaviour and the new normal, volume I: Implications for tourism resilience* (pp. 201–226). Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-45848-4\\_12](https://doi.org/10.1007/978-3-031-45848-4_12)
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2), 87–105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Gibbs, L., & Slevitch, L. (2019). Integrating technical and emotional competences in hospitality education. *Journal of Hospitality & Tourism Education*, 31(2), 99–110. <https://doi.org/10.1080/10963758.2018.1485500>
- Glignorea, I., Cioca, M., Oancea, R., Gorski, A.-T., Gorski, H., & Tudorache, P. (2023). Adaptive learning using artificial intelligence in e-learning: A literature review. *Education Sciences*, 13(12), 1216. <https://www.mdpi.com/2227-7102/13/12/1216>
- Goleman, D. (1998). *Working with emotional intelligence*. Bantam.
- Grohmann, A., & Kauffeld, S. (2013). Evaluating training programs: Development and correlates of the Questionnaire for Professional Training Evaluation. *International Journal of Training and Development*, 17(2), 135–155. <https://doi.org/10.1111/ijtd.12005>
- Gupta, V. (2019). Talent management dimensions and its relationship with Generation Y employee's intention to quit: An Indian hotel perspective. *International Journal of Tourism Cities*, 6(3), 583–600. <https://doi.org/10.1108/IJTC-02-2019-0018>
- Horsburgh, J., & Ippolito, K. (2018). A skill to be worked at: Using social learning theory to explore the process of learning from role models in clinical settings. *BMC Medical Education*, 18(1), 156. <https://doi.org/10.1186/s12909-018-1251-x>
- Index. (2025). In P. Thaichon, P. K. Dutta, A. K. Haghi, & S. Dutta (Eds.), *Digital disruption in hospitality, AI, and emerging technologies: A roadmap to personalized experiences, enhanced operations, and revenue growth*. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83608-796-020251019>
- Ivanov, S., & Webster, C. (2019). *Robots, artificial intelligence and service automation in travel, tourism and hospitality*. Emerald Group Publishing.
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, 10(1), 18–26. <https://doi.org/10.1007/s13162-020-00161-0>
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to

- learning and development: A Vygotskian framework. *Educational Psychologist*, 31(3-4), 191-206. <https://doi.org/10.1080/00461520.1996.9653266>
- Kabudi, T., Pappas, I., & Olsen, D. H. (2021). AI-enabled adaptive learning systems: A systematic mapping of the literature. *Computers and Education: Artificial Intelligence*, 2, 100017. <https://doi.org/10.1016/j.caeai.2021.100017>
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Kim, A. K., & Davies, J. (2014). A teacher's perspective on student centred learning: Towards the development of best practice in an undergraduate tourism course. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 14, 6-14. <https://doi.org/10.1016/j.jhlste.2013.12.001>
- Kivela, J., & Kivela, R. J. (2005). Student perceptions of an embedded problem-based learning instructional approach in a hospitality undergraduate programme. *International Journal of Hospitality Management*, 24(3), 437-464. <https://doi.org/10.1016/j.ijhm.2004.09.007>
- Koc, E., & Boz, H. (2020). Development of hospitality and tourism employees' emotional intelligence through developing their emotion recognition abilities. *Journal of Hospitality Marketing & Management*, 29(2), 121-138. <https://doi.org/10.1080/19368623.2019.1608885>
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212. <https://doi.org/10.5465/AMLE.2005.17268566>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Kumar, V., & Rewari, M. (2022). A responsible approach to higher education curriculum design. *International Journal of Educational Reform*, 31(4), 422-441. <https://doi.org/10.1177/10567879221110509>
- Kumi-Yeboah, A., Kim, Y., & Armah, Y. E. (2023). Strategies for overcoming the digital divide during the COVID-19 pandemic in higher education institutions in Ghana. *British Journal of Educational Technology*, 54(6), 1441-1462. <https://doi.org/10.1111/bjet.13356>
- Landers, R. N., Auer, E. M., Helms, A. B., Marin, S., & Armstrong, M. B. (2019). Gamification of adult learning: Gamifying employee training and development. In *The Cambridge handbook of technology and employee behavior* (pp. 271-295). Cambridge University Press.
- How to Cite this Article:** Kumar R., Khatter A.. (2026). Evolving Training Methods and Technology Integration in Hospitality Management Education: A Conceptual Review. *PALASH*, 1(2), 35-46. <https://doi.org/10.48165/palash.2026.1.02.04>